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GURNEY'S CATALOG

62.79 SPRING AND FALL
1921

GURNEY
SEED & NURSERY CO.
YANKTON, S.D.

SEE PAGE 3 FOR DESCRIPTION OF ARTICLES ON THIS PAGE

ONE EACH OF THESE
FOUR VARIETIES

\$1.90

FOUR SUPERB PEONIES

1. DELICATISSIMA
2. MEISSONIER
3. FESTIVA MAXIMA
4. DUCHESS
DE NEMOURS

EQUIPMENT AND FACILITIES DOUBLED FOR 1921 BUSINESS

Dear Friends:

In the spring of 1920, we figured we would have a remarkable increase in business over that of previous years, and made what we considered necessary preparations for it, but you got a little the edge on us and swamped us with orders in some lines. This taught us a lesson, and immediately after the close of the rush business of 1920, we purchased and built until we have more than 100 per cent extra storage, equipment and packing space, and if you swamp us again in any department you will have to go some. We are showing you on one of the following pages a sort of combination picture of a portion of more than 20 buildings used and owned by us for the storage, packing and distribution of our goods.

This year we, as well as yourselves, are confronted by new problems, and readjustment of prices and expenses in every department are necessary, and we believe in the following pages of the catalog we have made these adjustments fairly. We have continued the old plan of making this more than a catalog—a book of information that can be depended on, a readable book, and one that can be kept constantly for reference. We do this as it is necessary that you be successful with our goods in order that we may be successful in our business. We have increased our capital this past season by several hundred thousand dollars, and have taken as stockholders and part owners with us a large number of our customers. This increased capital has allowed us to prepare in a better way for our wonderfully growing business. We have added each season for the last number of years thousands of new customers, as well as retaining the old ones. As the years roll by, we gain additional information from our experiences and those of our customers. All of this we try to pass to you for your benefit without charge. This company is one of the oldest in the Northwest, established in 1866 by Colonel C. W. Gurney (the founder of "The House of Gurney"), who passed to the Great Beyond a few years ago. All of those connected with the present management were born in it and have a life's experience in this business. We have added, since last year, in the management, Charles, my youngest son. This makes the management now, myself, assisted by my six brothers and two sons. The sons of the other brothers are all still young, but will eventually be added, and later be the management of the business with mine.

PRODUCE, AND THEN SAVE THE PRODUCTION

I have had occasion, during the months of November and December, to travel over quite a large part of the territory of the United States, and in looking from the car windows the thought came to me that a very large portion of our producers of farm crops were losing money on their year's work because of unnecessary waste. Large fields of alfalfa covered with stacks of this best forage would have the live stock turned in to eat from them, and I believe a close estimate would show that they were wasting not less than 30 per cent of the produce of that field. Then, again, in these large fields you find the alfalfa stacks made low and broad, and probably 10 to 20 per cent of the upper part of the stack was ruined by water. A probable loss of not less than 50 per cent total in the crop of this field. This applies to all other forage crops, as well as to alfalfa, and there is not a farmer living and farming today who can afford to lose 50 per cent of his products, or even 10 per cent. Consequently, better methods of handling your crops are necessary.

The corn stalks in your field are at least 25 per cent of the value of the grain crop. Oat straw is worth 25 per cent of the grain crop, and is wasted entirely on a great many farms.

It is unnecessary for me to tell you how to save this waste. You can figure it out for yourselves.

In the feeding lots, we find wagon loads of ear or shelled corn scattered out in the mud and dirt, and a large portion of it lost.

If one of the farm force would constitute himself an "efficiency man" and figure out ways and means to eliminate this waste, he would easily make a good year's salary if he did nothing else. Let's get down to brass tacks and eliminate waste. Produce every pound you can to the acre, and then save it. It will make money conditions easy for you.

In the fall of 1920, with the tightening of the money market and the almost discontinuance of business, we realized how much depended on what we produced in the way of reducing the cost of living. We realized as never before that every foot of ground should be made to produce something to eat. The laboring man whose salary was reduced or who was laid off entirely realized the advantage of the vegetables in the cellar. The merchant and the farmer also were saved the necessity of using their cash reserve for the purchase of higher priced products by living on his own productions. And it is more necessary now than ever that we should continue to produce the good garden and the good field crops. The world is not yet adjusted to the new order of things since the Great War, and it may take several years of uncertain, strenuous and unsatisfactory times, but those who so far as possible produce from the soil their own living will be the best fitted of any. The low exchange rate between this and foreign countries has made it almost impossible for those countries to purchase goods from America. With the gradual adjustment of these rates there will be the same demand for American grown products and we must be ready to serve them. There never was a dollar's worth of excess food produced—there is always a hungry mouth somewhere for it if proper connection can be made between the source of production and that of consumption.

Let's all assist in the production and saving end.

Yours for a good 1921,

D. B. GURNEY, Pres.

THESE PEOPLE ARE RESPONSIBLE FOR THE WAY YOUR ORDER IS CARED FOR AFTER IT REACHES US

Something about each of them and their departments

H. J.—Is again located in California, taking care of our West Coast business, which has been growing very rapidly and promises to equal that of any other portion of the United States.

D. B.—President and general manager of the business. Responsible for the whole bunch in a business way. Something of a job sometimes. A mighty good bunch, however, and we work well together.

P. S.—General overseer of the downtown plant. When you consider that our downtown plant consists of about ten large buildings and large grounds, and houses all the departments, you will know that his job is a strenuous one; but it agrees with him and is getting fatter every year.

S. S.—Is nursery superintendent and lives on what is known as the "Emerson Ranch," one of our new purchases this last year. His house is nearly in the center of a 20-acre field of peonies, and is located near the large cement evergreen packing house. The Milwaukee Railroad track runs within a few hundred feet of his home, and you will see all the peonies in bloom in June, if you go through on the train. S. S. produces the nursery stock received by you, and there are hundreds of acres of it, and increasing each year. It requires the best possible knowledge to grow these trees and plants right. S. S. has lived on some portion of the nursery practically all his life.

Geo. W.—Is absolute "Monarch of all he surveys" in the nursery department in the office. He has charge of everything in connection with the nursery department from the office end, and thousands of letters are received by him each day during the busy part of the season, and last year you swamped him, in a way, but we have doubled the size of the office, which allows him at least twice the help, and he promises prompt action on everything in his line.

C. A.—His title should be "General Assistant to Everybody." But he is actually Assistant Superintendent of propagation at the nursery during the summer months and Superintendent of nursery packing the balance of the season, but when any department gets in a bad hole or any piece of machinery goes wrong, they call for Cassius and get results. He is there and over.

Donald—Is Superintendent of the vegetable and flower seed department. Every order that comes to us for these items passes through his hands, and when I tell you that during the busy season we send a good many truckloads of parcel post packages to the post-office every day containing almost thousands of packages to the load, you will realize that he has to keep busy. Donald's department is always up. He also has charge of the packing of all of the thousands of seed assortments that go out to the merchants. We are adding to his department, commencing with the spring business of 1921, all bulbs, which will insure absolutely prompt deliveries on all of these items. I will tell you more about this in that section of the catalog.

J. C.—Son of D. B. Born in 1895. That first year was devoted to the "nursery" department. From that time to the present he has been in and through most of the departments and has a rattling good working knowledge in any part of the business. He is, however, office superintendent and secretary-treasurer of the company. During the World War, he spent nearly a year in France, and just after the armistice took a look into the "Great Beyond," but by good nursing at one of the American hospitals got back. J. C. is married, has a peach of a kid out at his place, and this puts me in the grandfather class.

Charles—Son of D. B. Thinks he has completed his education, and has gotten into the bookkeeping department in the office. He has spent his last several summers calling on our merchant customers in a great many of the western states. Seems to have gotten along with them all right for a kid. Has ideas of his own, and will make a valuable addition to the force. The above bunch, and all others connected with the company, send Greetings to you.

D. B. GURNEY, Pres.

CASH PREMIUM LIST FOR 1921

WE ALWAYS PACK SOMETHING GOOD, FREE OF CHARGE,
WITH EVERY ORDER

For a great many years we have been offering cash premiums for products of our seed, and if you could be here in the office in the fall when the packages commence to come in you would think you were at a state fair. Hundreds of large potatoes, the biggest and best looking ears of corn, pumpkins and squash, that it would seem impossible to produce, all come to us from the enthusiastic competitors. A good many of these premiums, in fact I believe 80% of them, go to the women and the children, and it pleases me a whole lot more to write a check to them than it would to one of you big men, for the simple reason that they appreciate it always, and you, sometimes. But let's all compete.

Mammoth Pumpkin—Every order that goes out from the flower and seed department contains, free of charge, a package of Mammoth Pumpkin seed. These were brought over from France a good many years ago, and we have never sold any of them, but we have had pumpkins sent to us that weighed over 200 lbs. These are exceedingly valuable as a stock food, and some of our customers tell us they make the best pumpkin pie. We do not ask that you ship us the largest pumpkin, but take it to your store, have it weighed, have your merchant certify to the weight, have him exhibit it for one week in his show window with a sign something like this: "Grown by _____ from Gurney Seeds, Yankton, S. Dak." Send us a certificate, and the largest one will receive \$10 in cash.

Mammoth Whale Squash—This is another monstrous vegetable, and you can produce them nearly as large as a man. The same rules apply as to the Mammoth Pumpkin. The cash premium is \$10.00.

Watermelons—The same rules apply to Watermelons as to Squash and Pumpkin.

Corporal Gurney	\$5.00	Kleckley's Sweet	\$5.00
Tom Watson	5.00	Earliest and Sweetest	5.00

Special Squash Premium—This to be certified by yourself and one neighbor to witness the gathering of the crop. The largest number of squash produced from a single vine of Gurney's Table Queen Squash, \$10.00.

Potato Premiums—We have a storage potato cellar in building "C" with a capacity of 30,000 bushels of the best seed stock. We offer the following premiums for the largest single potato received by us grown from our seed of the following varieties:

Gurney's White Harvest	\$ 5.00	Early Ohio	\$ 5.00
Red Bliss	5.00	Gurney's Bugless	10.00
Irish Cobbler	5.00	Green Mountain	5.00

The premium for the largest Bugless Potato for the season went to A. B. Reamsbottom, Camloup, B. C. The potato weighed 4 lbs. 2½ oz. and perfectly smooth.

Corn Premiums—Same rules govern as for potatoes. Submit a single ear of any or all of the following varieties that you wish to compete for:

Gurney's August 15th	\$5.00	Reid's Yellow Dent	\$5.00
Northwestern Dent	5.00	Wisconsin No. 7	5.00
Gurney's Rainbow Flint	5.00	Early Murdock	5.00
Gurney's Hybrid Model Dent	5.00	Rustler's White Dent	5.00
Gurney's N. D. White Dent	5.00	White Rice Pop Corn	5.00
Minnesota 13	5.00	Red Rice Pop Corn	5.00
Wimples Yellow Dent	5.00		

Special Collection for Competitors for Above Premiums—These are put up specially for those who wish to compete, are specially selected seed and will give you best results.

One package Mammoth French Pumpkin, free
One package Mammoth Whale Squash
One package Gurney's Table Queen Squash
One pound Gurney's Bugless Potato
One pound Gurney's White Harvest Potato
One pound Red Bliss Potato
One pound Irish Cobbler Potato
One pound Green Mountain Potato
One pound Early Ohio Potato
¼ pound Gurney's August 15th Corn
¼ pound Northwestern Dent Corn
¼ pound Gurney's Rainbow Flint Corn
¼ pound Gurney's Hybrid Model Dent Corn
¼ pound Gurney's N. Dak. White Dent Corn
¼ pound Minnesota No. 13 Corn
¼ pound Rustler's White Dent Corn
¼ pound Wimples Yellow Dent Corn
¼ pound Reid's Yellow Dent Corn
¼ pound Wisconsin No. 7 Corn
¼ pound Early Murdock Corn
¼ pound White Rice Pop Corn
One package Red Rice Pop Corn
One package Corporal Gurney Melon
One package Kleckley's Sweet Melon
One package Tom Watson Melon
One package Earliest and Sweetest Melon

The above assortment of excellent selected seed, parcel post or express charges paid, for \$3.65.

Agricultural College, N. D., Sept. 18, 1920.
Last spring you sent a few pumpkin seeds to some one at this office, but the name had been obliterated so that I could not read it. Instead of sending the seeds to the dead letter office I planted them (4 seeds). I shall gather five large pumpkins from the vines. One is extra large. In shape and color they look like watermelons. I am wondering if they can be the French variety advertised in your catalog. Can send dimensions, weight and photo if you care for them.
A. F. Ross, P. M.

Agricultural College, N. D., Sept. 30, 1920.
Under separate cover I am sending a photo of the Mammoth French Pumpkins grown from one hill (4 seeds) that you sent me last spring. Weight of largest 44 lbs. Total weight of hill 155 lbs.
A. F. Ross.

We meet hundreds of you at the State Fair, and hundreds of you visited the nurseries and seed house during 1920. We want to meet thousands of you in 1921.

Fruits and Flowers on the Outside Front Cover:

- No. 1—Waneta, the most wonderful plum.
- No. 2—Sapa, the earliest maturing of the Hansen plums.
- No. 3—Hanska, the best keeper of the Hansen plums.
- No. 4—Opata, the blue-black fellow borne in immense quantities.
- No. 5—Compass Cherry, that fills in the open space when none of the Hansen plums are ripe.
- No. 6—Cluster of trial ground Dahlias.
- No. 7—Bouquet of trial ground Gladiolus.
- No. 8—Gurney's Earliest June Sweet Corn, the earliest large eared variety.

READ CAREFULLY

Business Rules, Instructions and Guarantee

Any business to be successful must have "Rules," and live up to them.

No. 1—Never allow any seed to leave our possession until it has been tested, and shows a germinating test that would satisfy us for our own planting.

No. 2—Use every means in our power to know that all Seed and Nursery Stock sent out by us are true to name.

No. 3—Never give customers less than they pay for; always give them full amount of the very best goods and then put in some extra.

No. 4—We guarantee safe arrival at your postoffice or railroad station of any goods purchased from us, provided you send us notice of their failure to arrive within three months from date of shipment. We do not guarantee against loss of goods after arrival at prepaid stations where there are no agents. If goods are received at your station or through the postoffice in bad order, accept them, but in every case, if through the postoffice have a statement made by the postmaster or the carrier of the condition of the package when you receive it; if through the railway or express company, a notation on the freight or express receipt of its exact condition, noting torn sacks, shortage in weight, or any other damage that may be made to the shipment. Return this to us, and we will immediately reimburse you and make our claim against the transportation company. This protects you.

No. 5—Never open a book account with any person; cash before shipment, or where one-third the amount is remitted with order we will ship C. O. D. for the balance, always with privilege of examination.

No. 6—At the prices quoted in this catalog we deliver goods to any Express or Railway Company or postoffice in the city of Yankton, no charge for bags or boxes. All seeds quoted in packages, ounces, one-fourth, one-half or one pound, and all bulbs up to and including 100 lots, and all strawberries, will be sent by parcel post or express, all charges paid to your postoffice or railroad station. Transportation charges on all other seeds and nursery stock, machinery, or other goods handled by us are to be paid by the purchaser.

No. 7—Follow shipping instructions given by the customer; if none are given, use our best judgment, always securing the lowest rate possible for them.

No. 8—When we receive an order for goods without any signature, or one that we cannot read, we use every effort to locate the party. To avoid this extra trouble and delay in filling orders, please **sign your name to your orders**; give the P. O. address, Rural Route, County, State and name of railroad. Make them plain so that anyone can read them.

No. 9—We guarantee safe arrival of all money paid us by bank draft, personal check, express or postoffice money order. We accept currency and coin in any amount, but advise against sending it as it is easily lost in the mail. We do not guarantee its safe arrival. We accept postage stamps in payment of goods, and request, when you send them, that you make them in the larger denominations. We, however, do not guarantee their safe arrival. Your personal check is the most convenient method for you to use. It is often inconvenient to send to town for draft or money order, and if you have money in the bank to cover your check it is good with us. We make you this offer to save you delay and trouble in obtaining the goods you need.

No. 10—If we do not have every item ordered, we do not substitute, without your permission. All money sent for goods that we are unable to fill is returned promptly.

No. 11—We send out nothing but goods of the best grade. If you want a cheaper, poorer grade, you will have to purchase elsewhere.

No. 12—Prices of all goods subject to change without notice.

This is a very important paragraph, as in these times of changing prices it is very difficult to determine what prices may be in February, March or April at the time of writing this catalog in November. We use our best judgment and any information we can secure. Remember, we are just as willing to lower as to raise the prices if the market will warrant.

Parcels Post

No. 13—We can deliver to your door packages weighing up to and including 70 lbs., in the first and second zones, 50 lbs. outside of those two zones. We can deliver these packages to you at a very low rate, lower than express rate in most cases. This will undoubtedly mean a readjustment of express rates to a lower basis.

No. 14—Orders packed in rotation as received. Notice mailed on day of receipt of order if order cannot be packed that day. All perishable goods ordered will be shipped just as early in the spring as weather will permit. **They will reach you in time.**

No. 15—We guarantee that all seed ordered from this catalog will prove of satisfactory germinating test to you; that is, on arrival of the seed test it, and if it does not prove satisfactory you may return it to us within **fifteen** days after receipt of the seed by you, returning at our expense, and your money, together with the transportation charges which you have paid, will be refunded. It is so manifestly impossible for a seller of any perishable article to be responsible for what may happen to it after it leaves his hands, especially one like seeds, which are planted under varying conditions of soil and climate, that we and all other American seed houses disclaim responsibility as to the crop that may be raised from seed which we sell. At the same time, in case of failure to secure proper results caused from some inherent fault in the seeds themselves, Gurney Seed & Nursery Company accept responsibility, not for the crop, but to the extent of the amount of money paid for the seed if immediately advised; or seeds may be returned. We do not warrant in any way, express or implied, the contents or the description, quality, productiveness, or any other matter of any seed and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are at once to be returned, and your money and transportation charges paid by you will be cheerfully refunded.

Gurney Seed & Nursery Co.
Yankton, South Dakota

Date.....1921

Gentlemen: Please send me the following goods by

		Amount Enclosed	
Name.....			
Post Office.....	R. F. D. No.....	P. O. Order	
Shipping Point.....		Exp. “	
(Name of R. R. Town)		Bank Draft	
Name of R. R.....		Cash.....	
County.....	State.....	Check.....	
Is there an agent at your R. R. Station?		Stamps.....	
I live.....	Miles from R. R. Station	TOTAL	

[illegible]

Please use this order blank for Garden and Flower Seed, Nursery and Field Seed blanks in their departments.

CUT OFF HERE--Use Pencil on This Sheet.

WILLIAM LONG WOLF AND FAMILY OF THE OKALALAS

THE GARDEN TO ASSIST IN READJUSTMENT OF LIVING COSTS

The garden is more important this year of 1921 than ever before. The readjustment of living conditions has been, and will be, severe. Be prepared to combat it with a good garden.

It is a worthy successor to the War garden and the Garden of Peace that served to save the millions of dollars in other foodstuffs, that taught the American people to depend on the little square rod or the large garden for a large portion of their maintenance, and in a great many cases some of their income by selling their surplus to those that were unfortunate enough to fail to plant the garden. **LONG MAY THE GARDEN OF PEACE STAY WITH US AND MAY IT CONTINUE TO GROW.** I want to say to everyone reading this catalog that the garden of peace is just as important to you and to the welfare of this and other nations as it was during the war, and you should not neglect it. The saving to you in a year amounts to considerable if you figure on nothing but the fresh vegetables; it amounts to considerable more with the new safe methods of canning and drying which give practically fresh vegetables the year through. The satisfaction in producing the best vegetables, the satisfaction of teaching the children to get back to the soil, the health-giving exercise to those that would lack it otherwise are matters that should be well considered before discontinuing the garden. In this garden, do not make it all vegetables, but plant some of the annual flowers so that you may have the beautiful with the useful. There is always room for a few flowers in any garden, no matter how small, and you realize that pleased sensation when a bouquet of hot-house flowers comes your way, the right flowers in the garden are equally as satisfactory and you may have them nearly every day. If I could use any stronger or more convincing language than I have in urging that you still plant the garden I would do so. It would be of serious consequence to the whole country if we materially reduced the acreage devoted to garden stuffs.

KINDS TO PLANT TO BRING BEST RESULTS

First, in a reasonably large garden, either in town or country, plant a bed of the **Asparagus**, a few roots of **Horse Radish**, and some of the **Pie Plant**; these are absolutely hardy and will live year after year. Then a row of **Wax Beans** to be renewed two or three times during the season, both for fresh beans and canning, a row of the **Table Beets**, to be used first when the size of a small thimble for greens, a little larger for pickling and canning and the matured beets to be wintered just as you would other vegetables. A row of **Celery** for early fall use requires a little more work or care than some other vegetables, but the crispness and sweetness of the home-grown will amply repay you. Plenty of **Carrots**, so that you can use them for the entire year, the little fellows about the size of your finger for scraping or frying whole, the larger ones to be used in about the same way, not quite as nice as the smaller, but always good, cellar a goodly quantity for soups and other purposes. In the larger gardens do not forget to have ample **Cabbage**, the early heads for slaw, salads and cooking, the larger later varieties for sauer kraut and for winter fresh cabbage. It is a mistaken notion to think that you cannot have **Cucumbers** in almost any garden; they do not take up much room, as a hill can be confined to a very small space, and the gathering of the wee ones for pickling and the larger ones for slicing makes them very desirable. The small garden in town must of necessity forego the **Sweet Corn**, but in the larger gardens plant goodly quantities commencing with the early varieties and ending with the evergreen or late variety; plant several times that you may have **Sweet Corn** from about the first of July until frost. Just a short row of a few plants of the **Egg Plant**; they produce wonderfully and half a dozen plants is ample for a family.

PRICES FOR GARDEN SEEDS

Since issuing the last catalog there has been a fearful upheaval in all lines of business over the entire world. Labor has been forced to take a considerable reduction. The merchants have been compelled to sacrifice on the high priced goods purchased during war-times. The farmer has been compelled to sell his products at less than the cost of production. But we believe that during the year 1921 everything will be on a more equitable basis, and be adjusted so that reasonable profits will come to everyone.

In line with these reductions you will, in going through the pages of this catalog, find prices properly readjusted. This applies to garden seeds as well as field seeds, and as it is more important this year than ever before that you should have a good garden to assist through these times of readjustment, we are glad to make these new lower prices.

ASPARAGUS

Sow in early spring in drills two inches deep and one foot apart between rows. After the plants are one or two years old transplant them into permanent beds. Set them 15 inches apart each way and cover four inches deep. Manure plentifully each fall, to be forked in very early in the spring, after which sow on a good dressing of salt, one oz. to 50 ft. of drill.

Columbian Mammoth White—A distinct variety of strong, vigorous growth, producing large white shoots that remain white as long as fit for use. **Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 70c.**

Conover's Colossal—A standard sort of large size, tender and excellent quality. **Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 70c.**

BEANS, GARDEN VARIETIES

Wax and string beans can be grown in very large quantities on very small plot of ground and are one of the best vegetables; can be used as green or snap as well as dried beans; is excellent for canning and pickling. The Pole beans are very desirable and can be planted in each hill of sweet corn, or individual stakes can be set for the plants. They yield enormously.

Plant as soon as danger of frost is past, in light, warm soil, in rows two feet apart, three inches apart in the rows. Keep well hoed and draw the earth up to the stems, but do not hoe when wet, as it will cause them to rust and injure the crop. Plant every two weeks until about the middle of August for a succession. One quart to 100 feet of drill.

GURNEY'S EVERBEARING WAX RUST-PROOF BUSH BEAN

The great campaign carried on by the government for the canning of vegetables applied especially to fresh beans, the wax and green podded beans in the pod. This created a very heavy demand for beans suitable for canning purposes, and we were sold out of the Gurney's Rust - Proof last spring before the season was over. We planted a larger acreage than usual and have a fine crop, and you will find this not only the best for canning purposes, but the best for using fresh as string or snap beans. As its name implies, it is an ever-bearing bean, or a continuous bearer, over a period of six weeks; it is also rust-proof and practically immune from all other bean diseases, producing always a large crop. This bean is especially valuable to the home gardener for all of the reasons named above. It produces the most beautiful pod of any of the beans, generally of very even length, of a beautiful shiny wax, very brittle and free from fiber, being absolutely stringless until ripe. 1/3 pint, 20c; 1 lb., 45c; 15 lbs., \$3.25.

Flandreau, S. Dak., Oct. 5, 1920.

Last spring we got some garden seeds from you, and I got a fine lot of everything to put down in the cellar for winter. It is the best seed I have used. You gave me a package of your premium prize Pumpkin seed. I got a pumpkin from one vine that measured 30 inches long and 20 wide, which I thought was a pretty good pumpkin. I thought I'd write and tell you about my luck, as I see you offer \$10 in prizes for the biggest pumpkin raised from your seed.

Mrs. Alice Olson.

Continued from Page 7

The **Kohl Rabi** takes the place of the turnip, is never strong and of excellent quality. The **Lettuce** is one of the most important vegetables in the small garden; it is used innumerable ways and is appreciated by everyone. Plant first the crinkle leaved and for late the good solid headed kind. **Melons**, both water and musk, must be grown in the larger gardens and on the farm, and the resident of the town and city must depend on the larger gardener for theirs. These are not often left out of the garden or field where there is room for them and they take the place of fruit in a great measure. In the smaller gardens plant liberally of **Onion Sets** and **Onion Seed** for the small green onions and onions for pickling. In the larger gardens plant larger quantities of the seed for the large winter onions as well as those for pickling. **Peas** are one of the important crops in any garden, both large and small, and the first planting should be as soon as the ground is in shape to plant; peas do not do well in real hot weather, consequently early planting is best. A row of each of about three varieties, early, medium and late, will well repay you of the small garden; you of the large garden should plant ample quantities for canning for winter use. The **Pepper**, like the egg plant, does not require large numbers. A dozen plants of the large fruited variety will be ample for stuffing or pickling or for use with other vegetables, but are necessary in the large and small gardens. The **Parsnip** can be grown readily in all gardens but is not used until winter, and it is probably better for the small gardener to purchase these in bushel lots in the fall from the larger gardener, pack them in sand and allow them to freeze, thawing them out as wanted during the winter; parsnips are much sweeter after freezing. Pumpkins, of course, are too well known and their uses too numerous for me to mention them here; they can be grown only in the larger gardens. A few plants of the **Parsley** are necessary for garnishing and flavoring, and continue to produce through the entire summer and use but little room. The **Radish** is another of the important early vegetables and should be planted when the first inch of frost has left the upper surface; plant the turnip rooted varieties first, follow these with the longer varieties like the icicle, planting once each week up to the first of June, then in July or August plant the winter varieties; you will find them mighty desirable

Oglala, S. Dak., Oct. 19, 1920.

This is the picture that I will send you to show that I planted 93 different kinds of Gurney seeds this year, and I got first prize at the Pine Ridge Agency Fair, and the district farm took half of the goods to the Huron State Fair. Well, I am very glad of your Gurney seeds because I plant more seeds than anybody on this Pine Ridge Reservation. I would like to tell you all that I want to say but cannot talk good English and hope you understand.

Wm. Long Wolf.

and satisfactory for winter use. The **Salsify** or **Oyster plant** is not half appreciated. A row thirty feet long will furnish ample for a good sized family and they can be grown very close to other rows of other vegetables. The roots get to be about an inch through at the top and are very long and are a mighty good imitation of the oyster when made into a stew. The **Spinach** is another vegetable for the early planting, producing rapidly and furnishing the most excellent greens at a time when the system craves them. The **Squash** is an important item, but unfortunately can be grown only where the room is amply large and we must depend on the larger gardeners or farmers for our winter supply of squash; you should buy these, where you cannot grow them, in dozen lots. The **Tomato** can be grown in all gardens, a single plant, if properly handled will produce more than twice the number of tomatoes that the inexperienced person is now harvesting. A tomato plant should be trellised or kept up from the ground; a good way is to drive three stakes in the ground on either side of the plant, secure a few wooden hoops from nail kegs, fasten them to the stakes and train the plant up through this inexpensive trellis—you will be surprised with the quantity and quality of the fruit. **Turnips**, excepting the early varieties, it is not policy to plant in the little town garden. Plant in large quantities on the farm on new ground where possible; plant the later varieties about the last of July, and where they are not strong they make one of the good winter vegetables. **Rutabagas** will produce best in the extreme north and should not be attempted in the south or central country as the quality of the northern ones and the price at which they could be purchased for winter use will not warrant your bothering with them, but in the northern states they should be planted at every opportunity and in large lots.

By reading our canning bulletin and following the directions in the various bulletins which we issue you will have ample garden for every day in the year, and I want you to work with me in making this a banner garden year.

The Sunshine of Darkeyland

Children of Isaac Blakey on a large farm near Yankton, growing watermelons, sweet potatoes and peanuts. His melons and sweet potatoes made him better than \$300.00 per acre.

Detroit Wax

Detroit Wax—(45 days). The erect plants of this early dwarf variety are hardy and productive. Pods are of an attractive bright yellow color, broad and flat, four to five inches long. An excellent sort for market, shipping or home use. $\frac{1}{2}$ pt., 15c; lb., 40c; 15 lbs., \$3.00; 60 lbs., \$11.00.

Golden Wax—The Golden Wax is probably the earliest, and we believe the most generally planted and satisfactory of any of the old varieties. Pods are a bright, waxy yellow, good length, a little flatter than round, entirely stringless, and of a fine, buttery flavor. It is excellent for cooking when the pods are just formed. Again, when the beans are nearly ripe, as a shelled bean. An excellent sort for canning, or pickling. A very heavy bearer, and withstands adverse conditions better than most. The seed is white, mottled red and purple, about the same color as the Wardwell Wax, but a shorter, nearer round bean. $\frac{1}{2}$ pt., 15c; lb., 35c; 15 lbs., \$3.00; 60 lbs., \$11.00.

Curry's Rust Proof Wax—Positively proof against rust. This is the earliest of the black wax beans. An ideal bean for the market gardener, being a heavy bearer of large, well-formed pods, tender, absolutely stringless, and positive proof against rust. It is a variety that when you sell it to your customer means a re-order. It is excellent to be used as a string bean when the pods are formed and before the beans are full grown. It can be used as a shelled bean when the beans are full grown but not ripe. The only objection to the use of it at that time is its color, but the quality is excellent. $\frac{1}{2}$ pt., 15c; lb., 35c; 15 lbs., \$3.00; 60 lbs., \$11.00.

Hodson Wax

Davis White Wax

This Davis White Wax Bean has taken the place of practically all other beans the last year or two for two reasons: One is that the ripe, dry bean is large, clear white, and equal for cooking purposes to any other bean grown. Another is that it has outyielded all other varieties of wax beans under adverse conditions and given crops where other varieties have failed. Consequently, with two or three years of short crops of the other standard wax bean and practically a full crop of Davis White Wax, it is taking the place of the others. The plant is exceptionally healthy, compact, upright growth, carrying its pods in the center and well up from the ground. It seems to stand wet and dry weather better than other beans and always gives a large yield of handsome pods, long, flat, clear and waxy white. The dry beans are most excellent for cooking. Personally, I prefer them to any Navy Bean. $\frac{1}{2}$ pt., 15c; lb., 40c; 15 lbs., \$3.00; 60 lbs., \$11.00.

Niobrara, Neb., Oct. 20, 1920.

I feel that I must write to you and tell you that I raised the best garden this summer—everything that I planted was fine. The Mammoth Pumpkins were great. We got first prize on the pumpkin at the Santee Fair. I am sorry that we did not weigh it. My husband sold it. We got first prize on the Hubbard Squash also. Sold it also. I am very much satisfied with all that I raised from your seed.

Nancy Robertson.

Golden Wax

Wardwell Kidney Wax—An extra early prolific wax bean; hardy and productive; pods flat, of a delicate, waxy yellow and brittle; seed white, mottled brown around the eye. $\frac{1}{2}$ pt., 15c; lb., 40c; 15 lbs., \$3.25.

Hodson Wax Rust Proof Bush Bean—This is a remarkably strong grower, sturdy and productive. Has been entirely free from rust and blight. The plants are well loaded with long, straight, handsome pods averaging about seven inches in length; the color is a very bright yellow, making them very attractive; the pods are brittle and tender and of the very best flavor. They are free from fibre and stringless, while its fine table quality, its long handsome pods will render it of special value to the private gardener. $\frac{1}{2}$ pt., 15c; lb., 45c; 15 lbs., \$3.25; 60 lbs., \$12.00.

SOME OF THE BUILDINGS, GROUNDS AND VIEWS OF OTHER PROPERTIES OWNED AND OPER- ATED BY THE COMPANY

THE MAIN BUILDING

This building is the main downtown building. The one that seems to be separated from the other is now joined and this building has a total length of 250 feet, is built of brick, three stories high, with a twelve-foot brick and concrete basement under all of it. In the open space under the street is the heating plant that furnishes heat for all of these and other buildings.

RESIDENCE, SUPERIN- TENDENT OF PROPAGATION

This home was built more than twenty years ago by Col. Gurney when his nursery was much smaller than it is now. It is now occupied by Cassius, one of the Superintendents of Propagation. The tree showing best in front is a Cut-leaf Weeping Birch. It is surrounded by Elm, Hackberry and Scotch Pine, and is located at our Evergreen nursery.

FOR TREE STORAGE AND GRADING

This building is at the evergreen nursery; is 65 by 100 feet, one story, with a twelve-foot concrete basement under the entire building; makes one of the most desirable and best storage and grading houses that could be built.

EVERGREEN PACKING HOUSE

Our evergreen business has grown to such immense proportions that we were compelled in order to give you the evergreen service that you are entitled to, to add packing room in that department. This big concrete building is 38 by 110 feet, cement floor and equipped for the best possible handling of evergreens. All evergreens purchased by you are taken out of the ground right close to this building, taken inside and packed immediately.

A VIEW OF THE DRIVE- WAY UP TO ONE OF THE RESIDENCES AT OUR EVERGREEN NURSERY

The trees on one side of the drive-way are Black Hills Spruce, on the other, Elm trees, planted a good many years ago by Col. Gurney.

Stringless Green Pod

BEANS—Green Podded Varieties

Stringless Green Pod—Is entirely stringless; as early as other green podded sorts, and remains tender and crisp longer. The pods are of a pale green color, round and of good substance as well as fine flavor. Seed dark brown. $\frac{1}{3}$ pt., 15c; lb., 40c; 15 lbs., \$3.00.

Long Yellow Six Weeks—Pods are flat, six inches long, light green, are excellent for cooking green or dry. $\frac{1}{3}$ pt., 15c; lb., 40c; 15 lbs., \$3.00.

Navy Bean—A great many people know what they suppose is the Navy Bean, but is generally a mixed, uneven bean that cooks uneven and lacks quality. Our Navy Beans are grown for us in Michigan; are absolutely pure and hand picked. You will not find a bad bean in a bushel. Per lb., 30c; 15 lbs., \$2.75; 60 lbs., \$6.00.

Burpee's Green Pod Stringless—A very desirable dwarf green podded snap sort for the home garden and largely grown for the market. The plants are large, spreading and productive. The pods are medium green, five to six inches long, cylindrical, larger than those of Red Valentine, but are quite as fleshy, of equally high quality and remain crisp and tender longer. They mature a little later. Seed of medium size and length, yellowish brown. $\frac{1}{3}$ pt., 15c; lb., 40c; 15 lbs., \$3.00; 60 lbs., \$11.00.

Bountiful—The plant is very handsome and of sturdy growth, being practically immune to rust and mildew. It is very hardy, early and prolific and continues in bearing for several weeks. The pods are of immense size, rich green, thick, broad, extra long, solid, meaty, rich, tender and entirely free from string. $\frac{1}{3}$ pt., 15c; lb., 40c; 15 lbs., \$3.00; 60 lbs., \$11.00.

Pole or Running Beans

They are more tender and require more care in culture than the bush beans and should be planted two weeks later. Plant in hills from three to four feet apart; plant five or six beans in a hill, leaving a space in the center for the pole.

Large White Lima—Pods broad and rough. Seeds large, broad and white. $\frac{1}{3}$ pt., 15c; lb., 35c; 15 lbs., \$4.00.

Kentucky Wonder. (Old Homestead.) This climbing variety is very vigorous and productive and bears its pods in large clusters. The pods are green, very long, often being nine or ten inches, nearly round, stringless and very crisp when young, and so fleshy that they are greater in width than breadth. The seed is long, oval, dun-colored. This is one of the very best early Pole Snap Beans for the home garden or market. The supply of seed is limited and purchases should be made early. $\frac{1}{3}$ pt., 15c; lb., 35c; 15 lbs., \$4.00.

Bush Lima Beans

Improved Henderson Bush Lima—This is the very early Sieva or Butter Bean of the South. The pods are ready for use a week earlier than those of Burpee's Bush Lima and the plants are immensely productive. When gathered young the beans are of excellent flavor. $\frac{1}{3}$ pt., 15c; lb., 35c; 15 lbs., \$3.50.

Bush Lima (Burpee's)—The true bush form of the old, large Lima Bean. It grows vigorously to a height of 18 to 20 inches, forming a circular bush, 2 or 2½ feet in diameter, requiring no poles or stakes, yielding from 50 to 150 fine pods, similar in size and quality to those grown on the large white Lima Beans. $\frac{1}{3}$ pt., 15c; lb., 40c; 15 lbs., \$3.50.

Fordhook Bush Lima—The very best large-seeded variety. The plant is vigorous, erect-growing, bearing well above the ground. The pods, which are produced in large clusters, are medium green, about four and three-fourths inches long, each containing three to five large beans of exceptionally fine quality. Don't fail to plant some of these in your garden this spring. Prices: $\frac{1}{3}$ pt., 25c; 1 lb., 50c; 5 lbs., \$2.25.

Dayton, Iowa, March 16, 1920.

We have used your seeds ever since we started farming and this will be the fifth year. I have always found them to be all good. Had some splendid muskmelons and squash last year. In fact, the finest Hubbard Squash I have ever eaten, and all who have tasted them say that they take the place of sweet potatoes, they are so sweet.

H. A. Flickinger.

MILLING PROPERTY, "YANKTON MAID" BRAND

This view shows you the mill and elevator buildings. We grind here pure **Buckwheat flour**, the best **Graham** and **Rye**, as well as **Corn Meal** and **Patent Flours**, **chicken** and other feeds, and can supply you at the lowest market prices. We grind lots of our own grain and going direct from the producer to the consumer is just what you want. Our brands are "**Yankton Maid**," which stands for highest quality.

RESIDENCE AT THE HOG RANCH

This is occupied by Dr. Adams, in charge of the ranch. This was built three years ago of Yankton made white brick. This is a new place and lacks trees but we shall add them this spring. The hog ranch is one of the big departments. We have hundreds of thorough-bred Duroc hogs of all sizes and more than a dozen buildings costing a great many thousand dollars. We are growing these thorough-bred hogs for you.

Miss Gschwendner is in the Traffic Department as first assistant to Mr. Wentworth, the Traffic Manager. Miss Gschwendner superintends the billing of all shipments that go out from this place. She knows the stock that we have on hand, the standard weight of every package, and Maurice tells me that he is satisfied because there are no errors under her supervision.

MR. WENTWORTH OF THE TRAFFIC DEPARTMENT

The Traffic Department of a big company is one of the most important, consequently, it takes a person of considerable ability to handle it correctly. Mr. Wentworth has been a traffic man practically all his life. He spent nearly twenty years with the railroad company in the traffic department, and before coming with us had the reputation of knowing rates, classification and routing better than any person in this town; and today he is better posted on railroad requirements, adjustments, rates, etc., than any railroad agent in this city. I am telling you this of him to let you know that the Traffic Department is conducted in a business-like and efficient manner. There are so many things depending on this department, that I thought it well to write of it. We receive orders from all parts of the world. Sometimes these orders are routed, sometimes not. If not routed, this department must know without delay, the best, shortest and cheapest route and get it started at the earliest possible moment.

We deliver all packages to the Transportation Company in good condition but sometimes they reach you in bad condition, and Mr. Wentworth wants to call this particular phase of the business to your attention and asks for your co-operation and assistance. When a shipment reaches you in bad condition from any cause, it is best to examine it carefully in the presence of the Agent, have him make a notation on your freight or express receipt of its exact condition, exact weight, whether torn, frozen, broken open or any other damage that may have occurred. Pay the transportation charges, send us the transportation receipt with the Agent's notation thereon, and we will immediately reimburse you by a refund of money or shipment of other goods to make up the loss, so that you lose nothing.

This gives us all of the necessary evidence to make a claim and protect ourselves. Without the above we can do nothing for you. This applies to express and freight shipments. Those coming by parcel post you either receive at the postoffice or through your carrier. A bad order slip signed by them is all that is necessary. Returning that to us promptly and telling us just what is damaged will bring quick relief.

Claims of the Gurney Seed & Nursery Company against Transportation Companies are paid promptly, because we make it a rule never to present a claim without the necessary evidence, and the claim must be absolutely just and warranted before presenting. Mr. Wentworth personally asks you to assist him in the Traffic Department that you may have the best service from us.

TABLE BEETS

For an early supply sow as early in the spring as ground can be properly cultivated. Lay out the drills for seed about one foot apart and two inches deep. For the main crop, sow first week in May and for the winter use in June.

Gurney's Early Model Globe

One of our lady customers wrote us this season that the Model Globe Beet should be sold as an ornamental plant as well as a vegetable. I do not blame or wonder at her making this remark. A row or patch of the Model Globe Beet is very ornamental. The foliage, as well as the root, is purplish red, and would make an ornamental bed even in the best front yard. The Model Globe Beet is medium early, always even in size, color and shape. A number of newer varieties have been offered since we offered the Model Globe, but they have never equaled this beet in the trial grounds or in the field. One of the most satisfactory uses of the Model Globe Beet is for pickling purposes, using them when they are about 1½ inches through. They retain their color and are of excellent quality. Pkt., 10c; oz., 15c; ¼ lb., 50c; ½ lb., 80c; 1 lb., \$1.30.

Gurney's Model Globe

Crosby's Egyptian—It is large, light colored, nearly spherical; one of the best for early planting outdoors. It is a most excellent sort, becoming fit for use sooner than any other variety. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.00.

Bassano—Extra early pink, globular root, flesh white, circled with brightest pink. The very best extra early. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., 90c.

Bastian Half Long—An early half long beet, quality excellent and will produce nearly twice the weight in the same time as the early round beets. Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., 90c.

Sutton's Globe Beet—This beet was imported by us from England from the originator. Resembles the Egyptian turnip rooted, but is perfectly round. There are none earlier. Pkt., 10c; oz., 15c; ½ lb., 70c; 1 lb., \$1.25.

Swiss Chard—For the leaves alone this variety is grown. This, gathered young, should be cooked the same as spinach, or later the midribs may be cooked and served the same as asparagus. Pkt., 5c; oz., 10c; ¼ lb., 40c; 1 lb., \$1.10.

Swiss Chard

Extra Early Eclipse—An excellent sort; about as early as the Egyptian, but we consider it better because it is larger and of much finer quality. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., 90c.

Edmond's Early Blood Turnip—The very best sort for general crop. In quality one of the finest; exceedingly dark; shape globular, having one tap root. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.00.

Long Smooth Blood—The standard long sort. Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

Detroit Dark Red Turnip—A grand beet for bunching for market; tops are exceedingly small and uniformly upright; roots are perfect turnip shape, with small tap roots. The principal fault with most Turnip Beets is the occasional appearance of white rings, and this will be found has been overcome by careful selection of the deepest red beets. Quality is the very best, sweet and tender. Gardeners can safely plant it largely. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., 90c.

Improved Early Egyptian—We consider this the best first early beet of all the standard varieties. Best for forcing, best for first outdoor planting, roots very dark red, rounded on top, flat underneath. Small tops, which allow close planting. Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., 90c.

Arlington Favorite—A new dark-leaved early blood variety; originated at Arlington, Mass., where it is grown extensively for the Boston market. It follows the Eclipse closely in maturing, but is of much darker color and superior in quality; perfectly round in shape, it differs from all other dark blood sorts, in that it has the sweetness of the Bassano, and yet a very dark, deep blood color. Its small upright, growing tops, early maturing, and the splendid shape and color of the roots make it popular with everyone who plants it. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., 90c.

Harvesting a 20-Ton Per Acre Crop of Mangels

ROOT CROPS

It is our purpose to give as much advice as possible in this catalog, advice that is worth while, coming as it does from long varied experiences of ourselves and our customers who have been kind enough to report, or where we have visited their many farms and ranches. One of the best paying crops on a stock farm is the acreage of **root crops**.

Their feeding value is high. The variation of feed to live stock is of nearly as much value as the feed itself. The yield per acre is enormous when proper selection of varieties and proper care is given the growing crop. It is not any more difficult to produce an acre of "root crops" than it is an acre of potatoes and none of you would think of discontinuing your potato field. Potatoes do not always yield a full crop, even with best care, but you always plant again; other root crops with good care almost invariably yield a much greater tonnage per acre than potatoes.

ROOT CROPS TO PLANT

Of the numerous kinds and varieties we would select the following for stock purposes: **Mangel Wurzel**, **Mammoth Long Red**. This produces under good cultivation twenty tons per acre. If fed to milch cows will increase flow of milk about 25 per cent. **Mangel Danish Sludstrup**. Long reddish yellow root, probably best of all mangels.

Sugar Beet—These will not produce the tonnage per acre that mangels will, but on account of their greater sugar content they are of greater food value. Sugar beets are especially valuable for syrup purposes, for cooking, as you do any other table beet and for canning. A fair yield under good care would be 13 to 17 tons per acre. A load thrown to the hogs, another fed properly to milch cows, will add a vast amount of additional profit to your year's income.

Carrots—Any variety of table carrot listed except the very short, early varieties, will pay well and are of great value for stock purposes as well as for winter's house use. An ordinary yield of carrots, table varieties, would be about 12 tons; of the mastodon variety, about 20 tons.

SUGAR BEETS AND MANGELS

In foreign countries a man running a dairy or growing stock of any kind for any purpose would be considered a mighty poor manager and in the end would be almost sure to fail, if he failed to grow a quantity of root crops each season. A ration of beet roots with the grain and hay will increase the milk flow at least 25 per cent. The fact that you can produce from 15 to 20 tons of beet roots per acre will, I believe, convince you that it is the greatest and most profitable crop you can grow. An acre of mangel beets can be produced, figuring all of the work from the first plowing of the land till they are harvested, stored, for not to exceed seventeen dollars per acre. This does not allow for rental value of the acre of land, but allows full labor value for all labor expended on the acre during the season.

Farmers, stock growers and people living in town with a single cow are certainly neglecting the most important root crop when they fail to plant a quantity of these for winter stock feed; easily taken care of, rapid growers; relished by all stock and a health producing feed. Buy these by the pound this year and you will increase your planting each season. Four to six lbs. per acre.

Sow in April and May in thoroughly plowed, well manured soil, in drills two inches deep and about 18 inches apart. Thin out to twelve inches and keep the weeds down by frequent hoeing and cultivating. **Mammoth Long Red**—More generally grown than any other sort; roots large, quality excellent. Oz., 10c; ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.10.

DANISH SLUDSTRUP

This most wonderful Mangel has been awarded a first class certificate several times by the Danish Government, which is the highest honor attained in Agricultural circles in Denmark. And to obtain this special certificate is a very difficult undertaking.

Sludstrup is a long reddish yellow root, but not so long as the Mammoth long red. It grows more above the ground and is very easily harvested. The sizes of the roots, like all other varieties, depends entirely upon circumstances. They are frequently grown to a size weighing from 15 to 20 pounds each. The Danish farmers prefer to grow them smaller, viz., 6 to 10 pounds each, which is accomplished by not allowing so much space in and between the rows. The smaller roots contain a higher percentage of dry matter, consequently the crop is more valuable than if large roots are grown. Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 60c; 5 lbs., \$2.25.

I am very much pleased with your seed I bought from you. I raised 3½ wagonloads of mangels, from about ½ acre. The largest was 12 lbs. And from the Mammoth Pumpkin seed you sent me the biggest I raised is 23 lbs. I am very much pleased. Skogmo, N. D., Nov. 15, 1920. Frederick Kolschepski.

ROOT CROPS—Continued

Yellow Obendorf monstrous half-long, grows nearly on top of ground; easily harvested. Oz., 10c; ¼ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

Golden Tankard—One of the medium sized perfect shaped ones, can be grown closer than other varieties, giving as good yield as larger varieties. Oz., 10c; ¼ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25.

Vilmorene Sugar Beet—It unites capacity for a large yield with an exceedingly rich flesh, making it the best for cattle feeding. Tops medium sized; roots above medium size, long top-shaped, growing slightly above the surface; white, washed with red at top; flesh fine grained and very sweet. Oz., 10c; ¼ lb., 25c; 1 lb., 65c; 5 lbs., \$2.75.

White Klein Wanzelben Sugar Beet—This variety has proved to be a very valuable sort, not only in foreign countries, but as well in Colorado and other sections of this country, where it has been thoroughly tested. It has a rather long, slender root, very rich in sugar, and grows deeply sunk in the ground and it is claimed to yield under average conditions about sixteen tons to the acre, containing 12 to 13 per cent of sugar. Oz., 10c; ¼ lb., 25c; 1 lb., 65c; 5 lbs., \$2.75.

MIXED SUGAR BEETS AND MANGELS

We have just a few pounds of beet seed that has become mixed in handling. The germination is very high, all fresh seeds, and for stock purposes they will be equal to the best named varieties, but will not be all of one type. ½ lb., 30c; 1 lb., 50c; 5 lbs., \$2.00.

BORECOLE
OR KALE

Tall Kale—One of the very best plants for greens, well known and much planted by German-Americans, but little used by others. It is much hardier than cabbage and a good frost improves its quality. The leaves are very curly and the plants are very ornamental as well as useful. Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., 95c.

Dwarf Green—Hardy, prolific, flavor similar to cabbage; desirable in every garden. Pkt., 5c; oz., 10c; ¼ lb., 30c.

BROCCOLI

Sow early in spring. Transplant and cultivate the same as Cabbage. The Broccoli is similar to the Cauliflower. They will produce heads in October and November, and should any plant not be forward enough for use before severe frosts, let them be removed to a light cellar, where they will head during winter.

Large White Mammoth—Pkt., 10c; oz., 35c; 1 lb., \$2.50.

BRUSSELS SPROUTS
Cultivated for the small heads that grow in considerable numbers on the main stem. It is a delicacy much esteemed by some. Sow in seed bed middle of spring and transplant and manage as Winter Cabbage. Pkt., 10c; oz., 25c; ¼ lb., 60c; 1 lb., \$2.25.

CELERY

Did you know that Northwestern grown celery will bring almost double the price on the market than the fancy Michigan and California celery will bring? Northwestern celery will not compare with these fancy brands in size or looks, but in quality it is simply perfect. It is easily grown and every family should have some of this nutritious, healthy vegetable.

Sow in April and May and rake seed in lightly; water and shade from strong sun. Prepare trenches from two to four feet apart, a foot wide and a foot deep; dig into the bottom plenty of well-rotted manure, and set the plants when they are three or four inches high, six or eight inches apart in each trench. Keep them shaded until started and gradually earth them up as they grow.

CELERY—White Plume

White Plume—Out in the State of California they produce and ship thousands of carloads of White Plume celery each year. We have received letters from some of the largest of the California celery growers, telling of the wonderful results from our White Plume seed, and we know that it will give you better results, as it has them. Celery is one of the most delicious of the vegetables, can be grown easily in any small garden, and gives full instructions, will

or large garden, and if you ask for it in placing your order be placed in your package. This is also true of practically all of the vegetables. We have bulletins on all of them for your special benefit. Pkt., 10c; oz., 25c; ¼ lb., 70c; 1 lb., \$2.00.

Golden Self-Bleaching Celery—Like the White Plume, this Celery requires very little earthing up, and in many other respects it is similar to that favorite sort, differing, however, in color, which is yellowish, the heart being large and solid and of a beautiful golden hue. Pkt., 15c; oz., 40c.

Giant Pascal—Grows about two feet high, the stalks are very broad, thick and crisp, and entirely stringless; the width and thickness of the stalks are distinctive features of this variety. It bleaches with but slight "earthing up," and very quickly, usually in five or six days. Pkt., 5c; oz., 20c; ¼ lb., 50c; 1 lb., \$1.50.

Winter Queen—Highly regarded by growers for late keeping, preserving its solidity and tenderness very late in the spring. Vigorous in growth and of attractive appearance. Pkt., 5c; oz., 15c; ¼ lb., 50c; 1 lb., \$1.75.

Early Snowball—This is a popular extra early strain of dwarf, compact growth. Under favorable circumstances nearly every plant will make a fine solid head of good size. It is valuable for both early and late. **Pkt., 10c; ¼ oz., 50c; oz., \$1.50; ½ lb., \$4.50.**

Extra Early Dwarf Erfurt—(Extra Selected)—This is the choicest selected strain of the popular Erfurt type and is remarkable for its extreme reliability in heading. Plants very dwarf. **Pkt., 10c; oz., \$1.50; ¼ lb., \$5.00.**

Vetches, Autumn Giant—The best large late Cauliflower, especially desirable for mixed pickles. **Pkt., 10c; oz., 75c.**

CHICORY

Large Rooted, or Coffee—Sown in drills, the roots become well developed. When they are dried, roasted or ground, they become the chicory of commerce, and are used in adulterating coffee. **Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.50.**

CRESS

Sow peppergrass early in the spring, in shallow drills, and every two or three weeks for a succession; cut often, as it will continue to grow. The Water Cress must be sown on the margin of a stream, or running water, or in a very moist location.

Curled or Peppergrass—Common and well known. **Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., 75c.**

True Water Cress—Leaves tender and highly flavored. **Pkt., 10c; oz., 45c; ¼ lb., \$1.75.**

CELERIAC

A variety of celery having turnip-shaped roots which, when cooked and sliced in vinegar, makes a most excellent salad.

Large Smooth Prague—This is the largest and best variety grown, and grows to a large size. **Pkt., 5c; oz., 20c; ¼ lb., 60c; 1 lb., \$2.00.**

CAULIFLOWER

For spring crops only the extra early dwarf varieties should be selected and seed sown in hotbeds early in February, transplanting the young plants to the garden early in April, when the trees are starting out in leaf. For main or fall crop seed should be sown about June 1st, and young plants set out during the latter part of July.

GURNEY'S EARLIEST MARKET CAULIFLOWER

This wonderful new short-stemmed large-headed, heavy-leaved Cauliflower was offered by us in 1910 for the first time, and we wish to say to all lovers of this delicious vegetable that you can grow these as easily as you can grow the cabbage. It is a sure heading variety, nearly every plant making a good, solid head. Is desirable for market gardeners on account of earliness and clear white color, which creates an unusual demand for it. **Pkt., 20c; oz., \$2.00.**

Renner, S. Dak., May 17, 1920.

I received your letter regarding my order, and in replying I wish to say that the order sent you for garden seed and flowers has been received and I am pleased and wish to thank you for the premium seed packages enclosed in the shipment. Thanking you again for the order and wishing you success in the future.

Mrs. F. M. O. Peterson.

CARROTS

Out at our hoggerly we have an evergrowing population, being about 1,000 now, and it is a question of keeping food enough on hand of the right kind, to keep them from squealing. We found that a mighty good way, and a good change of feed is a few acres of carrots. For this purpose we planted the Mastodon for the greatest yield, altho we use large quantities of Ox-heart and Long Orange. If you have never grown root crops for stock, do not neglect it any longer. It will be the most profitable acre on your farm. Do not stop at one acre if you have the stock to feed it to. We have ten acres. Cultivate with your corn cultivator if you have plenty of it planted. If not, plant them with your Planet, Jr., in the spring, rows 12 to 18 inches apart, and cultivate with a Planet, Jr. Wheel Hoe during the summer. It is not a difficult job nor a hard one. One man with a Planet, Jr., Cultivator will handle two acres per day nicely, and I hardly dare tell you what you may expect in weight per acre. Fifteen tons is not unusual by any means. A wagon load of these thrown into the feeding yard reduces the chance of disease and is a mighty satisfactory change of food.

The carrot has been one of the despised vegetables by the majority of people for probably centuries, but is at last coming into its own. The carrot is actually one of the most valuable and health giving vegetables grown. A great many people do not realize that it is the most delicious of all the vegetables. You can commence using them when they are one-half inch through and use them continuously until they are full grown, and then they are excellent all winter; and a carrot properly cooked is the most delicious of any of the vegetables. We will guarantee that if you properly cook them every member of your family will prefer them to almost any vegetable grown, and will call for them more than once a week during the entire season.

And for stock purposes plant an acre or more or less of the Mastodon. It will often produce fifteen to twenty tons of roots per acre, and for milch cows, horses, etc., it is of nearly as much value, pound for pound, as corn, and can be ground for one-fourth the cost per pound.

The Best Way to Cook Carrots

Select young, half-grown carrots, scrape and cut into one-fourth inch slices; boil in salted water until tender; then drain thoroughly. To one pint of cooked carrots add one tablespoonful of butter, one teaspoonful of sugar, a generous sprinkle of pepper. Return to fire and simmer a few minutes; serve in a heated dish.

The larger and older the carrots get, the larger quantity of sugar necessary.

There is no better stock feed than carrots, and every person should plant more than they want for house use. They are abundant yielders and cheap, healthy stock food.

For successful cultivation soil should be light and deeply tilled. For an early crop the seed should be sown as early as the ground can be properly worked. For late crops it may be sown until about the middle of June.

Gurney's Early Gold Lump Carrot

This new carrot is of French origin, is the brightest golden color, grows about 3 inches long and matures earlier than any other carrot grown. Market gardeners can safely discard all other extra earlier and plant largely of this. It is very uniform in size and color, consequently a money-maker, as there are no culls to throw out. **Pkt., 10c; oz., 20c; ½ lb., \$1.00.**

Gurney's Pie Carrots

We do not suppose you have ever made or eaten a carrot pie; very few people know that carrots are good for pie purposes and probably none of you have known that any particular variety or kind of carrot would make a better pie than another. Carrots for pie purposes are at least equal to pumpkins, and the pie resembles in flavor the pumpkin pie, but is much more delicious and on account of your being able to use them long before the pumpkins are ripe you have almost a continuous season of carrot pie, commencing with the carrots when they are about one inch through, and using them until the old carrots are gone in the spring.

Make the carrot pie just as you would pumpkin pie, and you will be surprised at the deliciousness of it. This particular carrot is better than any other variety for that purpose, and we trust that you will try it, and be as well pleased with the results as we are. **Pkt., 10c; oz., 20c; ¼ lb., 50c.**

The seeds we got from you this spring grew fine vegetables. I wish you would send me a price on your Evergreen Top Winter Onions. Please let me know in time for me to sow or plant sets by September.

Blackfoot, Idaho, Aug. 4, 1920.

Mrs. Elizabeth Campbell.

Gurney's Gold Lump Carrot—One of our customers sent us this picture. Said he could not resist the temptation to just go pull a few and have their "mugs" taken. He tells us it is just a little time after you have planted the seed until you have a full grown carrot. You can grow them mighty thick, and the quality is the very best.

Your sample of Gurney's Gold Lump Carrot seed was of very fine quality and should be grown in every garden. James Beck, Rice, Minn.

Earliest French Forcing—Small, almost globular root, maturing in about 40 days, especially valuable for market gardeners on account of its earliness. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.20.

Rubicon Half Long—It has rapidly grown in popularity, until now it is more largely grown than all other varieties combined. It is best in shape, deep red-orange colored flesh, finest of all in quality. Earlier than Danvers, about the same length, but heavier and thicker at the shoulders, making it more productive; the leaves shorter, fevver and finer. It is a wonderfully heavy cropper, producing thirty to forty tons to the acre under good field culture. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Early Chantenay Carrot—This carrot is considered by the market gardeners as one of the very best for early use; it grows about six inches long, very uniform in size and shape, stump-rooted, very smooth, deep red, fine grained, sweet and sugary, and is not apt to crack open while growing. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.20.

Guerende or Ox-Heart—A variety with short, thick roots, the diameter often exceeding the length. Color bright orange. Sweet and fine grained; good for table or stock. Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., \$1.10.

Danvers—There is no variety grown which will produce as much to the acre, with a minimum length of root, as this one. Under proper condition of the soil and cultivation it may reasonably be expected to produce, which it has done, 25 to 30 tons per acre. It is of medium length and heavy at the neck; color is a rich orange. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Improved Long Orange—A well-known standard sort, roots long, thickest near the crown, tapering regularly to a point; color deep orange; suitable for the table and main field crop. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Mastodon—Giant white, best and largest stock carrot grown, nearly one-half its length will be above ground when mature, which makes it easy to harvest. Will produce as many tons of green feed per acre as any vegetable grown. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 75c.

Half-Long Scarlet Nantes—The foliage is finely cut, dark and of medium height; roots smooth and of bright orange color, becoming bright yellow towards the center, but with no distinct core; quality extra fine. Pkt., 5c; 1 oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

Early Chantenay

Out at the State Hospital

They have a population of more than 1,000 people, and they use about 20 acres of garden, and the gardener, Mr. Labiz, has never failed to supply them with all vegetables they need, and he buys all his seed from Gurney's. The above is his field of Late Flat Dutch for kraut and winter use.

CABBAGE

The high cost of living can be materially reduced by the farmer and the person in town with just a town lot, if they will plant more gardens. The garden should always contain a quantity of cabbage because it can be used in so many ways and is in demand by the housewife almost every day. They will yield very large quantities of good wholesome food, and are one of the easiest of all the vegetables grown. Can be kept all winter in an ordinary root cellar or basement of the house. We print small booklets of instructions for planting, care, diseases, pests, and how to destroy them for practically every vegetable listed. In placing your order do not fail to include these free instructions. They are written by experts and will often save you a crop with just a few minutes' work. Sow the seed in the hot-bed or cold frame, thinner than usual, so that every plant will be good and strong. Transplant often so that when they go into the field you will not have to replant, and in this way make one-half pound of seed do where you used one pound before. You can do it. You should figure on the same acreage that you always planted, but cover it with less seed.

Sow one ounce for 3,000 to 4,000 plants. Four ounces for one acre if plants are to be transplanted. If drilled in the field and thinned out 1½ pounds per acre.

St. John's Day Extra Early, Extra Dry Weather Cabbage—Distinct variety, with extremely short stem. Head very hard and compact, round. Pkt., 5c; oz., 20c; ¼ lb., 75c; 1 lb., \$2.00.

Extra Early Express—Produces fair sized heads in 80 to 85 days. It is earlier than Etampes, although not quite as large. An important acquisition for the Market Gardener for very early use. Pkt., 5c; oz., 20c; ¼ lb., 75c; 1 lb., \$2.50.

Early Jersey Wakefield—One of the best of the conical types. Very early and makes medium sized, very solid heads, fine flavored and tender. Has few outside leaves. Price, pkt., 5c; oz., 25c; ¼ lb., 75c; 1 lb., \$2.50.

Charleston or Large Wakefield—This cabbage is of the same type as the Early Jersey Wakefield, but is about 50% larger. The heads are very solid and tender. Matures about a week later than the early Jersey Wakefield. Price, pkt., 5c; oz., 20c; ¼ lb., 75c; 1 lb., \$2.50.

Enkhuizen Glory

Early Winningstadt—Another of the conical type, maturing about the same time as the Wakefields. The heads are very pointed and the leaves somewhat fluted on the edges. For the private garden it is one of the best and in point of tenderness or flavor it has no superior. Pkt., 5c; oz., 20c; ¼ lb., 75c; 1 lb., \$2.50.

Copenhagen Market—The best Early Round headed sort on the market. The heads are very solid, averaging about 8 pounds. It is short stemmed, the heads growing very close to the ground. Matures with Charleston Wakefield and will give a heavier crop per acre. Our stock of this is very fine. Price, pkt., 10c; oz., 25c; ¼ lb., \$1.00; 1 lb., \$3.00.

SECOND EARLY AND SUMMER VARIETIES

True Jersey Wakefield

Enkhuizen Glory—Our experience with this cabbage makes it appear more valuable to us each season and leads us to recommend it most highly. It produces a large percentage of perfect solid heads. It is one of the best to follow after the early sorts. Pkt., 10c; oz., 25c; ¼ lb., \$1.00; 1 lb., \$3.00.

All Head Early—Without doubt this cabbage is unexcelled as an Early Flat Dutch or Summer variety. It makes very uniform, large, deep, flat heads and is a very sure header. Withstands heat and dry weather very well. The grain of this variety is very fine. Pkt., 5c; oz., 20c; ¼ lb., 75c; 1 lb., \$2.50.

Early Flat Dutch—A very good variety for second early use. Makes good sized flat heads and is very tender and of fine grain. It is similar to All Head. Has few outside leaves. Pkt., 5c; oz., 20c; ¼ lb., 70c; 1 lb., \$2.25.

All Seasons—A very fine summer or fall Drumhead cabbage. The heads are at least a third larger than All Head, but if planted early will mature within a few days of the All Head. It is also an excellent variety to plant for fall use. Pkt., 5c; oz., 20c; ¼ lb., 75c; 1 lb., \$2.50.

LATE VARIETIES

Late Flat Dutch

Mammoth Rock Red

Premium Late Flat Dutch—As a variety for winter market it has no superior, and is more extensively grown than any other. Heads large, bluish green, round, solid, broad, and flat on top, and often tinted with reddish brown after being touched with frost; they open white and crisp, are tender and well flavored. It is a fall and winter variety, and one of the very best to keep. Decidedly the best late variety for cultivation in our state. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.00.

Premium Late Drumhead—We recommend this sort to market gardeners and growers for shipping purposes. In good, rich soil and with a favorable season, the heads will grow to an enormous size. Very compact and solid, and of excellent flavor. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.00.

American Drumhead Savoy

Danish Ball Head—One of the best varieties for general crop. It has been selected for more than fifty years by the Danish gardeners, who grow it almost exclusively for Winter Cabbage and annually export large quantities. The heads are not as large as late Dutch Flats, but harder and more solid, fine grained and good keepers. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.00.

Mammoth Rock Red—This is by far the best, largest and surest heading red cabbage ever introduced. The plant is large, with numerous spreading leaves. The head is large, round, very solid and deep red color. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.00.

American Late Drumhead Savoy Cabbage—Heads large, round and compact; excellent for winter use. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 90c.

GURNEY'S EARLY BALL HEAD CABBAGE

In offering this new early summer Ballhead Cabbage we know that we are presenting the cabbage growing public with a winner and a money-maker and a great deal of satisfaction. This cabbage closely resembles the Danish Ballhead. The heads are perfectly round, good size and mature as early as Wakefield. They are exceptionally good keepers and the late plantings will keep equal to the winter varieties. We recommend this sort especially to market gardeners and for the home garden for both early and late. We feel sure it will take the place of nearly all of the summer varieties, producing a greater per cent of solid heads than any of them, and on account of the small amount of foliage and the compact form in which it grows, can be planted much closer than other varieties. We are offering this feeling sure that it is one of the best articles in the vegetable line we have offered. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.20; 1 lb., \$3.50.

Chinese Cabbage

Pe-Tsai or Celery Cabbage—I believe there have been more disappointed customers of seed houses over this vegetable than any other. It has only been offered for the last few years, and there are so many varieties of it that seedsmen generally have had a difficult time in establishing a correct variety to offer to the trade. We have tried out practically every variety offered, and there is only one that we shall offer in the future. All others have failed to head entirely, or made only a small percentage of marketable heads. Those that failed to make heads have produced immense quantities of seeds. The heading varieties produced but few seed. The Chinese Cabbage is one of the very valuable vegetables and will never be discarded. It is suitable for the usual cabbage purposes, especially valuable as a salad. It has the combined flavor of cabbage, turnip, celery and mustard. This should be planted at about the same season as lettuce for early use, followed by other plants during the summer. Cut these for fall and winter use just as you do other cabbage heads, storing in the same way. **Pkt., 10c; oz., 35c.**

Stuart, N. D., Nov. 15, 1920.

We have been using your seeds for several years. Our vines have done unusually well, many squash weighing from 20 to 40 lbs. We have raised Bugless Potatoes, Bliss Triumph for three years with success. For three years we have used irrigation from an artesian well. August 15th Corn matured with us about Sept. 1st. Grew about 7 feet tall and did real well.

Steve Ashburner.

CUCUMBERS

Do not plant cucumbers before danger of frost has passed, as the plants are very tender and the least frost will damage or kill them. Plant in hills or rows four feet apart, 10 to 15 seeds to each hill, thinning out later; make soil very rich. For pickles plant from June 1st to the middle of July.

I don't know as there is any use in my talking to you about cucumbers. A fellow certainly cannot do a subject justice if he don't like what he is talking about, and positively the only time I can look a cucumber in the face is when the vines are commencing to run and the fields are covered with millions of yellow flowers. This time is when the thousands of little fellows, about an inch to an inch and a half long, are picked and made into pickles. At that time I know and relish a good cucumber. As the cucumber increases in size and they commence to bring him in sliced, I am not there. I will let the other fellow eat him, but not me. The next time I enjoy looking at the cucumber is when the fields are covered with the beautiful yellow bronze ripe ones, ready for the seed thresher. It is really a wonderful sight to see fields of cucumbers with hundreds of thousands of the ripe fruit, all practically alike, the ground fairly covered with them, so easy to grow, so good when made into pickles, for myself, and I expect I will have to agree with the millions of people who eat them sliced. Anyone can grow a cucumber.

DAVIS PERFECT CUCUMBER

It is seldom that any one cucumber or other vegetable will stand permanently at the top of all others in quality, yield, etc., for as much as eight or ten years at a time. But the Davis Perfect has been on the market for about that time and its nearest competitor is so far behind that it seems safe to predict that Davis Perfect will be the best for a number of years. We have grown this in large fields for seed purposes and the cucumbers would lay so thick on the ground that you could hardly walk without stepping on them. It produces a very small quantity of seed, in fact, less per cucumber than any other cucumber grown. This make is specially desirable for slicing or for sweet pickles. **Pkt., 10c; oz., 15c; ¼ lb., 40c; 1 lb., \$1.35.**

Lemon Cucumber

Here is a cucumber in the shape of a lemon and having a flavor that at once puts it ahead of the common cucumber. It is bound to become a great favorite as a table delicacy. It is an excellent shipper, and pickled as a gherkin is delicious. **Pkt., 10c; oz., 20c; ¼ lb., 70c; 1 lb., \$2.00.**

Improved Early White Spine—This special strain of White Spine Cucumber is noted for its extra earliness, earlier than Fordhook or Arlington. Vines vigorous, fruiting early and abundantly; fruit uniformly straight and handsome, dark green, with a few white spines; flesh tender and of excellent flavor. Great bearer, for table use or pickling. **Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.00.**

Early Cluster—Early, short, and prickly, bears in clusters. **Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.**

New Everbearing—Very early, enormously productive, literally covering the ground with its fruit the entire season until killed by frost, making it the most prolific variety in existence. Fruit is medium size and rich, dark green in color, shape long, excellent for pickling or slicing. **Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.00.**

Davis Perfect

Early White Spine

Arlington White Spine—This is the favorite sort for slicing. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.00.

Livingston's Evergreen Cucumber—It is early, of strong, vigorous growth, withstanding drouth, and is very prolific, bearing abundantly until frost. A perfect pickle sort. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.00.

Chicago or Westfield Pickling—Medium length, pointed, with large, prominent spines; color deep green. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.00.

Gherkin or Burr—Oval-shaped and prickly; for pickling only. Pkt., 8c; oz., 20c.

Improved Extra Long Green—An extra fine variety, grows very long, very productive. For early and late crops, excellent for pickles. Pkt., 10c; oz., 15c; ¼ lb., 45c; 1 lb., \$1.35.

Earliest of All Cucumbers—This is a white spine sort, very dark green; when fit to slice, 6 to 7 inches long; has pale green stripes about ½ length from blossom end, straight square ended, firm, and makes a fine pickler. This is a great favorite among market gardeners and others desiring a good, prolific cucumber. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.00.

Hansen's Malakhof Sweet Corn

This picture shows the first ear of the Malakhof picked in our field this year. I regret that the boys did not give me the date of the planting and picking, but they said that the Malakhof was so much earlier than any other variety that I did not need the information. One of our market gardeners says that he gets the Malakhof so much earlier than others that people are always willing to pay 25c per dozen for these little delicious ears.

CORN, SWEET OR SUGAR

This is the most satisfactory of all of the grains for table use, and can be made to cover a period from the first of July until the heavy frosts of Fall, if you use proper varieties and season for planting. The earliest of all sweet corn is the Malakhof. By planting this about May 10 to 15 you will have good roasting ears of excellent quality by the first of July. Plant at the same time Golden Bantam and you will have corn a week to ten days later, follow this with Gurney's Early Golden, then Mammoth White Cory, then Early Minnesota and then Country Gentleman or Stowell's Evergreen, and you will have a supply of delicious roasting ears through the entire season. If there are any of these varieties you like better than the other, simply make your plantings about one week apart of that variety and you will accomplish results.

A great many farmers, the very fellows who should have the very best of everything, depend on their field corn for roasting ears. By so doing you are missing the most delicious grain you can have. If your planting is a little larger than can be used in the house, stock of all kinds appreciate it, and it is worth 50c more per hundredweight for fattening purposes than the ordinary field corn.

PROF. N. E. HANSEN MALAKHOF SWEET CORN

Professor Neils Hansen has originated a great many things in vegetables and fruits, but he did not originate this Malakhof Sweet Corn, but found it in Russia in one of his early trips to that country. He brought it because he considered it the earliest and sweetest sweet corn and that it would fill a place not yet taken by any other variety. The color of this sweet corn varies from an amber to a clear white. It matures the earliest of any variety; planting, say, by the 15th of May, you are practically sure of good roasting ears of mighty good quality by the 1st of July. The gardeners in and around Yankton sell this corn ahead of all other varieties, and from twenty to twenty-five cents per dozen ears. It will produce often three to four ears to the stalk. They are not large ears, but nearly as large as Golden Bantam. Coming, as they do, ten days ahead of Golden Bantam, it makes it specially pleasing and profitable to grow it. Everyone with either small or large garden can include some of the Malakhof. We would advise for an ordinary family at least one pound of this seed. We are still growing our stock from the original seed. ½ pt., 15c; 1 lb., 40c; 13 lbs., \$3.25.

GURNEY'S EARLIEST JUNE SWEET CORN

This variety of corn was offered by us for the last two seasons and has lived up in all cases to our promises and our expectations. It is the very earliest of the white sweet corns, quality excellent, and on account of the large size of the ears it is a most desirable corn. The quality is so good that we have trouble to keep our people out of our small acreage. We are going to plant a much larger acreage next year and can offer it in large quantities.

It would ordinarily be classed as a novelty, but we have grown it long enough so that it has passed the novelty stage, and you can absolutely depend on its being satisfactory to you. The points of merit we claim for it, and you can demonstrate for yourself, are, first, extreme earliness. Planting at the same time as Golden Bantam, it will be ready a few days earlier. Second, color. A great many people object to yellow sweet corn, and as none of the extremely early varieties of white sweet corn were of good quality, this being a white variety overcomes the objection to the yellow. Next, its quality, which is equal to the best crop of Golden Bantam or later varieties such as Country Gentleman and Evergreen. Next, its size. Making from 12 to 16-rowed ears, averaging from 25 to 50 per cent longer than Golden Bantam; deep-grained; remarkable in the length of time it can be used for cooking purposes. Next, every stalk produces an ear almost identical with all the other stalks in the field, and at the same height. It really is a wonderful sight to see a field of this **Gurney's Earliest June Sweet Corn** in full ear; monstrous ears on small stalks. It is an excellent corn for the market gardener and is especially good for those planting a small patch for their own use. It should be planted about six inches apart in the row, kept well cultivated, and you will find this the most profitable and satisfactory early sweet corn that you can grow. We are offering this season a limited quantity of this corn. We have a few hundred select ears wrapped in paper, harvested very early, at 50c per ear. Shelled, $\frac{1}{4}$ lb., 25c; $\frac{1}{2}$ lb., 45c; 1 lb., 75c; 5 lbs., \$1.75.

GURNEY'S EARLY GOLDEN SWEET CORN

This sweet corn was originated by us here at Yankton, a cross of the Golden Bantam and Early Evergreen. In color it is a bright yellow, the quality is equal to either the Evergreen or the Golden Bantam, size of ear 50 per cent larger than the Golden Bantam, and the average yield from 40 per cent to 60 per cent over the Golden Bantam. It is always ad-

visible to plant your garden for as much of a succession of crops as possible. Sometimes the same variety planted at different times during the season produces the best results; but in sweet corn we advise the planting of three varieties. We would plant the Golden Bantam for first early, the Gurney Early Golden for second early, Evergreen for third. But if you are going to plant only a small patch in the garden and expect to get along with that, you will get the greatest satisfaction and yield from this Early Golden. $\frac{3}{4}$ pt., 15c; 1 lb., 35c; 13 lbs., \$2.75.

Early Minnesota—A very popular early Corn, ears fair size, uniform and of excellent quality. $\frac{1}{2}$ pt., 15c; 1 lb., 30c; 12 lbs., \$2.00; 50 lbs., \$6.00.

Mammoth White Cory—This cut shows a single stalk with three ears. Produces wonderful yields. This comes in immediately after the Malakhof and will outyield all other early varieties. The quality is strictly first class, size of ear much larger than other varieties of early corn, and an exceptionally profitable variety for market gardeners. $\frac{1}{2}$ pt., 15c; 1 lb., 30c; 12 lbs., \$2.00; 50 lbs., \$6.00.

Golden Bantam—Fifty per cent of the sweet corn planted in the United States is of the Golden Bantam variety. It is one of the earliest and sweetest, yielding very heavily, producing good sized ears of the most excellent quality. On account of the seed being very hardy it allows early planting, consequently it reaches the roasting ear stage very early. You can sow this as early as any variety of field corn. The stalks grow only about 4 to 5 feet high and bear generally two good ears to the stalk. When ready for use the kernels are rich golden yellow color and a mighty satisfying sweet corn. $\frac{1}{3}$ pt., 15c; 1 lb., 35c; 12 lbs., \$2.50; 50 lbs., \$8.00.

Stowell's Evergreen Sweet Corn—Due to an oversight, our 1915 catalog failed to list Stowell's Evergreen Sweet Corn. We never knew until that catalog was issued how many fellows wanted Stowell's Evergreen. We were "swamped" with letters from the time the catalog went out until past planting season wondering why we had discontinued Stowell's. Of course, this took a personal letter to all of the people who wanted it and we told them we had the same strain of Stowell's we had been selling them for several years. Absolutely the best of this late, delicious sweet corn. We grow Stowell's in large quantities and we will always grow Stowell's Evergreen until they get something better. $\frac{1}{3}$ pt., 15c; 1 lb., 35c; 12 lbs., \$2.50; 50 lbs., \$8.00.

Country Gentleman—The most delicious of all; for private family use where quality is preferred to size it has no equal. The cob is very small, giving great depth to the kernels. Time of ripening a little later than Stowell's Evergreen. $\frac{1}{3}$ pt., 15c; $\frac{1}{2}$ lb., 25c; 1 lb., 40c; 12 lbs., \$3.00; 50 lbs., \$10.00.

Sweet Fodder—There is nothing better for summer and fall green feed or for curing for winter than Sweet Corn; being sweet and palatable, cattle eat every part of the stalks and leaves. Always a great favorite with dairy farmers, and excellent for soiling. Can be planted as other corn or sowed thickly in drills or broadcast. Sow $\frac{1}{2}$ bushel per acre in drills, 1 to $1\frac{1}{2}$ bushels broadcast. 12 lbs., \$1.00; 50 lbs., \$3.25.

POPCORN

About one farmer in ten grows Popcorn, even the little amount that is required for the children's popping during the winter months, when it is enjoyed so much. Give the children this year a little spot in the garden where they can plant at least one pound of the White Rice Popcorn, for their own use this coming winter. I would bet you dollars to doughnuts that the little shavers will never let this popcorn bother you, but they will hoe and cultivate it and produce a greater money yield, per square rod, than you will in the best acre of your own cornfield. Give the kids a try at it. It will yield from eight to ten tons of fodder per acre of as high feeding value as sweet corn. It matures very early, which is an advantage where you are going to be short of early feed for the stock. It can be planted at least twice as thick as other varieties of corn and the yield of ear or shelled corn is usually equal to that of field corn. The market price is much better than for other varieties of corn, and is always marketable. Plant at the rate of 6 to 8 quarts to the acre.

White Rice— $\frac{1}{3}$ pt., 15c; 1 lb., 25c; 14 lbs., \$2.00; 56 lbs., \$6.50; 100 lbs., \$10.00.

Red Rice—Fancy seed, bright red, $\frac{1}{3}$ pt., 30c; 1 lb., 65c.

Japanese Rice— $\frac{1}{3}$ pt., 20c; 1 lb., 40c; 14 lbs., \$3.25; 56 lbs., \$12.00.

Pop Corn for Popping—1 lb. carton, 20c; 4 for 60c; 3 for \$1.00.

Egg Plant—New York Purple

LETTUCE

For very best results sow the lettuce in rows just as you always do, but when it is up and making the second set of leaves, transplant it to about four to six inches apart in the rows. Did you ever realize that when you sow lettuce so very thick in the row that you are getting very poor quality lettuce and only about one-tenth the quantity to the row that you should have? By transplanting, the plants will make immense, tender leaves, of good quality, and the headed varieties will often head, making solid heads weighing one pound or more. Give them plenty of room and they will well repay you for the little time and trouble you take in transplanting. Try it out on a small scale anyway, and see if we are not right.

Gurney's Stonehead

Riviera Lettuce

This wonderful new Lettuce is of French origin and was introduced from there by us. Very hard-headed, and the most long standing of all lettuces. Heads average size, closely folded, clear light green color, interior leaves blanching to a creamy white. Unequaled for late planting or in places where it will be very hot and dry. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 80c.

Gurney's Crisp as Ice Lettuce

Very large, extremely crisp, hard - heading, and extra long-standing.

Grows to a larger size, makes larger heads, is of more pleasing appearance and retains its crispness and mild flavor to a greater degree during the hot summer months than any other crisp-head variety. While especially adapted for midsummer, it is most desirable also for spring and fall.

The plants are of quick, strong growth, attaining a diameter of twelve inches with good cultivation. The leaves are of a soft bright green, growing closely around the head. The heads are tightly folded, six to eight inches in diameter, bleached to a silvery white and nearly as crisp and brittle as celery. Per pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

EGG PLANT

Sow in hotbeds very early in the spring, and transplant to 2 or 3 feet apart, in very rich, warm ground. Hoe often and hill up gradually until they blossom.

New Improved New York Purple—The best variety in clutivation, being early, a sure cropper and of fine quality. The fruit is large, oval, very deep purple. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.50; lb., \$5.00.

GARLIC

Garlic—This vegetable is very much in demand for use with meats, sausages, etc. We can furnish in any quantity. 1 lb., 45c; 2 lbs., 80c; 10 lbs., \$3.75.

KOHL-RABI

Early White Vienna—Dwarf, small, early; bulb handsome, firm, glossy white; leaves few and small, the best variety for table but should be used when young and not larger than an early Turnip. All varieties are tough and stringy when overgrown. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Kohl-Rabi, White Vienna

Head Lettuce—The production of head lettuce for the market for every day in the year is one of the big industries over the country, very profitable on account of its immense yield and big market. Head lettuce produced from our seed near Omaha brought the grower nearly \$2,000.00 per acre and it was not unusual to find six heads completely fill a standard bushel basket.

Black Seeded Simpson—A favorite forcing variety; it does not head, but forms a compact mass of leaves, and differs in being lighter colored; stands the summer heat well, and is nearly double the size of the Curled Simpson. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., 95c.

Grand Rapids—This is beyond question the most popular of all forcing Lettuce. On account of its upright habit of growth, it can be grown much closer than the other sorts, and it is less liable to rot; the leaves are light yellowish green, excellent for shipping, and keeps a long time without wilting. Pkt., 5c; oz., 15c; ¼ lb., 35c; 1 lb., 95c.

Royal White Summer, or Drumhead—Heads very large, crisp, tender and of good flavor, one of the best summer varieties. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 90c.

Prize Head—An excellent variety for family use; forms a loose head of a dense mass of leaves, filled at the edge and densely blistered. Deep green in color, tinged with red; crisp, tender and good flavored. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 95c.

Hanson—A very fine heading variety of large size. The heads are very solid, sweet, tender and crisp throughout and entirely free from any bitter taste. A standard Summer Head Lettuce, very slow to run to seed. Pkt., 5c; oz., 15c; ¼ lb., 30c; 1 lb., 95c.

Market Gardeners' Private Stock—A strain of black-seeded tennis ball selected with special care for hot-bed and cold frame culture. It makes large, solid heads which stand a long time before sending up seed shoots. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 95c.

Big Boston—A large heading, forcing sort, also for outdoor winter culture. The plants are very hardy and vigorous, with broad, smooth, thin and hard leaves, light green in color, and when well grown are quite tender. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 95c.

California Cream Butter—Splendid lettuce for the open ground, producing very large, solid heads in cool weather. This should be planted just as early as you can work the ground, as it does better than other varieties when weather is cool. This lettuce is largely planted in the Southern States for shipping to the Northern markets in winter. Heads of large size, very solid heads and the interior portion blanching to a beautiful white. The genuine stock of this popular lettuce can be distinguished by very small spots on the outer leaves. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 95c.

Black Seeded Tennis Ball—Splendid for forcing in hotbeds, cold frames or greenhouses. It is preferred by most growers over White Seeded Tennis Ball on account of producing large heads. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 95c.

Brown Dutch—Medium sized firm head, leaves broad and crumpled, color medium green tinged with brown. One of the best for late planting. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 95c.

ENDIVE—Sow in August in shallow drills twelve to fifteen inches apart, and thin to one foot in drills. When fully grown, tie over the outer leaves of a few plants every week or ten days to blanch. Leaves curled, dark green. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00.

STATE HOSPITAL WATERMELON PATCH

The gardener and his more than 10,000 winter watermelons, all ripe, ready to be placed in storage for later use.

PRIZE WINNERS
All from One Garden—All from Gurney Seed

I approve of this, but boys will steal melons for the next twenty generations just as they have for the last twenty, and when they go into the patch and take just what they want to eat, picking and handling them carefully, not destroying the vines nor spoiling melons, I think we can all forgive the crime just for the fun they get out of it. So plant enough for your boys and a few for the neighbors.

Grand Muskmelon

This splendid new melon is a sport from the Osage, which it resembles in quality, but differs somewhat in color and markings and is more uniform in size. It is at least ten days earlier than Osage, has a more vigorous vine, and because of its vigorous growth, a greater yielder. Color, a peculiar pea-green; flesh, rich salmon or red color. In flavor it surpasses the best grown Osage or Emerald Gem. The flesh extends to the rind and retains the color and quality quite to the outer shell, which, though thin, is very hard and firm, and because of this bears shipment remarkably well.

The flesh is very thick, considering the size of the melon, leaving a small seed cavity. With repeated trials beside the Osage for the last five years, it has proven a more profitable melon for the market. The bushel crates will weigh five pounds heavier than the Osage, which shows that it is a much thicker-meated melon. **Pkt., 10c; oz., 20c; ½ lb., \$1.00; 1 lb., \$1.55.**

Gurney's Enid Muskmelon

Our description of this extremely valuable new melon when it was introduced by us in 1908: This new and valuable muskmelon originated in Enid, Oklahoma, and is certainly the best of all melons for home use or market gardeners. It is one-half larger than the Rocky Ford, one week earlier and twice as good. Color and shape the same as Rocky Ford, abundant bearer and an excellent market melon. Every word of this has proven true, and more. **Pkt., 10c; oz., 20c; ¼ lb., 50c; 1 lb., \$1.50.**

Davis' White Seed Muskmelon

We listed this melon in 1911 for the first time and recommended it highly on account of the good showing it had made in our trial grounds in comparison with other melons. Last season we said this was the best quality of any of the muskmelons yet introduced, and one more year's general trial over the country has convinced us that it is the best all-round home and shipping melon yet introduced. This is the only white-seed muskmelon, as all other muskmelons produce a yellow seed only. The originator of this melon, Mr. Davis, of Michigan, is the originator of the Gardener's Perfection Cucumber, Grand Muskmelon, and numerous other standard best vegetables. A report from one of our growers in western Nebraska tells us that the White Seeded was the earliest muskmelon of any that he planted this past season, coming in two weeks ahead of the Osage, and produced more melons to the vine that were marketable than any other melon he has ever grown, and the quality was all good. In most melons you will find some time during the season lots of melons of poor quality; with the Davis White Seeded they are all alike, both for size, color, quality, and the immense number borne on each vine. We can only offer a limited amount of the seed again this season; it will have to be sold in packages, ounces and quarter pounds. **Pkt., 15c; oz., 35c; ¼ lb., \$1.00.**

Honey Dew Muskmelons

"Some better than the very best, a whole lot better than all the rest." We might stop right there with our description of the Honey Dew Muskmelon. It is a wonderful production, a cross of an African Casaba and the Rocky Ford Cantaloupe. We want to say just a few words of its value on the market. I have taken from the Daily Chicago Trade Bulletin the market on various melons at different times, and without exception, the Honey Dew was selling at from fifty cents to one dollar and fifty cents per crate more than any other melon on the market. You can eat it in September or keep it until Christmas, it simply gets better all the time. I am taking from the Government Agricultural Service Bulletin No. 20, the originator's description of this wonderful melon. The photograph which we are showing is the actual picture of a Honey Dew Melon eaten here in the office. This melon weighed 8 pounds, and was delicious down to a rind one-eighth of an inch thick. **The pkt., 10c; oz., 40c; 2 oz., 70c; 4 oz., \$1.00; ½ lb., \$1.50; 1 lb., \$2.00.**

The Originator's History of the "Honey Dew"

The original seed of this new melon was secured from a melon shipped from Africa to New York City. This seed was planted at Rocky Ford, Colo., and crossed with the genuine, original "Rocky Ford" cantaloupe, by pollenization. The following season this hybrid seed was again crossed with the Improved Hybrid Casaba. Seed enough was obtained from this cross to plant one and one-half acres in 1915, from which I shipped three cars, aggregating 1,175 crates, which were shipped to Chicago. After paying icing charges and commissions, the three cars netted me \$3,719. After deducting the price of the crates, I still had \$3,600 net from the one and one-half acres or \$2,400 per acre.

I named the melon "Honey Dew" for several reasons. It is as sweet as honey and has the mingling of several flavors—pineapple, banana and vanilla predominating.

The average size of the melon is six inches in diameter and seven to eight inches in length, weighs five to six pounds. The skin is smooth with an occasional net; it is a creamy yellow when ripe. The flesh is an emerald green, very thick, melting and fine grained, can be eaten to the extreme rind. The seed cavity is very small, the rind impervious to water; the melon does not shrink in weight; it is not easily bruised and is a splendid shipper.

It matures about ten days later than the Rocky Ford strain and is very prolific. Yields at the rate of 8,000 to 10,000 melons per acre. The melon slips from the vine when ripe and will keep for several weeks; the late maturing ones may be kept until Christmas.

(Signed) J. E. Gauge.

Giant of Colorado—Large size; oblong; 12 to 15 inches in length, heavily ribbed and netted. Skin green, flesh light green and excellent quality. Best quality of any of the large melons.

This is a very satisfactory melon for the home garden and home market. The melon is very large and attractive and brings a good price always, but not a good shipping melon. We have picked as high as six ripe melons at one time from a single vine, none of them weighing less than 7 lbs. **Pkt., 5c; oz., 10c; lb., \$1.20; 5 lbs., \$5.00. Postpaid.**

Extra Early Hackensack—This valuable variety is ready for the market fully ten days ahead of the well-known Hackensack, which it much resembles in size, shape and quality; weight from five to ten pounds each; very productive, averaging from five to six melons to the vine; deeply netted; flesh light green. **Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.10; 5 lbs., \$5.00. Postpaid.**

Giant of Colorado

Rocky Ford—This variety is an improvement on the Netted Gem, and is largely grown in Colorado and shipped by the carload to the eastern cities. It is much sought after by hotel and restaurant keepers on account of its size and exceptionally fine flavor. Flesh is greenish white in color, very juicy and rich and good clear to the rind. It is medium in size, of round oval form and a most excellent keeper. **Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.00; 5 lbs., \$4.50. Postpaid.**

Rocky Ford

Hoodoo

Netted Gem—One of the earliest and best small melons grown. Oval in shape and very uniform in size; flesh light green and of fine flavor; exceedingly productive. **Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.00; 5 lbs., \$4.50. Postpaid.**

Jenny Lind—One of the earliest melons grown; small, round and flattened at ends, deeply ribbed, thickly netted, which makes it valuable for shipping; an excellent variety for the restaurant trade, flesh light green; sweetest of this class. **Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.15; 5 lbs., \$5.00. Postpaid.**

Paul Rose or Petoskey—This widely advertised melon is a successful cross of the Osage with the Netted Gem and combines the sweetness of the former with the finely netted appearance of the Gem. The flesh is of orange red color like that of the Osage. A splendid shipper and just the right size for the hotel and table use. **Large pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00; 5 lbs., \$4.50. Postpaid.**

Hoodoo—Another of Paul Rose's wonderful melons introduced three years ago, has grown into popular favor more rapidly than any other melon. The Hoodoo melon is equal in quality to any melon planted today, and for all purposes it is better than nearly all others. The color of the flesh is bright orange, meat very thick, seed cavity extremely small, netting is very close and firm, making it one of the very best for shipping. Our seed of this variety is saved from a most carefully selected, inspected field, and is two years ahead in selection of any other seed offered. **Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., \$1.25; 5 lbs., \$5.00. Postpaid.**

Gold-Lined Rocky Ford—A new, selected strain of Rocky Ford, slightly oval, with no ribs and heavily netted. Flesh is green, fine grained and sweet. Very uniform in shape and size. **Pkt., 5c; 1 oz., 10c; ¼ lb., 35c; 1 lb., \$1.25; 5 lbs., \$5.00. Postpaid.**

Hackensack

Osage — (Miller's Cream) — This is the most profitable of all Melons for the market gardener; uniform quality; it makes no difference what the size of the Melons may be, they are all sweet and delicious. The skin is thin, dark green and netted. The flesh is deep salmon, remarkably sweet and of a spicy flavor; extremely thick and delicious to the rind. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.00; 5 lbs., \$4.70, postpaid.

Home Sweet Home Muskmelon

Tip Top (80 days)—This very productive melon is of medium to large size, nearly round, slightly ribbed and fairly well covered with shallow netting. The flesh is deep yellow in color and of excellent quality. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Banana—A peculiar, long, smooth yellow-skinned melon with salmon flesh. Pkt., 5c; 1 oz., 10c; $\frac{1}{4}$ lb., 35c; 1 lb., \$1.00, postpaid.

Home Sweet Home—This is a very fine market or family melon. As shown in the illustration, it is oblong in shape, very beautifully netted, thick green flesh, and of delicious flavor. The melons run medium to large in size and exceedingly uniform, and a basket of them makes a very handsome appearance in market. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.25; 5 lbs., \$5.00, postpaid.

Emerald Gem—I asked the gardener at the Hospital for the Insane to name the muskmelon that he thought the most of, the one that would yield the most, and produce the best percentage of strictly good melons of the right size. Without hesitation he said Emerald Gem first. For the big institution out there he grows several acres of muskmelons, and I noticed a larger percentage of the acreage was Emerald Gem than any other one variety, and he was producing some beauties. They are not quite as much netted as other muskmelons, in fact they are nearly smooth skinned, deeply ribbed green rind, with just a few lighter colored stripes, flesh thick so that the seed cavity is not much larger than a walnut. Flesh of a delicate salmon color, and it would be useless for me to tell you much of their quality because you might think I was prejudiced. I think the best way would be to plant some Emerald Gems and prove for yourself that they are the best of the standard melons. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.20; 5 lbs., \$5.00, postpaid.

Citron, the Green-Seeded Variety

We can furnish these in either the small round or the large long. They are used for making preserves, and I guess every housewife knows of numerous other ways to use them. They are a very valuable vegetable. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c; 5 lbs., \$4.00, postpaid.

Corporal Gurney Watermelon

This little picture shows a field of the most wonderful melon grown. The quality is so much better than any other that it is only a question of time that the melon growers will discontinue the growing of other varieties for market. Another reason for its superiority is that you can get on top of these and walk on them without breaking the shell. Best quality, best keeper, best eater, best prices

THE NEW WATERMELON "CORPORAL GURNEY"

We offered this two years ago and, with the exception of a very few reports, it has proven one of the very best melons of the entire list. Its large size, extremely tough rind and excellent quality has made it a desirable market melon. We are offering it again with the assurance that this is the coming melon for the market, at least for that part of the country where they are grown in large quantities for the market.

We have called this "Corporal Gurney" because the first ripe melon was picked on the day he was appointed corporal. Since then he has become sergeant, but the melon remains "Corporal," altho it is absolutely "General" in quality. It is an oblong melon, shorter and much thicker thru than the Tom Watson and Kleckley. In color it is a very pleasing gray, or a very light green. The rind is extremely hard, making it best of all melons for shipping purposes.

It can be shipped across the United States and back again, and be equal to any freshly picked melon. The quality never has been surpassed, and probably never will be for some time. The rind is thin, but strong enough so that the heaviest man can stand on it without injuring it. I have rolled these melons off from an ordinary table to the floor without cracking the rind or bruising the flesh. I am not showing you a picture of Corporal Gurney, but a picture of the melon instead. This melon is not as early as the earliest, but will be classed as a medium early melon. Our supply of seed is limited and consequently rather high-priced this season, but for satisfaction you had better plant one packet of Corporal Gurney than a dozen packets of other varieties. Price per well-filled packet, 25c; 1 oz., 45c; ¼ lb., \$1.50; ½ lb., \$3.00; 1 lb., \$4.00.

WINTER WATERMELON

Yankton, S. D., has the best equipped State Hospital, takes better care of its patients, and cures more than any other in the United States. This is a broad statement, but I believe it is true. It is equipped with theatre, dance hall, ball ground, tennis court, and last, but not least, an immense automobile, carrying thirty passengers, and on every decent day, during the entire year, it is loaded with patients early in the morning, a fifteen mile ride given them, the car then returns to the Hospital and is reloaded, and this operation continues until nightfall. You wonder what this has to do with winter watermelons. I am just coming to that. I have been on the grounds of the Hospital for the insane at Yankton this summer a number of times, and it was not unusual to see hundreds of the patients on these beautiful grounds among the trees and on the lawn, each patient, if they wanted it, eating watermelon. Their garden covers about thirty acres, all grown from Gurney's seeds, and they had thousands of the winter watermelons, besides thousands of other kinds. On this date, November 1st, they still have a quantity of the winter watermelons stored. It is the sweetest and best of all. You can almost taste the deliciousness of this wonderfully sweet melon hidden in its luxuriant foliage. It is not only good at time of maturity of the ordinary melon, but can be harvested and kept well up to Christmas time. It is medium-sized, almost clear white rind, the brightest red flesh and small black seeds, very firm and very tough rind, which accounts for its keeping qualities. These should be harvested when ripe, not over-ripe, placed in a cool dry cellar; or if you wish, place them in the open in straw, seeing that the melons do not touch each other and covering all of them with sufficient straw to keep from freezing. Take them out as wanted and you will be well repaid.

We are showing also a picture on page 27 of a field of these winter watermelons grown at the State Hospital at Yankton, where they have thousands of them. One of the most desirable melons.

Back to the watermelon once more. Fkt., 10c; oz., 20c; ¼ lb., 50c; 1 lb., \$1.75.

WATERMELONS

Kleckley's Sweet

Before **After**

Kleckley's Sweet—Vines are strong-growing, producing uniformly large-sized melons. The fruits are oblong. The skin is dark green. Flesh is bright scarlet and ripens to within one-half inch of the rind. The quality is very rich and sweet, hence its name. For the home market or family garden it is decidedly one of the best. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c; 5 lbs., \$3.00.

Sweetheart—Our field of Watermelons this past season was certainly a pleasant sight. A field of 30 acres of these planted right and growing right was so well covered with melons that a person could have started in any part of the field and walked around all over it and stepped on a large melon each time. Every melon seemed to be perfect in color and shape. This is certainly a fine strain of this very popular shipping melon. Rind is thin, but firm. Flesh bright red, very sweet and tender, size large. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 65c; 5 lbs., \$2.75.

Tom Watson

It is not often that a melon will jump from the unknown to the most popular melon grown in a short period of four or five seasons. The Tom Watson is a melon of that type; it is one of the very best shippers of the long melons, and one of the best quality. The melons will grow to a length of about two feet, and about one foot in diameter. The rind is a hard mottled green, thin, but tough enough to endure shipping to any distant market. Of the long shaped melons it is the best shipper of any. The flesh is deep red and comes very close to the rind. We consider this for quality equal to any of the melons, and it sells readily on the market when there is no demand for others. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 70c; 5 lbs., \$2.75.

Peerless—(Ice Cream)—of medium size, thin rind, light mottled green; flesh bright scarlet, solid to the center, and sweet as honey. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 70c; 5 lbs., \$2.75.

Fordhook Early—Without a rival. This is the earliest large-fruited melon in cultivation. We secured a good number of fine large melons before any other varieties ripened, with the exception only of the small Cole's Early. These fruits are of good size, rather short and blocky in form, with large diameter; skin dark green, occasionally with faint stripes of lighter green; flesh bright red, crisp, sweet, and of splendid quality; rind quite thin, but skin tough; make an excellent shipping variety. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c; 5 lbs., \$3.00.

Gurney's Improved Cole's Early Watermelon

Gurney's Improved Cole's Early Watermelon—This is an improvement over the old COLE'S EARLY. By selection it has been made more uniform in size, better quality and earlier; in fact, it is the earliest and sweetest watermelon grown. Sure to ripen. Just the melon for home market. Ripens during August and by far the best watermelon for the northern states, where the seasons are usually too short for any other. Since its introduction melons have ripened further north than it was supposed possible to ripen them. COLE'S EARLY is no less valuable for the middle states from the fact that it ripens melons ahead of any other and continues to bear abundantly throughout the entire season. Weight about 8 to 12 lbs., nearly round, dark green with lighter stripes, flesh brightest red, crisp and free from stringiness. Very solid. Is deliciously sweet and refreshing all the way through to the rind. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 70c; 5 lbs., \$2.65.

Kolb's Gem—A valuable variety. The fruit is large, weighing from 25 to 50 lbs. It has a delicious flavor, and its keeping qualities are the best. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c; 5 lbs., by express, \$2.40.

McIver's or Wonderful Sugar—Oblong in shape; size uniformly large; handsome appearance; skin shows broad bands of white, shading into narrower bands of dark green; quality is superior; flesh is soft pale pink, crisp, free from any stringiness, and juicy. The melons have a solid heart, free from cracks, while the seed rows are close to the rim. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Pinney's Early—An early variety; medium and uniform size, and a beautiful form. The skin is smooth, with white mottled and dark green stripes. Flesh light red or pink, sweet and delicious. One of the best for home use. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 65c.

The Earliest and Sweetest Watermelons

Almost as far back as I can remember we have urged everyone to plant the Cole's Early, for the earliest and best watermelons. We have not changed our minds a particle about the Cole's Early, as it is still one of the very best, but the earliest and sweetest, a cross of Mountain Sweet and Cole's Early, combining the best qualities of both, is nearly one week earlier than Cole's Early, three to five pounds heavier, does not break as easily when handled, and the facts are that when the two melons ripening together are placed before you, you will always eat the earliest and sweetest. The average weight of this melon would be probably from 12 to 15 lbs., flesh scarlet, very fine grained,

and the flavor is delicious. The seeds are white. Vines producing wonderful crops, often producing eight to twelve melons to the vine. We wish to say to our Northern customers that this earliest and sweetest melon is the one they should plant. There is but little use in planting the large late varieties in your locality. They are only a disappointment, nearly ripe when the frost comes. You will always get under the wire with the Earliest and the Sweetest. Pkg., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Harris Early—Oblong, striped, meat rich red of excellent quality. I just want to "tip it off" to you, that you are missing a big bet and lots of mighty early melons if you don't plant this one. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; 1 lb., 90c; 5 lbs., \$3.80.

Preston, Idaho, Nov. 20th, 1920.

Enclosed find photo of my onion patch grown from your seed. I raised 387 bu. on 56 square rods of land. Some crop! Please send your 1921 catalog as soon as you can as I want to have my seed by the first of March.

I received the check of two dollars and fifty cents (\$2.50) today and am sending you the films of the onion patch, as you request, and have had good luck with all your seeds this year. I had ball head cabbage that weighed 20 lbs. My onion patch measured just exactly fifty-six rods. I am figuring on putting in one acre of onions next year. Send me your 1921 catalog as early as possible.

Ralph Jenkins.

Potter, Neb., Jan. 16, 1920.

I always have a good garden, and will say that the seeds I got from you last year did better than any seed I ever bought. My garden was a wonder to all who saw it, for most people think they cannot grow a garden in this dry country. I showed them it could be done. From one ounce of onion seed, bought from you, I gathered four bushels of onions, besides giving away armful of green ones where they came up too thick. I will send again this spring for a good order, so don't forget to send your catalog. I also want some cherry trees and grape vines. Wishing you a very prosperous New Year.

J. H. Madden.

ONION CULTURE AND PROFIT IN ONIONS

You cannot plant a crop on your farm that will produce more dollars per acre than a crop of onions. The yield in this particular section of South Dakota from the onion **Dakota** and **Southport Red Globe** and other standard varieties has been exceptionally heavy; the gardeners selling but few of them under \$1.25 per bu., and lots of them moving at \$1.50 and \$2.00 per bu., making the greatest yield of dollars per acre of any crop. Onions can be grown and delivered at your station for \$45.00 per acre; this allows about \$8.00 per acre rent for the land.

ONION SEED

Last year we sold nearly two carloads of onion seed in lots of from one package to 10,000 lbs., all going direct to the grower. This would mean a planting of ten thousand acres of onions. Five years ago our sales of onion seed would be less than one-eighth of the amount we sold last year, and there has been a good healthy increase in all of these four years, and we expect this season to sell 25 per cent more than we did last year. Onion growing is very profitable, probably the most profitable of any of the root crops. A small investment, a reasonable amount of work, and an immense income, per acre, and Gurney's High-Grade Seeds will insure you the immense income. Onion seed are our hobby. You know sometimes you will see a farmer who runs a most excellent place, you think that everything is just about as perfect as it can be, but that fellow has a hobby. Possibly it is some variety of seed corn, maybe horses, cattle or hogs, or some particular variety of these. When you find his hobby you will find him giving this particular item a little better attention than anything else on the place.

That is exactly where you strike us in the seed business. Our hobby is onions.

SELECTION OF LAND AND PREPARATION OF SEED BED

Selection of land for onion growing should have your most careful consideration. Remember that most of the work in an onion field necessarily must be done with hand machines and by hand, consequently you should select a piece of ground kept thoroughly clean the year previous. We would advise using ground that had produced potatoes or a garden crop or some other crop that had been kept thoroughly free from trash, so there will be nothing left in the ground to catch on the knives of the wheel hoe, which is so necessary in the success of onion culture. The newer and richer the land the better. Do not cover it with coarse manure just before plowing as it would have a tendency to dry out, and more or less of the trash will interfere with the cultivation of the onions. When you have made the selection to your satisfaction prepare the ground; plow it in the best possible shape, disc and drag and float the ground until you have put it in the same condition that you would the very best garden ground you have planted. Remember that every dollar's worth of work you put on the ground previous to sowing the seed will save you \$2.00 when it comes to cultivation and care of the crop during the growing season. Do not figure that you are wasting time in preparing the seed bed.

After the seed bed is prepared to your satisfaction and the weather conditions are right, which may be any time during the month of April or the first half of May, drill your onions in, using any good seed drill, though we prefer the **Planet Jr.** Onion seed should be planted at the rate of about 4½ lbs. per acre and should be covered from ¾ of an inch to 1½ inches deep, depending on the kind of land. On rather heavy soil a little less covering, and on light or sandy soil, a little deeper. The rows should be from 12 to 14 inches apart and you should make them just as straight as possible; we advise stretching a line for the first row, and following this with your drill; the marker on your drill will make the next row straight, and so on through the field.

Spicer, Minnesota, April 28, 1919.

I want to thank you for the extra garden seeds and tip-top shape they came in. I am an old man but never received as well rooted trees from any nursery as those received from you, and I have handled thousands of trees. I live by one of the most beautiful lakes in Minnesota. If you ever come down this way, I would like to have you visit us.

D. WEAVER.

Mr. Weaver's invitation will certainly be accepted. If the whole Gurney tribe should accept it at once, he would probably regret being so rash.

CULTIVATION OF ONIONS

After sowing the onion seed and previous to their coming up you may have a good stand of weeds; if it looks as though you were going to have a large crop of weeds, take your double wheel hoe or garden cultivator, whichever you have, put the rakes on it and go over the ground thoroughly without regard to the rows, as the seed will be deep enough so the rakes will not disturb it even if you go crossways. As soon as you can see the rows put on the knives. We advise the double wheel hoe with 6-inch knives. Straddle the row, cultivating as close as you possibly can to the little onions; do not cultivate deep—barely under the surface of the ground, just enough to destroy the weeds. Do not cultivate onions deep at any time; onion roots are very close to the top of the ground and if you repeatedly cut them off, you will induce your onions to grow up to **long necks or scullions** and make them grow much later in the season than otherwise. Follow with thorough cultivation, removing the weeds in the rows by hand just as early as possible after they appear. If you allow the weeds in the rows to grow so they disturb the ground for several inches when you pull them you will have a bunch of scullions where you have disturbed the onions. Remember this always; onions and weeds can be produced on the same ground but it is not profitable, at least from the onion end. Keep your onion crop free from weeds from the time you start until harvest and you will have a profitable crop.

ROLLING THE TOPS

Hundreds of people write us each year asking when they shall roll their onions in order to make them ripen. We have always advised our customers to keep off the onion field with their barrel; we have submitted this question to the best onion growers in the country and they all advise that onions are damaged more than helped by rolling. The proper selection of land, preparation of the seed bed, securing strictly first-class seed, and good care for the summer will produce a crop of marketable onions without the use of the barrel or any other roller.

HARVESTING THE CROP

As early as your onions are mature they should be pulled, left on the field and allowed to cure for several days. For small fields, a boy on his knees—straddling one row and pulling a row on each side and making a windrow of them—is best; for larger fields or where you prefer in the smaller ones, attach the onion lift to your wheel hoe, and lift the onions from the ground; this makes it much easier to handle than pulling them. The onions should be allowed to lay on the ground, if the weather is right, for several days; the tops will then be thoroughly dry and can be jerked off easily as you handle them, putting them into bags or crates. In sacking or crating onions for the market we would advise the use of new bags and new crates, as a new package always brings a better price for the goods they contain than an old, dirty package will. We also advise making two grades of your onions; the increased price for the fancy onions will more than pay for the trouble. If the weather be bad during the harvest time the onions can be spread on corn crib floors and kept there for some time. Heavy frosts or light freezes do not hurt the onions especially if they have as much protection as they would have in an ordinary corn crib.

Gurney's Red Globe "Dakota"

MARKETING THE ONIONS

We advise marketing as many onions as you can at home, as it saves the freight charges both ways. After you have supplied your home market there is always a regular market just as there is for potatoes, corn, wheat or hogs. Always remember the better grade you have to ship and the more attractive the packages the better the price.

OUR GUARANTEE

We guarantee all the onion seed we send out to be of the crop of 1920 and to test to the satisfaction of the purchaser; that is, on arrival of seed test it and if it does not test to your satisfaction return it to us at once and your money will be refunded. We make a specialty of onion seed and probably sell more than any other seed house in the northwest. We offer our customers nothing but fresh seed each year and seed of the best quality. It is absolutely necessary that you should have a strictly first grade seed to produce a good crop, but good seed will not always produce a good crop if you do not handle it properly after planting it. The growers in the Northwest are reporting better success than ever with Gurney's Onion Seed.

Minneapolis, Minn.,
Feb. 7, 1920.

Kindly mail me a copy of your 1920 seed catalog. A friend of mine, Mr. C. P. Colby, of Orchard Gardens, Savage, Minn., has had such splendid results from your onion seed that I would be glad to receive any special literature on onions and Red Globes in particular, that you may have. Geo. A. Adam.

VARIETIES TO PLANT

GURNEY'S RED GLOBE ONION "DAKOTA"

In offering the "Dakota" Onion for the first time we wish to tell you something of it. The parentage of this onion is strictly Southport Red Globe, but has been grown in Dakota for a number of years and by careful selection of the bulbs and saving of the seed crop we have produced an onion that is very uniform in size, very dark red in color, a perfect globe, and quite a bit earlier than any other globe onion that we know of. We consider this one of the most profitable onions for the people of the Northwest to plant. It has yielded an immense crop of firm bulbs when other seed has failed to do as well. On account of being able to market them earlier than other varieties you can secure a better price, and as the yield is equally as large as any other variety it is certainly more profitable to plant them. The seed will cost you a little more money than the others, but a few cents per acre is more than made up by the results in the fall.

The seed supply of the onion "Dakota" is limited this season, and we cannot offer them in as large lots as we would like. Pkg., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; $\frac{1}{2}$ lb., \$1.50; 1 lb., \$2.50; 5 lbs., \$10.00. Postpaid.

Australian Brown—An early onion of medium size and nearly globular shape; a sure cropper and long keeper. The skin is a bright brown, and the flesh is white, crisp, extremely solid, and of a sweet, mild flavor. This is the longest keeper and the best onion to plant for early market when prices are high—a very beautiful onion. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.50; 5 lbs., \$6.00. Postpaid.

White Portugal—Is very good sized, half globe, pure silvery white, an excellent keeper, and yields heavily. This is the best of all onions for the production of sets or small pickling onions. For sets or pickles sow at regular time very thick—at least ten times the amount you would sow for larger onions. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; 1 lb., \$2.50.

Southport Red Globe—We consider this the most profitable of the onions for planting in the north. Brings the best price on the market of any of the red onions. Its large size, dark, glossy red color and the fact that it is one of the best keepers makes it very desirable. They are just a little later in maturing than the Red Flat, but are safe to plant almost any place that onions can be grown. We would advise that you make the bulk of your planting Southport Red Globes. This variety has given as high as 1,100 bushels per acre, and is the leading market variety in the north. Pkg., 5c; oz., 25c; $\frac{1}{4}$ lb., 85c; 1 lb., \$2.25; 4 lbs., \$8.25. Postpaid.

Southport Yellow Globe—The true Southport Yellow Globe is particularly valuable for winter market. It is a more perfect globe than the Yellow Globe Danvers and a better keeper. The onions are similar in size and form to the Southport Red Globe, but have a pale, straw yellow skin, mild flavor and a heavy cropper. Owing to its handsome appearance and delightful flavor it sells readily on all markets. We would advise that you plant a part of your acreage to these. Pkg., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; 1 lb., \$2.25; 4 lbs., \$8.25. Postpaid.

Southport Large White Globe—This is the best all-purpose white onion in cultivation; it is large, a perfect globe, silvery white and the very best keep, and excellent quality. It commands in a small way a higher price on the market than the Yellow or Red onion, but the demand is not as large for the White. In growing onions we advise that you put in a part of your acreage of this large White Globe, as there is always a demand for a reasonable amount of them at a better price than you could get for other onions. On account of their mild flavor they are particularly valuable for green onions for bunches. Pkg., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; 1 lb., \$3.00; 5 lbs., \$12.00. Postpaid.

Large Red Wethersfield—One of the old standard varieties and a favorite onion especially in the West, where immense crops are grown for shipment. Large size, skin deep purplish red, form round, somewhat flat, flesh purplish white, moderately fine grained, and stronger in flavor than most other kinds. Very productive, best keeper, and very popular for general cultivation in most localities. It is more inclined to form large necks if planted on very rich soil, but it is the best of any variety on poor or dry soil. Pkg., 5c; oz., 25c; $\frac{1}{4}$ lb., 80c; 1 lb., \$2.25; 4 lbs., \$8.25. Postpaid.

Extra Early Red Flat—For the early market we advise this onion, as it matures two to three weeks earlier than other onions. It is not quite so large, medium size, flat in form, flesh white tinged with pink, skin deep red, solid, good keeper. Pkg., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; 1 lb., \$2.00.

Prizetaker—This is the largest of all onions and most handsome, the mildest in flavor not excepting the Bermuda onions. Our seed stock of this onion is pure American grown and produces the largest and handsomest onion we have ever seen; large in size and better in appearance than the most wonderful of the Spanish and Italian varieties, many of the bulbs weighing as high as 3 and $3\frac{1}{2}$ lbs. each. Skin rich golden color, and so mild and sweet that it can be eaten raw like an apple. This variety has been on sale in the grocery stores over the country and usually retails at from 5 to 8 cents per lb. This onion is a reasonably good keeper, but should be disposed of by January 1st. We strongly urge the planting of a reasonable acreage of this variety, as it will certainly prove profitable. Pkg., 5c; oz., 25c; $\frac{1}{4}$ lb., \$1.00; 1 lb., \$3.50.

MAMMOTH SILVER KING—This is absolutely the largest white onion grown, specimens often measuring as much as 20 inches in circumference and weighing as high as four lbs. It is of very attractive shape and color; silvery white skin, flesh a most agreeable flavor, but only a reasonable keeper. We advise the growing of this in small quantities, and you should dispose of them by the first of December. For exhibition purposes these should be started in a hotbed and transplanted; in this way you will produce onions of immense size. **Pkg., 10c; oz., 30c; ¼ lb., \$1.00; 1 lb., \$3.00.**

Leek, London Flag

White Welch Onions—For early green onions, the seed of this onion may be treated as any onion seed, making one-third the expense and trouble of planting top sets and producing more green onions. The flavor is the sweetest of all onions. The plant is perennial and may be left in the ground for years with but slight protection. Maximum results, however, are obtained by treating as an annual; sow in the spring or fall. **Pkg., 10c; oz., 35c; ¼ lb., \$1.00.**

PARIS WHITE PICKLING, OR SMALL SILVER-SKIN—This is used for pickling purposes almost entirely; it is of small size, silvery white and makes the best onion for its purpose. In planting onions for pickling or for sets, seed should be sown at the rate of about 40 lbs. per acre. **Pkg., 5c; oz., 35c; ¼ lb., \$1.00; 1 lb., \$3.25.**

LEEK

LONDON FLAG—Sow early in the spring in drills one inch deep and one foot apart. When six or eight inches high transplant in rows 13 inches apart and 5 inches between the plants, as deep as possible, that the neck may be blanched. One oz. to 150 feet drilled. **Pkt., 10c; oz., 20c; ¼ lb., 80c; 1 lb., \$2.95.**

Onion Sets

ONION SETS—These may be planted early in the spring to be used for green onions, or can be allowed to grow, producing large onions very early. They are planted largely by market gardeners and allowed to grow full size on account of coming into the market when other onions are scarce; in this way they realize the best price. 32 lbs. per bu.

White Bottom Sets—½ lb., 25c; 1 lb., 35c; pk., \$1.35; bu., \$4.00.

Red Bottom Sets—½ lb., 25c; 1 lb., 35c; pk., \$1.00; bu., \$3.25.

Yellow Bottom Sets—½ lb., 25c; 1 lb., 35c; pk., \$1.00; 1 bu., \$3.25.

White Multipliers—Enormously productive. **Lb., 35c; pk., \$1.40; bu., \$4.25.**

Potato Onions—Should be planted in March or April. ½ lb., 15c; 1 lb., 35c; pk., \$1.40; bu., \$4.00.

Evergreen Top, or Winter Onions—These are planted in September, and you should ask for prices.

Evergreen Top

MUSHROOMS

These delicious fungi can be grown in a warm cellar or close shed, in which an even temperature can be maintained of from 50 to 60 degrees, and where a plentiful supply of fresh horse-stable manure for making the beds can be obtained. Our spawn is imported from the best English makers, runs freely and produces the finest mushrooms. Bricks weigh about one pound, and a brick is sufficient to plant about nine square feet. Best Spawn, in bricks, 40c per lb.

OKRA OR GUMBO

Sow about the middle of spring in drills, and thin the plants to a foot or more apart. Highly esteemed and cultivated for its green seed pods, which are used in soups or stewed and served like asparagus.

Long White Velvet—Long ribbed pod. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 70c.

PEANUTS—South Dakota Grown

Two or three years ago we offered a quantity of South Dakota grown peanuts. It sounded almost wonderful to think that South Dakota was growing them, and we find that peanuts are just as easy to grow as potatoes, sometimes a little more so. This last year, for instance, when potatoes failed to potato, peanuts went right on peanutting and made as good a crop as they did any season. Down south they let the hogs harvest the peanuts because it is easier to do that than it is to harvest them in any other way. The southern hog has a shovel nose and enjoys this work. Up here peanuts are grown profitably, and a panful of them set in the oven, baked and eaten during these long winter evenings is certainly worth while. Do you get the idea? The variety which we are offering is early enough to grow in any of the northern states, produces an immense yield of excellent nuts. We have enough of the South Dakota grown nuts to supply our customers this season, and believe it to be a profitable crop to grow. I am showing this season a photograph of a portion of one hill of peanuts. These are not exactly Dakota grown, but are grown within sight of our office on the Nebraska side of the Missouri River. It will give you some idea of the yield of peanuts. A peanut at its best should be planted in a light sandy soil, kept clean, and it will produce paying crops. You can grow peanuts in other soils profitably, but the light sandy soil produces the greatest crop. With each order for

peanuts we will inclose the peanut bulletin that will give you full instructions for planting and care. Per lb., 35c; 5 lbs., \$1.35. Postpaid.

Wynot, Nebr., Oct. 20, 1913.

I bought some peanuts from you last spring, had sixteen hills, produced half bushel of nuts. I shall order seed from you again next year. The carrot seed you sent me produced just fine, and they are a dandy specimen. I have had people eat in my house that did not eat carrots, but when they tasted these they wanted a second plate full.

Mrs. F. L. Donnell.

PARSLEY

Parsley thrives best in a rich soil. The seeds germinate very slowly, three or four weeks generally elapsing before it makes its appearance. Sow early in spring half an inch deep, previously soaking the seeds for a few hours in tepid water. One oz. to 150 feet of drill.

Champion Moss Curled—A beautiful crimped and curled variety. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Turnip-Rooted Parsley—This vegetable has the same flavor as the regular parsley, but it produces small turnip-shaped roots underground that are used for flavoring soups, etc. Pkt., 5c; oz., 35c.

Parsley

Thomas Laxton

Peas, First Earlies

The planting of an early crop of garden peas, should be made in the spring, as soon as the ground can be worked, in a warm, dry situation, and covered about three inches. They are usually planted in double rows 3 to 4 feet apart, and (those requiring it) bushed when about 6 inches high. The large and later sorts do better at a greater distance apart, leaving a broad space for planting low growing vegetables between.

Thomas Laxton—The earliest Wrinkled Pea. Equal in quality to the best of the late wrinkled sorts. Peas are large as Telephone, unsurpassed in quality; coming into use early in June, as soon as the small round early sorts. This is certainly the finest Wrinkled Pea yet introduced, coming in with the first earlies, with pods double the size, and contain on the average 7 to 8 very large peas of the richest flavor. It is a reliable market gardener's as well as private gardener's pea, and will undoubtedly take the same place among earlies as Telephone among late sorts. $\frac{1}{3}$ pt., 15c; lb., 40c; 15 lbs., \$4.00; 100 lbs., \$22.00.

Gradus, or Prosperity—Early as Challenge or Alaska; equal in quality and size to Telephone. The great drawback with the small, early round peas is lack of size and flavor. In Gradus, however, we have a pea coming in along with Alaska, producing dark green, handsome pods as large as Telephone, containing 8 to 10 large peas, with that rich, sugary flavor found only in the wrinkled sorts. The vines grow to a height of $2\frac{1}{2}$ feet and produce the pods singly, all maturing at one time. $\frac{1}{3}$ pt., 15c; lb., 40c; 15 lbs., \$4.00; 100 lbs., \$22.00.

American Wonder—One of the earliest Wrinkled Peas in cultivation, of the finest quality and flavor, and very productive. Its great distinctive feature, however, is the compact and dwarf growth, seldom exceeding 10 inches in height. $\frac{1}{3}$ pt., 15c; lb., 40c; 15 lbs., \$4.00; 100 lbs., \$21.00.

McLean's Little Gem, or Premium Gem—A dwarf, prolific, green, wrinkled marrow; habit similar to the Tom Thumb. It has all the sugary flavor of the late wrinkled pea. Height, 1 foot. $\frac{1}{3}$ pt., 15c; lb., 40c; 15 lbs., \$4.00; 100 lbs., \$21.00.

The Top Notch Early Pea—Laxtonian

This is a pea that just suits me, and I eat some peas during the season. I like them any way they can be served, and the Laxtonian seems to be willing to be served any way, always yielding a bountiful supply. This splendid new pea is of Stratagem type, dark green pod, borne in pairs, larger, longer and more even in size than Thomas Laxton, and contains fine deep green peas of excellent flavor. It is undoubtedly the best early, large-podded pea on the market. It can be picked ten days earlier than Thomas Laxton. It is in the dwarf class in habit of growth. The vines run about one and one-half feet in height. $\frac{1}{3}$ pt., 15c; lb., 45c; 15 lbs., \$4.75; 100 lbs., \$28.00.

Edible Podded Peas

Dwarf Gray Sugar—Vines grow to be almost 15 inches in height, with purplish blossoms. These peas are not to be shelled, but cook pods and all like string beans. This vegetable should be grown by all and will never be left out of the garden after one trial. $\frac{1}{3}$ pt., 15c; lb., 40c; 15 lbs., \$3.50.

Sugar Peas, Henry's Early Prolific

From Holland. This is the most delicious of all the edible podded peas and will be appreciated by lovers of good peas. There has been an immense demand in the last few years for the sugar or edible podded peas, and we have been unable to supply the demand on any variety. We are in hopes that we will have enough of this variety this season to run us through. $\frac{1}{2}$ pt., 15c; 1 lb., 40c; 10 lbs., \$3.50; 100 lbs., \$25.00.

Alderman Pea

This new pea was imported by us from England and we found it in many respects the very best early main crop variety of the Telephone type. Pods very large, long, dark green, similar to the Duke of Albany and about the same season. The peas are of largest size and unsurpassed in quality. Market gardeners are demanding the large podded, dark colored sorts, which retain their fine color even after shipping a long distance. The Alderman meets these requirements, and, furthermore, is the most productive variety of this class. We recommend it especially for the market gardener and home market. $\frac{1}{2}$ pt., 15c; 1 lb., 40c; 10 lbs., \$2.90; 100 lbs., \$22.00.

Gurney's Yankton Main Crop Pea

The most delicious fresh vegetable in the garden are peas. I believe more disappointment has been met with by the grower from an attempt to grow an ample quantity of peas than from any other vegetable. This is from improper selection of varieties, and not any fault of this vegetable. The Yankton Main Crop Pea has produced from a single pound all the green peas that a large family can use. We do not advise you to stop with the single pound, but plant enough so that you can use them fresh and then can some. The Yankton Main Crop is one of the most luxuriant of the semi-dwarf peas, attaining a height of about two feet, not tall enough to make it necessary to stake or brush them.

This has become one of the standard medium early peas all over the Northwest. It is the one variety that can be planted and almost insure yourselves all of the green peas you can use during their season. They produce very large pods, six to nine peas, excellent quality, and yield heavily.

We sent this pea out the last four seasons as one of our specialties and it has more than redeemed itself. We counted pods on our trial grounds containing twelve large peas, and there were none of better quality. The leaves are very large and leathery; the vines grow about two feet high and are remarkably productive. As one of our lady customers wrote us, "I have never been able to grow peas enough for the family before, but this year with your Yankton Main Crop we have had a great many more than we could use." $\frac{1}{2}$ pt., 15c; 1 lb., 45c; 10 lbs., \$3.00; 100 lbs., \$23.00.

Second Earlies and Late Varieties

Improved Telephone—This is without exception the largest podded pea in existence. It is a heavy cropper and of fine quality; the pods are well filled with peas of the largest size, tender, and retain their sweetness well. Undoubtedly one of the best of the tall-growing late peas. $\frac{1}{2}$ pt., 15c; 1 lb., 40c; 10 lbs., \$2.90; 100 lbs., \$21.00.

Pride of the Market—A dwarf wrinkled pea, growing about 2 feet in height. Pods are medium green in color, very large, often containing 9 large peas of excellent quality. Not needing brush, a very good sort for the home garden. $\frac{1}{2}$ pt., 15c; 1 lb., 40c; 10 lbs., \$2.90; 100 lbs., \$22.00.

Improved Stratagem

Morrisville, N. Y., July 29, 1920.

We have just picked and shipped the first planting of the Stratagem Peas we bought from you. The yield was at the rate of 112 bushels per acre, the later plantings will be a much heavier yield. There seems to a sentiment for letting a club order for a carload of seed peas to some reliable seed man. The most of this order will be Telephone and other tall growing varieties and some Early Thomas Laxtons and others of that class. Could you supply us with that amount? It would be best if you could give price f.o.b. at Morrisville. The freight on the thirteen bushels we got last winter was about \$0.57½ per bushel from Yankton, and on a carload it will be considerably less. I am enclosing one of our land circulars to give you an idea of the pea industry here. This last Tuesday two carloads of green peas were shipped to New York City and one to Philadelphia, about 3,000 bushels in one day from Morrisville.

John Anderson.

Improved Stratagem—This is one of the finest dwarf wrinkled peas. In quality it is unsurpassed, when cooked being of the most delicious sweetness. Vines grow only 18 inches high, do not have to be brushed; they are extremely robust and bear many very large pods packed with immense dark green peas. A remarkably fine sort for both home and market use. The heavy demand always makes this pea short. ⅓ pt., 15c; lb., 40c; 10 lbs., \$2.90; 100 lbs., \$20.00.

The Admiral—A very heavy-cropping green wrinkled pea. Ripens with the Telephone and remains palatable longer than any other variety after it becomes large enough to use. The abundant pods are closely packed with peas of the very best quality. Vines 3 to 4 feet high. ⅓ pt., 15c; lb., 35c; 10 lbs., \$3.00; 100 lbs., \$20.00.

White Marrowfat—Almost exactly similar to Black-Eye Marrowfat as to growth, season and productiveness. A favorite on account of its being such a heavy yielder. ⅓ pt., 15c; lb., 25c; 15 lbs., \$2.00; 100 lbs., \$10.00.

Horsford's Market Garden—A very fine wrinkled pea. Grows 2 feet high, very uniform and is an immense yielder. Because it yields so well it is one of the favorite canning sorts, hundreds of acres being planted by the large packers. The pods are of only medium size, but are always full of good-flavored peas. ⅓ pt., 15c; lb., 35c; 10 lbs., \$2.75; 100 lbs., \$20.00.

PEPPERS

Chinese Giant, or Procopps Giant—Double the size of Ruby King, the largest and finest mild red pepper. Not only is it immensely productive for so large a pepper, but its enormous size and magnificent appearance make it sell most readily. Plants well branched and thickly set with enormous fruits; frequently half a dozen peppers will touch each other. It makes an excellent salad sliced and served like tomatoes. Pkt., 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.50.

Bull Nose, or Improved Large Bell—The standard sweet-flavored scarlet sort. Plants 2 feet in height, prolific and quite early ripening. Sweet scarlet fruits 3 inches in length and 2 inches in diameter. Our stock is particularly fine. Earlier than Ruby King. Pkt., 10c; oz., 40c; ¼ lb., \$1.50.

Ruby King—This is the most popular large red pepper. Plants grow 2 feet high and bear a fine crop of extra large scarlet fruits. The flesh is quite thick, sweet, and so mild that the peppers may be eaten from the hand like an apple. Pkt., 10c; oz., 40c; ¼ lb., \$1.50.

Long Red Cayenne—The true Cayenne, hot and pungent. Pkt., 10c; oz., 45c; ¼ lb., \$1.40.

Golden Queen—Largest sweet yellow pepper. Pkt., 15c; oz., 75c; ¼ lb., \$2.25.

Tobasco—Hottest small bright red. Pkt., 10c; oz., 45c; ¼ lb., \$1.40.

Ruby Giant—A cross of Ruby King and a Giant pepper, produces immense crops of very large peppers, mild flavor, excellent for pickling or stuffing. Pkt., 10c; oz., 45c; 4 oz., \$1.60.

Pimento—Flesh extremely thick and very mild. Must be started early. Pkt., 10c; ½ oz., 25c; oz., 40c; ¼ lb., \$1.40.

Ruby Giant

PARSNIPS

you can remove one to the cellar at a time and use them up through the winter for fries and parsnip stews. Nothing better. Try it our way and you will enjoy them.

Guernsey (Improved Half Long)—The roots do not grow so long as the Hollow Crown, but are of greater diameter and more easily gathered. The roots are very smooth; the flesh is fine grained and of most excellent quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Long Smooth, or Hollow Crown—A great cropper, tender, sugary and considered the best for general cultivation. Parsnips improve by remaining exposed to frost. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

PUMPKINS

These are easily grown and profitable for stock feeding. At time of corn planting scatter seeds in every fourth or fifth hill, or for a large crop sow in May, in good warm soil, in hills eight to ten feet each way; four plants to a hill.

Large Cheese, or Kentucky Field—Cheese-shaped; in flavor like Crook-neck Squash; yellow-fleshed, fine-grained, and very productive; superior to many field varieties. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 70c.

Connecticut Field—A large yellow variety; hard shell; an excellent variety for field culture. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

Field of Connecticut Field Pumpkin

RHUBARB OR PIEPLANT

How many farmers and city people are supplied with this delicious fruit? It is easily grown and produces abundantly. It comes the first of anything in the spring, just when you want it. The canned fruit from the cellar is exhausted and the price of fresh fruit at that time is almost prohibitive. It will grow any old place and will thrive there for years, but the better place, care and cultivation given it the better the returns. It is as easily grown from seed as from the roots, and you get a nice cutting the second season. Try at least a package of these seeds.

Linnaeus—Early, large and tender. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

Victoria—Very large, later than Linnaeus. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

We were told that parsnips were poison until after they had been frozen. This is absolutely an untruth. They never have been and never will be poison. It is one of the best vegetables we have, and they get much sweeter after they are frozen; consequently it is much better to freeze them if you can before using. We dig them in the fall, pack them in boxes in sand and let them freeze. Have the boxes small enough so that

Tennessee Sweet Potato

Quaker Pie—A distinct and valuable variety. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c; $\frac{1}{2}$ lb., 50c; lb., 90c.

Tennessee Sweet Potato—Grows to a medium size; pear-shaped and a little ribbed. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Sugar—This variety is smaller than the Large Field, but of finer grain, sweeter and very prolific. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 90c.

Mammoth King—The largest variety ever introduced. An enormous yielder, having produced over 100 tons per acre. The flesh is very thick, bright orange color and of fine quality, and in flavor equals squash. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.10.

RADISHES

For a successive supply sow from the middle of March until September, at intervals of two or three weeks. For an early supply they may be sown in a hot-bed in February, care being taken to give plenty of ventilation, otherwise they will run to leaves.

Radish, Half Long, Scarlet or Paris Beauty—One of the most delicious of the half long Radishes; in fact, it comes in season between the Turnip and Globe Root and the Long Rooted one. Upper parts are scarlet, changing to a much lighter pink at the tip of the root. Always crisp and mild. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Crimson Giant—A remarkable feature of this Radish is that it will grow double the size of other red forcing Radishes and will remain solid, not showing the least sign of becoming hollow. It will grow six and seven inches in circumference, weighing about ten ounces, and will remain solid and juicy. Shape is round to oval and very attractive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Crimson Giant Radish

Icicle

Rosy Gem—One of the quickest growing and hand-somest extra early Radishes in cultivation. It is crisp and tender, while its perfect globe shape leaves nothing to be desired. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 75c.

Giant White Stuttgart—An immense white Radish. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

The Icicle—This new Radish is undoubtedly the finest white Radish grown. It is very slender, pure white in color, and the tenderest of the long Radishes. It is very early, as early as the Long Red. Compared with the Lady Finger, it is earlier and more tender, but not so large. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 70c.

Hailstone—The quickest growing white Radish; ready for the table in from fifteen to eighteen days. The Radishes are regularly "turnip-shaped." The flesh is solid, crisp and mild in flavor. The foliage is extremely small. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 70c.

Early Scarlet Turnip, White Tipped—Very early; color bright scarlet, tipped with white; an excellent market variety; fine for forcing. Their shape is perfectly globular with rich deep scarlet top, blending into pure white at the bottom. Tender, crisp and delicious. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Chartier, or Long Rose, White Tipped—A very distinct variety, being dark red at the top, and merging into pure white at the base. It stands well and will grow to a large size before it is unfit for the table. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Early Long White, Vienna, or Lady Finger—This is unquestionably the finest long white Radish in cultivation. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., \$65.

Long, Brightest Scarlet, White Tipped—This is a new variety, resembling the Early Long Scarlet in shape and size, and is very early, being ready for use twenty-five days after sowing. Very handsome, being of the brightest scarlet, tipped with white. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 60c.

All Summer's Radish—This new Radish is a great acquisition to the list of Radishes. It can be planted very early and can be used as soon as it is large enough, but will continue to grow if left in the ground until it is as large as an ordinary turnip and does not become pithy or strong if left in the ground for as long as two months. It is one of the best money makers for the market gardeners on account of its long season and its immense size. At maturity it is nearly as large as an ordinary Globe Turnip and can be sliced and eaten with vinegar and is at least the equal of any other Radish grown. Color is bright scarlet, globe in shape, and exceptionally fine Radish in bunches. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; 1 lb., \$1.00.

French Breakfast—A great favorite, beautiful bright scarlet with pure white tip, oval in shape, fine for open ground or force. Pkt., 5c; oz., 19c; $\frac{1}{4}$ lb., 25c; lb., 65c.

French Breakfast

Professor N. E. Hansen's Turkestan Radish

Did you ever notice boys or girls going on a journey, whether short or long, and when they returned note the difference in the report of the trip? One of them all enthusiasm, telling of the wonderfully beautiful sights and useful things noticed along the roadway, the other will listen to this narrative in open-eyed wonder, will ask, "Where did you see all of that?" Just the difference between people; one with his eyes open, senses alert, grasping that which is good. The other possibly a dreamer that needs awakening. Professor Hansen is of the type that sees and knows all of the good things in making a trip. This new radish, brought by him from Siberia, in his 1913 tour, is one of the things picked up from the wayside. He was sent for alfalfa seed, brought alfalfa all right, but found a great many other valuable things and brought them also. We have grown the Hansen Turkestan Radish two years in succession, and while it is not exactly of a fixed type, it is a wonderful all-season radish. You can use it from the time it is the size of a five-cent piece until it is five or six inches through. You can pull and eat it in the field just as you would a turnip. I have asked Professor Hansen to write us regarding this radish, and his letter follows:

Mr. D. B. Gurney:

In reply to your inquiry, I found the radish which I have named Hansen's Turkestan Radish on my 1913 tour to Siberia. It had been brought four years previously by native Sarts from an interior region of Turkestan, hundreds of miles from a railway, to the Semipalatinsk Province of Siberia. I ate it a number of times in Siberia and became interested in it as a very valuable vegetable, owing to its very mild, excellent table quality. The radishes were served sliced and eaten with butter. The remoteness of its native home probably accounts for the fact that it had not been introduced earlier.

From the few seeds obtained I have been working up a stock ever since. As Secretary of the South Dakota State Horticultural Society I offered prizes for the largest specimen grown in South Dakota in 1916 from this seed. The prize was won by Mr. D. Betts, Hanson County, South Dakota. His best specimen weighed 2 pounds 4 ounces. The plants must be well thinned to get fair size. This point is often neglected by those who enter a competition of this kind. A correspondent in Stanley County mentions its high quality and the fact that it is good throughout the season.

The radish varies somewhat, but the type is somewhat turnip-shape and of a bright red color. Some purple and white specimens occur also. Mr. Wm. G. Anderson, Arcola, Manitoba, Canada, writes: "The radishes were excellent, of fine flavor. I used six of them at different times and found them to be the best radish for this climate I have found." Owing to its large size this new radish can be peeled readily. I feel it will be a welcome addition to our list of table vegetables.

N. E. HANSEN.

Pkg., 15c; 2 pkts., 25c; oz., 40c; 4 oz., \$1.00.

Radish, Sparkler White Tip

We consider this one of the most desirable radishes to grow. Color: deep scarlet with a distinct white tip covering at least one-third of the lower diameter of the root. It matures under favorable conditions in about twenty-five days and will hold longer than the other turnip or globe shaped radishes before becoming pithy. The maximum size before becoming over-ripe is about one and one-fourth inches in diameter. Its shape is nearly round, being only slightly flattened on the under side. Pkt., 5c; 1 oz., 10c; ¼ lb., 35c; 1 lb., \$1.10.

Gurney's Extra Early Scarlet Globe Radish

In offering this Scarlet Globe Radish to the public we know we are offering the very best radish on the market. It is earlier than any other market variety, and the quality is so crisp and sweet that it always creates a demand for more. It is especially valuable for early planting in hotbed or first outdoor plant'ng. Pkt., 10c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

Sakurajima and Two Other Mammoth Chinese and Japanese Winter Radish

These monstrous Japanese winter radishes were considered a novelty some time ago, but they are becoming just as staple a winter vegetable as potatoes, carrots or beets. These radishes produce wonderful specimens, some of them will measure as much as four or five feet long, and retain the size well from top to bottom. Some of the other varieties are globe shaped and grow as large as the largest turnip. We have grown these in the trial ground for regular winter use for a number of years, and we have never found any of them but what were crisp and juicy. To get best results plant in mid-July, dig before freezing weather, pack in damp sand or dirt and use as wanted during the winter. They will keep perfectly until spring. We find one of the best ways to use them is to take one radish at a time, cut off from this radish as much as you expect to use in one day, return the balance to the packing box, peel and slice, leave in vinegar for about two hours, and in serving use a little pepper and salt, and you will find them delicious and refreshing. These three varieties are absolutely the best of the winter radishes. Prove it to your satisfaction by growing them. Single packet, 15c; three packages, one each variety, 35c.

Gurney's Scarlet Globe

Winter Radish

This is a much neglected vegetable, and for the same reason that you neglect the Turnip and Rutabagas. When you are making your order for vegetables you pass the Winter Radish, as you will not be ready for it before June or July. The result is when planting time comes you have no winter Radish Seed, and consequently you get no winter Radishes. Add enough of these to your spring order so that you may have plenty of the vegetable for winter use. It costs only a few cents and yields abundant returns. Take them up in the fall and store in your house, or cellar, same as older vegetables, and you will have fresh, crisp Radishes nearly all winter. Give these a trial this year.

Chinese Rose, or Scarlet China—An excellent Winter Radish. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 60c.

California Mammoth White Winter—Of immense size; long. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 60c.

Round Black Spanish—The favorite Winter Radish of Germany. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c.

Long Black Spanish Winter—Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 60c.

SQUASH

This vegetable is greatly neglected by the majority of farmers, as it adds greatly to the winter vegetables, it is easily grown, yields abundantly, and a most satisfactory vegetable. In placing your order do not forget the new Delicious, Burbank's Patagonia and the old standard Hubbard. They are all good.

SUMMER SQUASH

Giant Bush Summer Crookneck—Matures very early. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.20.

Mammoth White Bush Scalloped—Large size; flesh clear, waxy white, tender and delicious. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.20.

Golden Custard Bush—A very productive early scalloped sort; color rich golden yellow; quality excellent. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.20.

GURNEY'S TABLE QUEEN SQUASH

I guess, from the number of testimonials that I am submitting, it will be useless for me to elaborate on its many good qualities, but as I have just eaten one of the Squash I will have to talk. First: The size is the most desirable of any squash produced, and might be termed the individual squash. A really hungry person could eat one of them at a sitting. In the larger varieties of squash you cut one and bake a portion for the family and not wanting a continuous squash menu the balance invariably spoils before you are ready to use it. Second: The shell or rind is as thin as a sheet of paper, and the meat separates readily from the skin. The flesh is extremely thick, and of a bright golden color. The seed cavity is small and packed with seed. The color of the squash is a dark green, somewhat ribbed, and after picking and storing for some time changes to a bright golden color, but retains its quality until used. It keeps equal to the best of the other varieties, and bakes quicker than other squash, never requiring over 30 minutes in the oven. We find the most desirable way to cook these squash is to cut them in half, place a portion of butter in the lower half, cap it with the other half, and bake as though whole. They are always dry and mealy. It yields enormously. A single vine this past season produced in our grounds more than 75 perfectly matured squash. I am showing here a picture of brother Don with a painful of these and a split squash. It was hard to keep him out of the field while they were growing, and after they were mature he nearly boarded there. He surely believes in this new squash, and I think if I were to search his cellar I would still find quantities of them. Don has four kids up at his house, and he says there are two things they really like. One is corn meal mush, the other Table Queen Squash. The Table Queen can be planted in the most ordinary garden. The growth is medium, but they grow a squash at almost every joint. Any person who neglects planting these this season is failing on at least a good portion of his garden. One man wrote me that it was the most desirable squash for market gardeners. He says, "I pile my Ford car full of these and I hardly reach town before they are all sold at 75c to \$1.00 per dozen."

Per package, 15c; one ounce, 40c; four ounces, \$1.00.

That I might taste and judge the edible value of the squash, I prepared, cooked and tested them. Compared with Hubbard, the flavor is surely equal if not superior. Then (I always boil squash, there is no waste then in cooking) I found economy in several respects over the Hubbard—1st, the seed pocket does not occupy to exceed $\frac{1}{4}$ of the squash, and I found this seed cavity just literally packed with seeds, and 2nd, the flesh is all edible to the rind which is not thicker than the shell of a hen egg, and this rind naturally detaches itself from the flesh so there is no waste. My judgment is that you get at least 50% more edible food from a given weight of squash; 3rd, in cooking this squash you prepare from two to four squashes according to size of the family, but with the Hubbard you only

cook one-third to one-half of one squash and set aside the balance, which may be forgotten and spoil—another waste.

I received the bulbs and squash and wish to thank you for them. I was delighted with the squash and think it is the best I have ever tasted. Snohomish, Wash., Nov. 12, 1920. ELIZABETH DANSER. To say the least, I think the squash of very good flavor and their size makes them easy to market. The bulbs were also quite welcome and have been planted. Whatever they bring forth in the way of flowers and plants will be highly appreciated as my mother surely likes nice flowers.

The new squash are sure fine. There are six of us in my family and we all think the flavor is better than the old Hubbard, and they are thin shelled and handy. You have sure struck a leader in the new squash.

Received the two squash the other day. We baked them, and want to say that the flavor is better than all others and then some. Thanks for the flower bulbs. We appreciate these.

The squash which you sent me last month was surely delightful. They were certainly a treat. Also the bulbs for which I thank you so much. The squash was all you claimed for them, fine flavor and tasty.

My wife cooked the larger of the two squash and the only fault I find with it was that it tasted "morish"; there was only enough for one, but of course I had to divide up with my better half. Let me say that I think they are the finest flavored squash I ever ate, and I wish I had enough of them to carry me through the winter.

We had the squash last night for dinner, baked as you suggested. They made a hit, all right. One said: "Queen of squashes." Another remarked: "You could say all kinds of good things about these squashes." Still another: "We'd be lucky to buy these for ten cents apiece." Personally, I regard them as equal to the average Hubbard in flavor—better than most. There is absolutely no waste to them—for you can eat them right down to the thin skin. They make two good portions, and as you say, a squash lover could get away with a whole one and not half try. We pronounce them as Shakespeare said: "Most excellent good." I hope they make good with you and that business will increase as it deserves from your long experience and indefatigable energy.

The squash are certainly fine. They are almost exactly the same flavor and sweetness of Henderson's Delicate, and about the same size. If, as you say, they will produce as much per acre as Hubbard and keep as well or better, then you have a valuable acquisition to the squash family on account of their desirable small size.

Chicago Warted Hubbard—A perfect dark green and very warty selection from the well-known Hubbard, retaining all the good qualities of its parent. Very handsome, a good keeper and sells at sight. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.35.

True Hubbard—This is the well-known Winter Squash, now grown so largely throughout the country. Vines of strong running growth; fruits large, olive shape, with dark green skin and very rich flesh. An excellent keeper and of splendid quality. Our strain is extra fine. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.30.

Delicious Squash

I cannot think of any better comparison than to figure the Old Hubbard Squash as the standby and the New Delicious as the one bidding for public favor. It has been out now years enough so that we can honestly say that it is better than any other winter squash as far as quality is concerned. It is not so large as the Hubbard, will not yield as many pounds per acre, will keep equally as good, but that one point, exquisite quality, entitles it to a place in the garden or on the farm of every person. I cannot express the quality better than one of

Squash, Delicious

our customers a few years ago expressed it to me. He said, "I put in a bunch of Delicious Squash in the cellar for winter. The good wife cooked one. I immediately went out and put in another bunch, just on account of quality. They are better than the best sweet potato." This squash weighs about eight to ten pounds; the color is almost uniformly of a green shade. When baked it will separate from the shell of its own weight. **Pkt., 10c; oz., 20c; ¼ lb., 50c; 1 lb., \$1.40.**

Symmes Blue Hubbard Squash

For more than fifty years the old Hubbard Squash has been considered the acme of perfection in squashdom. In comparing yield, size, quality and keeping qualities of squash it has always been compared with the Hubbard. The Symmes Blue Hubbard is simply a selection from the old true Hubbard Squash. Selected for better quality, for greater yield, and for its blue instead of its green color. It keeps equally as well as the Hubbard, produces a greater number of squash per vine, cooks up a little drier and sweeter. The demand for the Symmes Blue Hubbard has more than doubled each year since we introduced it.

Our Stock seed of this variety has been saved each season from the bluest specimens and this past year over 98 per cent of all the squash in our field was true blue; only an occasional one going back to the original parentage. **Price per pkt., 15c; oz., 25c; ¼ lb., 65c; 1 lb., \$1.75.**

Crop from ¼ lb. of seed, Mammoth Whale Squash. Grown by D. K. Johnson, Mitchell, S. D.

Mammoth Whale — This is the "Jumbo" of the Squash family, and creates great attention wherever grown or placed on exhibition. It is an extra large-fruited sort, quite distinct in form and appearance. The squashes grow from 2½ to 3 feet in length, with a slight neck at the stem end. The large seed end is swelled to a width of 12 to 18 inches and slightly flattened, giving a most distinctive appearance which suggests its name, "Mammoth Whale." Under good cultivation the fruits frequently attain more than one hundred pounds in weight. Flesh firm and solid, of beautiful orange yellow and excellent quality. **Pkt., 10c; oz., 20c; ¼ lb., 40c; lb., \$1.40.**

Delicata — A small-fruited variety, suitable for both summer and winter use. The fruits are oblong, slightly ribbed with orange yellow, skin striped with dark green; flesh thick and solid; cooks dry and is of rich flavor. **Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.10.**

Delicata

SALSIFY OR OYSTER PLANT

Sow early in the spring in drills 14 inches apart. Cultivate same as Carrots or Parsnips. Gather what may be wanted for the winter and let the balance stand in the ground for the next spring's use.

Mammoth Sandwich Island—A new and large variety. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 45c; lb., \$1.40.

R. E. Leaper of Wheatland, Wyo., sends me two pictures of the mammoth tame sunflowers produced from seed purchased last spring. The Mammoth Russian Sunflower grows, as you will notice, to a great height, producing monstrous heads filled with the seed. It has been demonstrated that silage made from sunflowers is equal in feeding value to that of any other fodder, and is being used to a great extent in Montana and Wyoming and other western states. It is especially desirable where the seasons are apt to be hot and dry, producing large crops in the driest season. The seed of the sunflower is especially valuable for feeding to fowls. It is commonly called the Russian Peanut and is a desirable and healthy food. Children like it. Try them.

Wheatland, Wyo., Nov. 18, 1920.

Enclosed find some pictures which we took this summer of corn and sunflowers grown from your seed. We have planted seed from you four seasons and always with good results. Am sending the photos in competition for your \$2.50 prizes. On account of a very late spring and early fall frost our Rainbow Flint did not mature as well as it should this year, but we certainly have a fine lot of fodder from it.

MRS. R. E. LEAPER.

SUNFLOWER

Mammoth Russian—The plant produces very large heads which measure 12 to 20 inches in diameter, and contain an immense quantity of large striped seeds, which are highly valued as an excellent and cheap food for fowls. They eat it greedily, thrive well, and lay the greatest number of eggs. Small rations of the seed fed to horses and other stock during the winter months are of great service to keep them in fine, healthy condition, imparting a sleek glossiness to the coat of hair. It will produce a good crop of seed even on thin, poor land. Pkt., 5c; oz., 10c; lb., 25c; 10 lbs., \$1.50; 50 lbs., \$5.50; 100 lbs., \$10.00.

SPINACH

This is one of the most important of our market garden crops, and one that requires very little care. For summer use sow at intervals of two or three weeks from April to August, and for early spring crop sow in September, covering it in exposed places with straw to protect it from severe frost.

Long Standing—The leaves are thick, fleshy and crumpled, equal to the Bloomsdale Curled Savoy-Leaved, and standing at least two weeks longer than any other variety without running to seed. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 60c.

Bloomsdale Curled Savoy-Leaved—The leaves are wrinkled like Savoy Cabbage, from whence the name; it is a very valuable variety, particularly for market gardeners. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 60c.

SPECIAL CASH PREMIUMS

It has been our policy each year to offer to various agricultural bodies cash premiums for results from their work. Last Spring we offered to the Extension Division Club Work of the Brookings College a cash premium of \$75.00 to be given to the champion boys' and girls' crops club who exhibited their products at the South Dakota State Fair. This \$75.00 was to be used by the winning club in partly paying for an educational trip to the International Live Stock Show at Chicago. The winners were Leo O'Hara, Clear Lake, S. D.; Harold Kleppen, Wessington Springs, S. D., and Ruby Jorgenson, Hayti, S. D. I sincerely hope that the team enjoyed their Chicago trip and received considerable benefit from it. Paul J. Scarboro, State Club Leader, was in charge of the party for the week.

TOMATOES

It is not how cheap we can furnish you Tomato Seed, but how good. In buying Tomato Seed from us you are getting the **Gurney quality**, which means the very best product. There are no better strains of any of the varieties that we are offering and the constantly increasing demand for **Gurney Tomato Seed** proves that we are furnishing seed that produces the best quality, quantity, smoothest and best shipping of any.

New Tomato, Mr. Topp

NEW TOMATO—MR. TOPP

We have grown this excellent new tomato one more season, and it has justified all that we have claimed for it, except that it is not the proper tomato for the market gardener to plant in large quantities. The Mr. Topp tomatoes produce large clusters of fruit as shown in the photograph, and on that account the tomatoes are apt to be smaller than the gardener likes to use for his trade. We believe this tomato will produce equally as many pounds of fruit per plant as any tomato you can grow. The photograph shows a cluster of ripe fruit weighing over 7 pounds. This plant produced one stem of blossoms with over 350 flowers open at one time, and ripened 50 full size Topp tomatoes in that cluster. It is a very rapid, rank grower, and to get best results we advise staking it. It is the earliest of all the tomatoes except the Earlibell. They are of excellent quality, beautiful color, bright red, of medium size on account of their producing such an immense quantity of fruit. The fruit is always smooth and round. We have also found it especially valuable for forcing in the greenhouse for winter market. For home use we consider it is one of the very best. **25c the package.**

Early Dwarf Champion—A great favorite on account of its dwarf habit and upright, tree-like growth, which permits close planting, fruit resembles Acme; medium size, the color being a purplish pink, very smooth and symmetrical, fine quality, very solid meated. The vine growth is very strong and stiff, so that it needs almost no support. **Pkt., 5c; oz., 25c; ¼ lb., 75c; 1b., \$2.25.**

EARLIBELL TOMATO (SELECTION)

We are still waiting for someone to prove to us that they have or can produce an earlier tomato than the Earlibell. I just received a letter from one of our Texas customers today, ordering six pounds of this Earlibell seed. He tells me that he can get 25 per cent more fruit to the acre and ten days earlier than any other tomato grown in the market garden section of Texas. This ten days means sometimes several cents per pound additional for their big crop. In the North it means ten days more of tomato season, freedom from frosts, etc. It means that we can produce tomatoes further north and at higher altitudes than ever before. This past season we grew in the Trial Ground practically every variety of claimed early tomatoes. The method adopted was as follows:

On the first day of June we planted in the open ground the seed of all of the varieties and as they grew made records of the growth, the time of blooming and the first ripe tomatoes. The Earlibell this year was just five days ahead of the next earliest, and running about as much as twenty days earlier than a number of varieties that were claimed to be extra early. The Earlibell is not only earlier but it produces greater quantities of fruit with enough foliage to keep them free from sunburn, seldom rots, generally good-sized, smooth and of a bright red color that makes it very desirable for market as well as for the home table. We have found that the Earlibell is also one of the best tomatoes for greenhouse forcing. It requires a little more trimming than some other varieties but produces quantities of good, marketable fruit. Try it. **Pkt., 15c; oz., 45c; ¼ lb., \$1.50; ½ lb., \$2.25; 1 lb., \$3.50.**

Chalk's Early Jewel—The largest of the extra early bright red Tomatoes. About one week later than Spark's Earliana; a heavier cropper of large size and better flavored fruit, which are produced continuously throughout the season. On account of the handsome appearance, bright color and extremely good quality it has commanded nearly double the price on the local market over Spark's Earliana. On account of its extremely heavy foliage, fruit never scalds in the hottest weather. Pkt., 5c; oz. 25c; ¼-lb., 75c; lb., \$2.50.

Spark's Earliana—The earliest, large, smooth, red Tomato. This Tomato is not only remarkable for its earliness, but for its very large size, handsome shape and bright red color. Its solidity and fine quality are quite equal to the best medium and late sorts. Enormously prolific. The very finest for the Northern market and home garden. In many localities it is now planted almost exclusively. Pkt., 5c; oz., 25c; ¼ lb., 60c; lb., \$2.00.

New Stone

Dwarf Stone—A splendid new Tomato, originating with the famous Livingstons. In habit of vine it resembles Dwarf Champion, but it is of stronger growth and more erect. The fruits are the same color and size as the regular stone, with the additional advantage of the Dwarf Champion habit. Under ordinary field culture this sort completely outclasses Dwarf Champion. Here is the record. Ten fruits picked at one time from one vine weighed 5 lbs. and 3 ozs.; five fruits selected for average specimens weighed 2 lbs., 9 ozs., a safe average of, say, ½ lb. Specimen fruits of 1 lb. each are very common. Pkt., 5c; oz., 25c; ¼ lb., 70c; lb., \$2.00.

New Stone—The Tomato for a main crop. Choicest seed. We call this the king of the Livingstone kinds, which are the best types of large smooth, solid, "beefy" Tomatoes. If asked to select one main crop, market sort, we advise this. Color, fine scarlet; stem set high, core small and shallow, so that but little is lost when it is taken out of the fruit before slicing. We want to make what we say of this kind definite, because there are very many good kinds, and a long list is confusing. If in doubt, buy the New Stone. Pkt., 5c; oz., 25c; ¼ lb., 55c; lb., \$1.65.

New "Globe" Tomato

Every Tomato of this variety just alike. Size, color, solid meat and quality. Every vine full and ripens early. Get next to it. Market and Home Gardener.

An extra good all around sort, of distinct globe shape, with quite a large percentage of elongated fruits. It is a beautiful variety, and on account of its shape, one that permits of a greater average number of slices to be taken from each fruit than from other sorts.

In time of ripening it belongs among the first earlies. The fruits are of large size; and a good marketable size is retained throughout the season; always smooth, of firm flesh and has few seeds; ripens evenly; color a fine glossy rose, tinged with purple, and without the slightest hint of yellow at any stage of ripening. An exceedingly productive variety, and a remarkably good keeper. In quality there is nothing more to be desired, being mild, pleasant and of delicate flavor; unsurpassed for slicing or to eat from the hand. Pkt., 10c; oz., 35c; 2 ozs., 60c; ¼ lb., 90c.

Acme—One of the earliest and handsomest varieties. The fruit is of a medium size, perfectly smooth and regular in shape; very solid and a great bearer; color dark red, with a purplish tint. Pkt., 5c; oz., 25c; ¼ lb., 60c; lb., \$1.75.

Tomato Record

Drilled in the open on June 1st, 1920, the following varieties of **Early Tomato**: **North Dakota No. 51**, **North Dakota No. 60**, **North Dakota No. 103**, **Burbank's Earliest**, **Earlibell Selection**, **Earlibell Regular Strain**. These were allowed to grow to a height of about 4 inches, then thinned to twenty-five plants of each variety and given best cultivation; were not "trellised" or "trimmed." First fruit commenced to show color **August 15th**, but was not disturbed in any way until **August twenty-first**; then all fruit entirely ripe was taken from each vine with following results:

North Dakota No. 51—Twelve fruit, good specimens, smooth, solid, good color, crop set medium. Lacks foliage.

North Dakota No. 60—Thirty-seven fruit, not as good specimens as 51. Extra heavy yield; not so good color. Lacks foliage. Medium strong grower.

North Dakota No. 103—Twenty-five fruit. Smooth, better than either 51 or 60. Good yield. Just enough foliage to protect from sunburn. Strong grower. Fruit of all—51, 60 and 103—borne in good clusters of good marketable size.

We saved some seed of all three. We offer it at 15c per package—one packet of each for 35c.

Burbank—Nine fruit. Fruit rough, color fair, quality good, solid. Strong grower, well set with fruit. Yields well, but too late to be classed with the earliest.

Earlibell Selection—Forty-eight fruit.. Smooth, color good, solid; borne in clusters of about five to seven; very even size; most of 48 fruit over ripe. Strong grower, good foliage, quality excellent.

Earlibell Regular Strain—Thirty-four over ripe fruit. Not so smooth as **Earlibell Selection**; identical otherwise. Full ripe fruit could have been picked from either strain Earlibell five days in advance of any other variety.

St. Joseph, Minn., Oct. 16, 1920.
Enclosed find a picture of the Earlibell Tomato. The tomato crop surely was a good one this year. But I think it will not win a prize in the Photo contest. The Bugless Potatoes were the biggest we raised for many a year back. I think it would be very good to change the word "Bugless" to Bumper Potato, because they are good yielders.

Rup A. Reisinger.

Beauty—(Livingston's)—A very fine variety of large size; grows in clusters of four or five; color glossy crimson with a purplish tinge; very solid, with a tough skin, making a desirable market variety. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 70c; lb., \$2.15.

Favorite—(Livingston's)—Ripens evenly and as early as any good variety, holding its size to the end of the season; very prolific; good flavor, few seeds, flesh solid. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 70c; lb., \$2.00.

Perfection—(Livingston's)—Larger in size than the Acme—color, blood-red; it is one of the first to ripen; almost round in shape; perfectly smooth and very solid; of the best quality; enormously productive. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 70c; lb., \$2.00.

Livingston's Coreless—(110 days)—All of the fruits are of marketable size. Always free from green core; ripens all over and through and right up under the stem, all at once. A grand, good slicing variety; the seed cells being surrounded by bright red, heavy, meaty and delicious flesh. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Bonny Best—(88 days)—Large smooth fruit of a rich scarlet red, the color demanded by many markets. Fruit thick, with a small core, an excellent tomato for any purpose. Slices exceptionally well. Nearly globe shaped, slightly flattened at stem. Borne in clusters of 5 or 6 fruits, all ripening evenly together. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

Red Rock—(115 days)—In Red Rock we believe we offer the very best main crop red tomato ever offered. Very prolific, borne on strong disease resisting plants, and of excellent quality, very thick fleshed and meaty. One of the heaviest yielders. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Ponderosa Tomato—This is the largest of the tomatoes. Often producing fruit weighing two pounds or more. Very bright red, generally smooth, fine vigorous growers, producing large crops of this immense fruit; quality very good. Pkg., 15c; oz., 45c.

Golden Queen—This is the only first-class, large, purple-yellow Tomato. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 65c; lb., \$2.00.

Early Detroit—This is considered the largest and best of the purple varieties. Vine is vigorous and very productive; fruits are purplish pink, smooth, uniform in size and are nearly globe shape. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., 90c.

Yellow Pear—Fruit bright yellow, distinctly pear-shaped; of rich flavor and used largely for preserving. The stock we offer is the true pear-shaped, not the large yellow plum often sold for it. Pkt., 10c; oz., 45c.

Strawberry, or Husk Tomato—Also called Ground Cherry. Plants of spreading habit and immensely productive. Pkt., 10c; oz., 45c.

HYBRIDIZED POTATO SEED

FROM THE SEED-BALLS—HEADQUARTERS STOCK.

Millions never saw a Potato Seed Ball. Thousands have tried in vain to get the seed. Now is your opportunity. This unrivaled seed will produce an endless variety of new kinds. Your fortune may be in one of them. They are as easy to grow as tomatoes.

PHOTO OF POTATO SEED BALLS—ONE-HALF NATURAL SIZE.

It is from these that ALL valuable new varieties of Potatoes are produced.

Growing new and distinct Seedling Potatoes from the Seed-Ball Seed is intensely interesting. They will be the greatest curiosity of your garden. This seed will positively produce innumerable new kinds, colors, shapes, sizes, and qualities. The product will astonish you. Some may be of immense value and bring you a golden harvest. Every farmer, gardener, and bright boy should plant a few packets. You may be one of the lucky ones. Full directions on every packet.

READ THESE EXTRACTS FROM CUSTOMERS LETTERS.

"I grew 101 Potatoes from one plant of your Potato Seed. Every plant was a different variety." Mrs. Ellen Keener.

"I raised 50 Hills from one Packet; many kinds and colors; some early, some late. 94 Potatoes in one hill." J. H. Skinner.

"Your remarkable Potato Seed produced white, pink, red, purple, blue, cream, russet, and black potatoes." W. M. Johnson.

"Your Potato Seed is a wonder. I grew 115 different varieties from one Packet—the finest I ever saw." C. E. Flint.

"I grew 45 pounds of Seedling Potatoes from one Packet. I expect wonders from them next year." Thomas Lucas.

Packet 15 cts. 2 for 25c. 5 for 50c. 10 for \$1.

Husk Tomato

Yellow Pear

TURNIPS

Along in June each year we receive numerous orders for these Seeds that should have been sent with early orders. Nearly everybody fails to include Turnip and Rutabaga Seed with the regular order on account of their not being wanted until late in the summer. The result is when ready to plant you do not have the Seed, so go without. Include all you are going to need with your first order; you are then sure of having plenty of good Seed when planting time comes.

Light, well-manured soil is best suited for Turnips. Sow the earliest varieties in April, in drills about 15 inches apart, and thin out to from 6 to 9 inches in the rows. For a succession sow at intervals until the end of August.

Golden Ball (Robertson)—A rapid grower, globe-shaped and of beautiful color and a good keeper. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Large White Globe—One of the most productive; in rich soil the roots will frequently grow to 12 pounds in weight; globe-shaped, skin white and smooth. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c.

Purple, or Red Top Strap Leaf—Flat; fine flavor and one of the most popular varieties grown, and when sown late it is one of our best varieties, being an excellent keeper. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Extra Early White Milan—Extra early Turnip, in which the extreme earliness, small top and tap root of the Purple Top Milan are united with the clear, white skin and flesh. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.40.

Sutton's Snowball—New English Turnip—As its name implies, it is a round, clear white turnip of unusual size and a great yielder. Should be planted in July for winter use. One of the best keepers. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

Danish Barthelda—We have tried a great many varieties of long Turnips and have been compelled to discard them on account of quality. This new variety will outyield all others and quality is fine. The best variety for winter. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 20c; lb., 60c.

Rutabagas or Swedes

I am going to make this a little personal appeal to the fellows in the extreme North. Montana, North Dakota, Northern Minnesota, Northern Wisconsin, in fact, all of that strip of territory across the northern part of the United States where root crops, such as rutabagas, turnips, carrots, etc., grow to perfection, where you can produce a greater yield than in any other section of the United States, where they will outyield the potato crop, and where they will bring equally as much money if you grow them in quantities as your best acre of potatoes. Do you know that all of us fellows south of that northern point, where these root crops grow to perfection, are hungry every winter for your very best rutabagas, your turnips, your carrots, etc., and we do not get them unless we pay immense prices for them? They are recognized as the acme of perfection in good crops and there is a demand for them that will take every bushel you can grow. When we ship our seed potatoes in from the north we always manage to get a few bags of rutabagas, carrots, etc., in the cars, for the reason that the quality is so much better than those of our own growing in this section, that we simply cannot get through the winter without having these particular vegetables. Why not grow them in larger quantities so that you can load cars? We can find you a market for them every year. We will be glad to do it. In fact, we handle hundreds of carloads of produce of all kinds each fall and have generally paid nearly as much for these root crops as we have for potatoes, sometimes more.

For feeding stock in Fall or Winter there is nothing superior to Turnips or Rutabagas, as they are much liked by all kinds of stock and serve to keep them in good condition. We cannot too earnestly recommend farmers to increase their sowings largely, for we are sure the crop will prove remunerative.

Purple Top Yellow—Best variety of Swedish Turnip in cultivation. Hardy and productive; flesh yellow, of solid texture, sweet and well flavored; shape slightly oblong; terminates abruptly with no side or bottom roots; color deep purple above, and bright yellow under the ground; leaves small, light green, with little or no neck; the most perfect in form, the richest in flavor, and the best in every respect. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 65c; 5 lbs., \$2.25. Postpaid.

RUTABAGA

Krasnoselski Russian Rutabaga

On our trial grounds for past three seasons this gave the best satisfaction and produced the largest yield of any of the rutabagas. On account of the dry, hot weather, most varieties became hollow and strong. This was solid entirely through the season, making an extra large percentage of good-sized rutabagas, bright yellow in color and of excellent quality for table use. This will take the place of the older varieties on account of the increased yield and quality of the fruit. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; 1 lb., \$1.00.

GURNEY'S PURPLE TOP WHITE GLOBE TURNIP

This is an all-season Turnip; is sweet from the time it is large enough to use until the following spring; size above medium; heavy foliage, and the best turnip of all of them.

This new English Turnip was brought from England by us three years ago and was recommended to us by one of the largest turnip specialists as the best ever originated. It has proven fully up to the originator's recommendation, and we urge all to give it a trial. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c; 1 lb., 90c.

NEW TOBACCO, TOM SUTTON

Grow Them—Smokes for yourself on your own farm. And think of the greater quantity at less expense. Buy a package or two packages of the Tom Sutton Tobacco and send him a supply. I know the quality will please him. I am reproducing the description used in last year's catalog. It still holds good.

Not being an expert on tobacco myself, I will have to give you the originator's description, and the experiences of the boys around here who use tobacco and claim to know a good tobacco from a "stogie." This tobacco was originated in Minnesota, is extremely early, yields wonderfully, and if I am to believe the fellows who use it, it is of remarkably fine quality. The originator says of it: "I feel that I have perfected as nearly a perfect tobacco for the northwest as it is possible to grow. I have crossed the General Grant variety with Evans Cinnamon, a Canadian variety, and have a tobacco that combines earliness, large size, productiveness, mild flavor and fine quality. It is unequalled as a pipe and cigar tobacco. My crop was all right to cut before frost this year. Stock four to six feet high, with as many as 24 large leaves on a stalk. Many people would grow gladly their own tobacco if they could do so without the rank flavor commonly found in northern grown tobacco. I wish you would note specially the light color, also the white ashes after burning. Compare carefully with any of common cigars and note the extreme difference. Note also, and specially, that it has no green, rank flavor and does not bite the tongue."

I passed out a quantity of the leaves and crumbled tobacco to the boys who smoke. They accepted it, I suppose, just to indulge the "Old Man," but I insisted on their lighting their pipes in my presence, and the general report was that it was tobacco of excellent quality, and I believe them, for they are begging for more of it every day. Some of them would be willing to furnish the match if I would furnish the pipe and tobacco. We want to have all the Northwest tobacco users purchase a package of this Thomas Sutton tobacco this season. 15c the package, 2 packages for 25c.

Minnesota, Sept. 4, 1917.

I send herewith two prints of my 1917 crop of Tom Sutton Tobacco, which is now in full bloom and the leaves beginning to redden. It is better this year than ever.

THOMAS E. SUTTON.

EVERGREEN AND TREE SEEDS

Evergreens may be grown easily from seed if the proper varieties are selected and reasonable care given them. We list a few varieties which are most successfully grown by the amateur, and believe you will have no trouble in making a success of it. There is nothing that improves the looks and value of a place so much as Evergreens.

It is the general impression that they are very high priced, hard to transplant and only suitable for the front yard in the town or city. This is a mistaken impression, as they are cheap and easily transplanted. The one thing to remember in transplanting an Evergreen Tree is never to allow the roots to become dry for even one minute.

In preparing your seed bed it should be made about three feet wide, and length according to amount of seed to be placed therein. Rake it over smoothly and sow broadcast, then cover to the depth of about one-half inch with fine soil. Plant the seed in the springtime when the soil is warm and mellow; shade completely until germination takes place, then remove one-half the shade and raise the balance from six to ten inches above the plants, leaving shade on the entire summer after planting. Shade can be made with a frame made of boards or laths, or with branches of trees.

An 8-Year-Old Blue Spruce and Mr. Cramer's Daughter, at Colman, South Dakota

Bull Pine (Ponderosa)—This is the most easily grown from seed of any Evergreen and is successfully grown by any person. One of the most rapid growing, hardy and best tree for windbreak. Will do well anywhere that any tree grows. Pkt., 15c; oz., 30c; ¼ lb., \$1.25; lb., \$3.25.

Black Hills Spruce—One of the best ornamental Evergreens grown; resembles the Norway Spruce. Grows much broader and heavier. This variety only seeds once in several years, consequently seed is very scarce and high priced. Pkt., 15c; oz., 75c.

Jack Pine—A standard rough, rapid cold weather tree. Absolutely hardy; a wonderful windbreak and easily grown. Pkt., 15c; oz., 50c; ½ lbs., \$3.00.

Colorado Blue Spruce—A rare, elegant tree, with foliage of a rich blue. One of the most distinct and striking of all the Spruce family. A free grower and perfectly hardy. Pkt., 15c; oz., 65c.

Ash—This is the hardwood tree of the North and is readily grown from seed. About three weeks before planting the Ash seed place them in a cloth sack and soak them for all of the three weeks. They should be planted about May 1st. Do not allow them to dry after they have been soaked; they will germinate and come up within five or six days after planting if they have been soaked long enough. Pkt., 10c; ½ lb., 40c; lb., 70c.

Catalpa Speciosa, or Hardy Northern Catalpa—

This is the only Catalpa that is of any value in the North, and all the seed offered by us is Dakota grown; consequently, it is the hardiest of this variety. These do well in any part of Iowa, South Dakota, or any place south of this latitude. Seed are very light and consequently there are a great number to the ounce. Pkt., 15c; oz., 40c; lb., \$3.00.

Honey Locust—This is one of the most rapid growing and most beautiful of all of the northern shade and timber trees. In the spring it is covered with long racemes of pure white, very fragrant flowers, and in the fall and early winter is covered with the long and tropical-looking seed pods, seed about the size of a navy bean. This is one of the most valuable, most rapid growing and easiest grown of any of the forest trees. Oz., 20c; ½ lb., 70c; lb., \$1.25.

Black Locust—A native American tree of large size and rapid growth. Flowers in long white racemes, very fragrant, valuable for timber and is being largely planted for timber, posts, etc. Along the railroad lines east of Chicago there are hundreds of miles planted to Black Locust. This tree is easily grown and perfectly hardy. Seed very small. Oz., 35c; ½ lb., \$1.20; 1 lb., \$2.25.

Russian Mulberry—This well-known hedge, shade and fruit tree grows readily from seed. Often grows to a height of 4 feet the first year. Our seed of this is grown here at Yankton. Pkt., 15c; oz., 30c; lb., \$4.00.

Russian Olive—Easily grown from seed, the hardiest and best hedge and windbreak for north and west. Oz., 15c; ¼ lb., 45c; 1 lb., \$1.35.

Box Elder—(See description nursery section.) Oz., 15c; ¼ lb., 30c; 1 lb., 75c.

Hackberry—One of the finest trees for all purposes. (See description nursery section.) Pkt., 15c; Oz., 25c; ¼ lb., 75c; 1 lb., \$2.50.

Flower Seeds

New and Standard Varieties

Flowers from seed are usually known as Annuals, Biennials and Perennials.

Annuals bloom and ripen seed the first year and then perish.

Biennials do not generally flower the first season, and are in perfection one year.

Perennials continue to flower several years in succession. Many of them bloom the first year if sown early.

Hardy Annuals, Biennials and Perennials can be sown in the open ground early in the spring, if desired, the Biennials and Perennials will not require any protection in winter. The blooming period of all classes may be greatly extended by picking off the flowers as soon as they begin to fade.

Half-Hardy Annuals, Biennials and Perennials should not be sown in open ground until settled warm weather, though they can be sown in the house, if desired, early, and afterwards transplanted. The two latter need to be protected in the winter, or if carried over until spring, in cold-frames or green-houses.

Aquilegia (Columbine)—Popular hardy perennials that bloom very freely during spring and early summer. These plants grow wild in the timbered country and are known to all the children as Honeysuckle. They come in a great variety of colors and are easily grown. **Pkt., 5c; oz., 70c.**

Alyssum

Little Gem—Plants 3 to 4 inches high; they soon become a large mass of white scented flowers; fine for bordering; hardy annual. **Pkt., 10c; 1 oz., 35c.**

Sweet—Fragrant, white, hardy annual. $\frac{1}{2}$ foot. **Pkt., 5c; $\frac{1}{2}$ oz., 15c; oz., 25c.**

Aquilegia

Antirrhinum, Snap-Dragon

An old favorite border plant, which has been greatly improved, with dark and glossy leaves and large, curiously-shaped flowers, with finely marked throats. They bloom the first season from seed sown in the spring, but the blossoms will be much stronger the second year. Succeeds best in dry, loamy soil. Half-hardy perennial. A few leaves of any light litter thrown over them will help to carry them through the winter, or they may be treated as annuals.

The Giant-Flowered grows about 2 feet high, with larger flowers than the old sorts.

Giant-Flowered Firefly—Scarlet, crimson and yellow. **Pkt., 10c; $\frac{1}{2}$ oz., 40c.**

Purple King—This is the forerunner of a race of new and distinct Snap-Dragons. Flowers more than twice the size of the ordinary Antirrhinum. Only the one color as yet, but do not fail to include it in your order. **Pkt., 10c.**

Amaranthus

Tricolor—(Joseph's Coat)—Beautiful foliated plants, growing three to five feet high. They are useful as borders for taller growing plants or for the centers of large beds. Should be grown in warm sunny situations and given plenty of room to develop. The ornamental leaves are red, yellow and green. **Pkt., 10c.**

Anemone (S. D. State Flower)

The **Anemone** or Wind-flower is one of our choicest autumn flowers and is at perfection when most other flowers have ceased blooming. Hardy perennials, easily grown from seed, blooming the first year if sown early. Produces large double flowers in mixed colors. **Pkt., 10c.**

Abutilon (Flowering Maple)

Desirable plants for the house in winter and effective specimens for the lawn in summer. They will bloom the first year if sown early. Half hardy perennial, $1\frac{1}{2}$ to 3 feet. Mixed colors. **Pkt., 20c.**

Ageratum

As an addition to the flower garden's color forces in blue, the Ageratum is a valuable flower. The dwarf sort being particularly desirable for borders, edging, etc., being very compact and erect. Half hardy annual.

Mexicanum Mixed—Blue and white. 2 ft. **Pkt., 10c.**

Tom Thumb—Dwarf blue, distinct variety, desirable for edging. $\frac{1}{2}$ ft. **Pkt., 10c.**

Asters

The Rochester, or Vick's Mikado—Pink petals, narrow, long and reflexed, bending and curling across each other in such magnificent disorder as to make it the fluffiest aster grown, color most exquisite shade of lavender pink, plants are very vigorous and produce immense quantities of very large flowers, ranging from four to six inches in diameter. Pkt., 10c.

Asters for Cut Flowers

Queen of the Market—The earliest of all the Asters. Grows about 9 inches high and very branching; the fine double flowers are produced freely on long stems, making it valuable for cutting. Mixed, pkt., 10c; $\frac{1}{4}$ oz., 25c.

New White Branching—The magnificent large double white flowers, 4 inches in diameter, borne upon long stems, are excellent for cutting. The big broad petals are curled so as to give the blossoms the appearance of a graceful Chrysanthemum. Pkt., 10c., $\frac{1}{4}$ oz., 30c; oz., \$1.00.

Asters, the Latest, American Beauty—We are offering this in the novelty or special class and we want to say that it stands head and shoulders above all other asters for length of blooming period and quantity of flowers produced. It was in bloom with us this past season for over three months, more than one and one-half months longer than any other aster. It produces very large flowers, the inner petals being curved and of a deep rose color, borne on extra stout stems from 15 to 20 inches in length, making it a good companion to an American Beauty Rose. Seed of this aster planted in the early spring should be in bloom the latter part of July and stay in bloom until frost comes. This is specially valuable for the florists' trade, but equally as valuable to those wanting a patch of asters in their flower garden. Pkt., 20c; 2 for 35c.

Sensation, the New Red Aster—This is a good companion for the American Beauty and if you want the best in the various colors, you should have, at least, a package of this new red aster. It is brighter red than any other aster and produces very large double flowers measuring as much as four inches across; the blooming period is about the same as the American Beauty; height about eighteen inches. It being a little shorter than the American Beauty, consequently it can be planted in front of the American Beauty without hiding the flowers. This is the fiery red aster we have all wanted. Pkt., 15c; 2 for 25c.

Lady Roosevelt—It might not be policy to offer three new asters in one season, but these are so good that we do not wish to save them over. In fact, we can hardly make a selection as to which one we should leave out.

The Lady Roosevelt with its distinct Carmine Rose coloring introduces a new class of asters. Its long period of blooming, its beautiful flowers borne on long stems make it one of the most valuable of its class. If you want the best aster in your neighborhood, something that cannot be equalled by others, plant the Lady Roosevelt and the other two varieties named on this page. Pkt., 10c; 3 Pkts., 25c; 1 Pkt. each of 3 above Novelty Asters, 35c.

Crego's Giant Aster—With their long twisted in and out, curved petals they resemble the choicest of Japanese Chrysanthemums; flowers measuring four to five inches in diameter; borne on long, strong stems, making them very suitable for cut flower purposes; flowers lasting from one week to ten days when cut and placed in water; blooming period August and September; height of plants, about 2 feet. We offer them in the following separate colors:

Crego's Giant Rose; Crego's Giant Pink; Crego's Giant Lavender; Crego's Giant White; also Crego's Giant Mixed. Any of the above, Pkt., 10c; 3 Pkts. for 25c.

Balsam Apple—A very beautiful, cut leaved, rapid growing, annual climbing vine, producing beautiful flowers, followed by seed pods bursting open and showing the interior, bright crimson. A very satisfactory climbing vine for hot, dry places where others will not do well. The seed grows readily and rapidly. Pkt., 10c; oz., 40c.

Balloon Vine

Hardy Annual Climber—A rapid-growing climber, very desirable in its place. It will grow to a height of from 10 to 15 feet, bearing beautiful white flowers which are followed by its seed-pods of a balloon shape. Pkt., 10c; oz., 25c.

Balsam or Lady Slipper

Magnificent plants for garden culture. Tender annuals.

Camelia Flowered—The largest flowered of any of the Balsams and perfectly doubled. The individual flowers frequently measure 2½ inches across, the plants forming symmetrical, well branched, erect bushes, the branches being almost covered with the magnificent double flowers. In color they vary from the brightest scarlet to pure white, including spotted violet, royal purple and many others. Pkt., 10c; oz., 35c.

CENTAUREA

Centaurea Imperialis—The bushes are about four feet high and covered with large, sweet-scented flowers. Will keep for over a week in water if cut when just about to open. Pkt., 10c.

Corn Flower—The Blue Bottle, or Bachelor's Button, is one of the most attractive of all hardy annuals, with its graceful beauty of its old-fashioned flowers. Colors include dark, light blue, pink, rose and white. Pkt., 10c; oz., 35c.

Calliopsis—A very showy border plant, producing flowers in nearly every shade of yellow, orange, crimson, red and brown. Finest mixed, pkt., 10c.

CALENDULA

Hardy annuals about one foot high, that produce a wonderful profusion of flowers, ranging in color from ivory to orange. Valuable for bed and borders. Bloom until late fall. Choicest mixed. All colors. Pkt., 10c.

COSMOS

These beautiful annuals are wanted by everyone. Those living in the south or the extreme west with their long seasons grow the tall, late varieties, and we of the central north and north have planted these tall, late varieties for a great many years and the frost catches them as we get the first few flowers.

This new class of extra early, mammoth, flowering Cosmos producing beautiful flowers, measuring four to five inches across, 60 days from sowing of the seed allow us not only the beauty and pleasure of the big Cosmos, but gives us a better flower; one that measures nearly twice as large as the tall, late growing variety, produces its flowers on wonderfully long stems, which are used extensively for cut flowers. Cut the flowers as fast as they open on the plants and their place will be taken by others for a long, blooming period. We offer these in white, pink, crimson and mixed at 10c per pkt. 4 Pkts., 30c.

Early Flowering—This early flowering strain may now be had in bloom from July to November. It is such a strong, vigorous grower, and its fine, fringe-like foliage is such a pretty background for its lovely spreading flowers of white, pink, crimson or rose-purple, that it can hardly be spared from any garden. All colors, Cosmos, mixed. Pkt., 10c.

White Lady Lenox—This gigantic Cosmos is a forerunner of an entirely new race; it is of extraordinary size and beauty, the flowers measure 4 to 5 inches in diameter, which is three times larger than the ordinary. Color, an absolutely pure white. This is an excellent flower for cut flower purposes, lasting an unusual length of time in water. Plants grow very strong, and the flowers may be cut up to any length of stem. Pkg., 10c.

Pink Lady Lenox, description same as for White Lady Lenox, with the exception the color is a beautiful shell pink, lighting up beautifully at night. Per pkg., 10c.
One each of the White and Pink Lady Lenox, 15c.
Giant Flowering Cosmos—Pkt., 5c.

Centaurea

Cosmos

Cannas

Wild Cucumber

The most rapid growing vine in existence. It will make a growth of 50 feet in a single season and will cover unsightly places quicker than anything else you can plant. It is an excellent shade for summer houses or to train over trellis or porches. Pkt., 5c; oz., 15c.

Cannas

Extra Choice Mixed—Seed saved from 20 varieties of only the very best of the large or Gladiolus flowered type. Blooms in about ten weeks after planting. Pkt., 10c; oz., 35c.

Coboea Scandens—A rapid growing vine with beautifully cut foliage producing large quantities of bell-shaped flowers of a beautiful violet hue. Pkt., 10c.

Candytuft

All the varieties look best in beds or masses. Seed sown in autumn produces flowers in early spring. When sown in April, flowers from July to September, and some of the sorts till frost comes. Hardy annual, 1 foot.

Candytuft Empress, or Snow Queen—A complete mass of large snow-white flowers. Pkt., 10c; oz., 30c.

Candytuft, Dark Crimson

We all know the Candytuft, the white variety, and love it for the beautiful borders it makes. This new dark crimson variety produces largest racemes of flowers of a beautiful dark crimson color and makes a wonderful border as well as specimen plants. Pkt., 10c.

Celosia or Cockscomb

Giant Crimson Empress Maxima—Dwarf plants bearing mammoth bright cockscomb and bronze foliage, making it one of the most attractive of all the Cockscombs. Pkt., 10c.

Dwarf Cockscomb (Cristata Nana)—Low growing plants with showy combs. Choice mixed. Pkt., 10c.

Cockscomb

Chinese Wool Flower—This recent novelty is the most curious as well as the most showy of all Celosias. The round globular flowers, appearing like large balls of bright red wool, start blooming in July and continue until cut down by frost. The flowers do not fade but increase in size and brilliancy throughout the season. They are excellent for bedding, or are fine when grown as specimen plants. Height of plant, 2 to 3 feet. Pkt., 10c.

Ostrich Feather (Celosia Plumosa)—A beautiful feathered Celosia, producing large, bright, crimson and orange plumes. A packet of each with the taller for the center and the dwarf for the outer edge would make a beautiful bed.

Tall—Mixed, 3 feet. Pkt. 10c. **Dwarf**. Mixed, 1½ feet. Pkt., 10c.

Castle Gould—A distinct type of Celosia Plumosa. The plants are literally clothed from base to summit with immense feathered heads. Pyramidal growth, two to three feet high; especially suited for pot culture, the profusion of long continued bloom being remarkable. The colors are blood red, carmine yellow, golden orange, scarlet and wine red. Mixed. Pkt., 10c.

Chinese Wool Flower

Carnation

Carnation

The Carnation has always been one of the most esteemed of the florist's collection, and there is no flower more desirable for the garden. Sow under glass in greenhouse or hot-bed, and when of sufficient size transplant one foot apart each way. Half-hardy perennial, 1½ feet.

Extra Choice Double Mixed—Seed saved from choicest German and English stocks. A large portion of this Seed will produce double flowers. Pkt., 15c.

Marguerite—Very free flowering. With ordinary care will be in full bloom in four months after sowing the seed, flowering in profusion until checked by frost. They flourish equally well in open ground or in pots. The flowers range through many shades of red, pink, white, variegated, etc., of fine form and large size. Mixed pkt., 10c.

Cypress Vine

A most beautiful vine, with delicate fern-like foliage and beautiful star-shaped rose, scarlet and white flowers. Pkt., 5c; oz., 30c.

CYPRESS VINE

Chinese Lantern—A showy variety of Winter Ground Cherry, making plants 18 to 24 inches high and producing large, balloon-like fruits, changing from green to bright crimson as the season advances. The husk covering the fruit measures nearly 2 inches through and the fruit is usually about three-fourths of an inch through and excellent for eating from the plant or for preserving. It bears a fruit at every leaf bud and late in the season is a solid mass of crimson. It is a hardy perennial, roots living over winter in the ground. Pkt., 15c.

Cineraria

A beautiful class of plants for spring decoration of the window or conservatory; may also be planted out in summer. They grow from 12 to 18 inches high, and are completely covered with a mass of flowers, two and three inches across, of the richest colors, in white, blue, violet and crimson shades. Seed may be sown from May to September for succession. Greenhouse perennial.

Grandiflora. (Large flowered.) Mixed. Pkt., 25c. **Choice Mixed.** Pkt., 15c.

Chinese Lantern

Chrysanthemums

The annual Chrysanthemums are distinct from the autumn flowering varieties, blooming all summer and making a gorgeous display in the flower garden and for pot culture.

Annual Double White Snowball. A magnificent variety growing about 18 inches high and blooming continuously throughout the summer. They are covered with clusters of double pure white flowers of a beautiful fringed appearance. Will last a week or two after being cut. Pkt., 10c.

Annual Double and Single Mixed. Beautiful double and single types in a wide range of colors. Pkt., 10c.

Coleus

A beautiful class of well known and popular decorative foliage plants. For bedding or pot culture.

Choicest New Hybrids. (Mixed.) Pkt., 15c.

Dahlia

The New Cactus—One of the finest flowers of late introduction, and where known is rapidly taking the place of the old standard Dahlias. Flowers are quilled and curved, resembling Chrysanthemums; grown on long stems, which makes them especially valuable for cut flowers. Our seed is all saved from the newest and most perfect varieties. Pkt., 15c.

Digitalis or Foxglove

The Shasta Daisy—A bed of these giant white Daisies in full bloom is a sight worth seeing. The flowers measure $3\frac{1}{2}$ to 4 inches across and are borne on stems 18 inches to 2 feet long. The numerous long, slender-stemmed white flowers rise most gracefully amid the bed of green, blooming all through the spring and summer months. The flowers keep in water for two weeks. Packet, 10c.

Dianthus

Digitalis, or Foxglove

The Foxgloves are quite stately and highly ornamental plants when well grown, with flower stems at least three feet in height. They are fine for the mixed border or planted singly in half-shady places near a walk or drive. The racemes of flowers are often two feet in length, containing scores of the prettily spotted thimble-shaped flowers. Perfectly hardy. Sow seed in spring in the garden and transplant as desired. Perennial. Mixed varieties, pkt., 10c.

Daisy, Bellis Perennis

A favorite spring blooming plant. Sow seed early in hot-bed or house and transplant to rich, cool, partially shaded situation, though they do quite well in open sunshine. Half-hardy, perennial, $\frac{1}{2}$ foot.

Double Mixed—Choice. Packet, 10c.

Golden Orange Daisy, African

This wonderful new flower was offered by us first in 1912. The success reported certainly places it absolutely at the head of all the annuals. This flower is from South Africa and is the easiest grown of any of the showy border plants. It grows to a height of about 15 inches and blooms profusely all summer. Seeds planted in the open ground in early May were flowering in July and continued until frost came. In our trial grounds it was the most attractive flower of any shown there; the flowers are about two and one-half inches across and the most beautiful golden orange color. We recommend this specially for borders for flowers and along walks. Pkt., 10c.

Dianthus, Pink Heddewegia

For brilliancy of coloring and markings, as well as beautiful forms of flowers, this family cannot be surpassed. The colors range through white, pink and crimson to the very deepest maroon; many varieties are finely fringed. Hardy biennials, but are better treated as annuals, as they bloom early from seed sown in the spring. Fancy mixed. Pkt. 10c.

Dianthus—Chinese or Indian Pinks—Hardy biennials; bloom early from seed; extra double flowers in choicest mixture of bright single colors, variegated and spotted. One of the finest for massing in beds. Pkt., 10c.

HELIOTROPE

Highly valued for the fragrance of their flowers and duration of bloom. Tender perennial, one foot. Easily grown from seed, blooming first summer if sown early.

Lemoine's Giant Hybrid. Choice mixed. Pkt., 15c. Fine Mixed. Pkt., 10c.

EVERLASTING OR ETERNAL FLOWER—HELICHRYSUM

These are of the most beautiful colors, pink, white, red, yellow, lavender. They bloom on good, strong stocks, standing 3 to 4 feet high in the flower garden and are as beautiful as any of the annuals you can have. Cutting these just as the buds commence to open, they will cure, retaining their delicate colors perfectly and remain beautiful flowers for several years. These are the genuine everlasting flowers and bouquets of them can be kept throughout the house during the winter. Plant liberally of these. Cut large quantities of the just opening buds and retain them for the holidays and for special occasions. Add a few green fern leaves or Plumous Fronds and you will have with these bright and varied colored, eternal flowers most beautiful bouquets for any occasion.

Helichrysum, or Everlasting Flower

Fireball—A beautiful ball shaped flower glistening in the sunshine like a burning coal. Pkt., 10c.

Golden Globe—A beautiful branching plant covered continuously during the summer with globe shaped flowers of golden yellow. The waxy finish makes them shine as though varnished. Packet, 10c.

Silver Globe—This is a variation from the white eternal flower as it has a grayish shiny cast of silver; a wonderful bloomer holding its color indefinitely after picked. Pkt., 10c; 1 each of above, 25c.

Burbank's Crimson Flowering Escholtzia

This was raised by selection for nine years from one of our common California "Poppies," which showed a thread of crimson on the inside of one of the petals. The plants grow about one foot high and a foot or more across. Pkt., 10c.

Golden West—A grand strain of the well-known favorite California Poppies. The flowers have large, overlapping petals, which are often delicately waved at the edges, showing beautiful and varied forms. The color is an intense shining yellow, with an orange blotch. Hardy annual. Pkt., 10c.

Four O'Clock, Marvel of Peru

A handsome, free-flowering, half-hardy perennial, blooming the first season from Seed. The flowers, which are produced in clusters, open in the afternoon and wither the next morning. They can be kept like Dahlias. Our mixture contains a fine variety of colors. Pkt., 5c; oz., 20c; ¼ lb., 60c.

Forget-Me-Not—This charming little blue flower succeeds best in damp, shady situations, but will thrive in almost any soil. The Victoria Blue which we offer is the largest flowering, and continues to bloom the longest of any. Pkt., 10c.

Gypsophila, or Babies' Breath—The flowers are small, star-like and born on feathery sprays, which are highly esteemed for cut flowers, as they lend a most graceful effect when combined with Sweet Peas or Nasturtiums in bouquets. Pkt., 10c.

Forget-Me-Not

Godetia

These wonderfully beautiful annuals have been developed and improved so rapidly within the last few years that you would hardly recognize them comparing them with those of previous introduction. These new plants and flowers resemble the high priced imported Azalia, but, unlike the Azalia, continue to bloom for a number of months in succession. They are compact, pyramidal, and globe shaped plants covered with beautiful flowers of varied colors, the flowers measuring about two to three inches across, and of the most delicate shades.

We have selected from the growing field a few of the most attractive varieties in the very best colors. **Gloriosa Compactii**, blood red, Pkt., 10c; **Carmine Rose Compactii**, beautiful carmine rose color, Pkt., 10c; **Rosamond Compactii**, pink dotted with crimson, a beautiful plant. Pkt., 10c; **Duchess of Albany**, satin-white, Pkt., 10c; **Dwarf Hybrid Compactii**, mixed, Pkt., 10c; 3 pkt. of any of the above, 25c.

Gaillardia

Godetia—Dwarf Crimson Glow—This splendid new Godetia is the most brilliant, easily grown flower that we are sending out this year. It forms a compact bush about 9 inches high, completely covered with flowers of the most dazzling interior crimson. A bed of this variety produces a rival effect, the intensity of which it is impossible to describe. The picture will convey some idea of the splendid color, but to be fully appreciated it must be seen growing. Pkt., 10c.

Gaillardia, or Blanket Flower—Finest single mixed. The flowers are greatly admired for their rich blending of colors. They thrive well anywhere. Large single flowers in red, scarlet, yellow and orange. Pkt., 10c; oz., 25c.

New Double Gaillardia—Large bright-colored double flowers, useful for cutting. The colors embrace Sulfur, Golden, Yellow, Orange, Amaranth and Claret. Pkt., 10c; oz., 25c.

Gourds

Gourds—A tribe of climbers, with curiously-shaped fruit in various colors. Being of rapid growth, they are fine to cover old fences, trellises, stumps, etc. Do not plant the Seed till the danger of frost is over, and select rich, mellow ground. Tender annual climbers, 10 to 20 feet. Fine mixed, pkt., 5c; oz., 15c.

Calabash Pipe Gourd—A rapid growing climbing annual from South Africa. The very popular Calabash Pipes are made from the fruit. When grown to make pipes it is best to let the vines run on the ground like cucumbers. These pipes are very light and color nicely. Pkt., 15c.

Nest Egg Gourd—Pkt., 10c.

Hyacinth Bean (*Dolichos Lablar*)—

This photograph is taken at the South Dakota Hospital for the Insane. It shows one of the men's buildings with the beautiful Hyacinth Bean nearly covering the front of it. This makes one of the most desirable annual climbing vines for all parts of the country, grows rapidly, produces clusters of beautiful flowers and then covers itself with the bright pods containing the seed. I want to say that all of the buildings at the Hospital are as well cared for and made just as beautiful as this one. The grounds are kept equally well and the whole institution is a credit to the United States.

Splendid climbers with abundant clustered spikes of purple and white flowers. It is of rapid growth and often runs 30 feet in a season. Height, 10 to 20 feet. Tender annual. Pkt., 10c; oz., 25c.

Mammoth Fringed Hollyhock, Allegheny—The flowers of this grand variety are from 4 to 6 inches across, single, semi-double and double, finely fringed and curled. The colors are shell pink, rose and ruby red, crimson and maroon, a shade or two deeper at the center, and exquisitely tinted toward the edge. The blooming season is from June until frost. Choice mixed pkt., 10c.

Helianthus, or Double Sunflower—Double Chrysanthemum flowered. This variety grows about 6 feet high and bears profusely all summer long. The perfectly double flowers are bright yellow and of many different sizes, from 3 to 6 inches in diameter. A row of these across our trial grounds this summer attracted great attention on account of the immense number of flowers always open and their bright yellow color. Pkt., 10c; oz., 20c.

Ice Plant—Handsome plant for baskets, rock work, vases and edgings. Leaves and stems appear as though covered with ice crystals; easily grown. Pkt., 10c.

Ipomea, Moon Flowers

Tender annuals of rapid growth, with beautiful and varied flowers; for covering old walls, trellises, arbors or stumps of trees they are invaluable; 15 to 20 feet.

Heavenly Blue—Flowers, 4 to 5 inches across in large clusters, produced in such abundance as to nearly hide the foliage; color a beautiful sky blue. Pkt., 10c.

Moon Flower, Mixed, including blue, red and white. Pkt., 10c.

Ipomea Mikado—A new Japanese climbing vine, producing flowers measuring from 4 to 5 inches across, in the greatest variety of colors. The leaves are large, glossy dark green, and will grow to the height of 20 feet in a very short time. This is an especially good plant for trellis or covering porches, outbuildings or fences. Pkt., 10c.

Ipomea Bona Nox—This is the Goodnight or Evening Glory. Flowers very large, violet; commence opening in mid-afternoon and remaining open all night. Pkt., 10c.

Japanese Kudzu Vine

The most remarkable climbing vine of the age and should be planted by everyone for dense shade of porches, arbors or places where you wish to screen outbuildings. It comes from Japan, the land of the flowers and of the most curious vegetable productions. The blossoms are large and borne in pinnacles like Wistaria, much larger in size and better clusters. Color, purple; blossoms very freely and early. It requires but little care and its hardy nature commends it to all. Large pkt., 10c; 1 oz., 35c.

Kochia, or Summer Cypress—An easily grown annual about 3 feet high. Throughout the summer it is a beautiful green, but turns to a bright red in autumn. It is of perfectly rounded form, with very fine foliage and stems. Is used for ornamental exhibits or borders. Pkt., 10c.

Lobelia—Crystal Palace—A most excellent and useful plant for bedding. Compact, erect growth; flowers deep blue. Seed should be covered lightly. Pkt., 10c.

Lupinus Mixed—Deep blue Texas Lupin—Loveliest spikes of deepest sea blue flowers, delicate fragrance, easily grown and very satisfactory. Pkt., 10c.

Lychnis Chalcedonica, or Burning Star—One of the greatest hardy biennials, which grow and bloom year after year, requiring no protection and easily started. Color brilliant scarlet. Pkt., 10c.

Linum, or Scarlet Flax—One of the most showy annuals for flower beds and masses. Brilliant crimson-scarlet flowers, 1 inch across, borne in wonderful profusion. Pkt., 5c; oz., 25c.

Delphinium Larkspur, Annual Varieties

The branching varieties grow two feet high, and should stand eighteen inches apart. The annual varieties are very free bloomers, and produce large spikes of flowers, white, pink, rose, light blue, dark blue and violet. In some varieties the flowers are double, in others single. The beautiful plume-like foliage is very ornamental, and the whole series is excellent for bouquets and table decorations.

Double Rocket—One foot in height, mixed colors. Pkt., 10c.

Delphinium—Hardy Larkspurs—These are true perennials, but bloom freely the first year from seed. In fact, in our trial grounds, I think, these are the most showy of any of the flowers for the longest period during the first season. The flowers vary in shade from the lightest lavender to the deepest blue. They are borne on spikes eighteen inches to three feet high and are excellent for cut flowers. The advantage of this hardy Delphinium is that when you plant them you have them for several years. Just a light covering of leaves or mulchings in the Fall; they come up and bloom early in the Spring. Pkt., 10c; 3 pkts., 25c.

Mignonette

Seeds of Mignonette may be sown at any season, so that by having pots prepared at different times a succession of flowers can be secured. Seeds sown early in the garden will give flowers through the summer. Very few cultivate the Sweet Mignonette compared with the many that might show their love for this sweet little flower. Annual.

Sweet—A well-known fragrant plant. Pkt., 5c; oz., 25c.

Kochia

Marigold

The African and French Marigolds are valuable for their flowers in autumn, and can be grown to advantage in little clumps with other plants in the front of shrubbery or in the garden border. The African varieties are the taller in growth, and produce large, self-colored blossoms. The French varieties are smaller, some of them being elegantly striped and spotted. The dwarf-growing kinds adapt themselves to spots where the taller varieties would be unsuitable. They succeed best in a light soil, with full exposure to the sun. Annual.

African Marigolds—Mixed varieties. Pkt., 5c; oz., 40c.

French Marigolds—Mixed. Pkt., 5c; oz., 40c.

Tall Morning Glories

Fine Mixed—A great variety of colors of the popular old-fashioned Morning Glory. Pkt., 5c; oz., 15c.

Imperial Morning Glory, Fancy Fringe—Exceptionally large flowers, beautifully fringed and ruffled, contains

all and many more colors than the ordinary Morning Glory. Per pkt., 10c.

Nasturtiums

I inspected the fields of Nasturtiums this summer when they were in full bloom; fields of more than ten acres in one body, a glowing, quivering mass of color. My wife compared it to an immense velvet carpet. It was a wonderful sight and one that will not be forgotten. Small beds of Nasturtiums are equally as beautiful on a smaller scale. The Nasturtium is one of the flowers you should plant largely of; the dwarf fellows in the beds and borders and the tall fellows for covering fences, objectionable objects or low buildings.

Tall or Trailing Nasturtiums

These are all of strong, vigorous growth and can be trained upon strings or wires, or for covering fences or trellis.

Sunlight—Flowers of the largest size are most beautifully colored. Clear, rich golden yellow. In this you will find flowers measuring nearly three inches across and are produced most profusely. Pkt., 5c; oz., 15c; ¼ lb., 45c.

Midnight—Plants of extremely deep dark green foliage, flowers are a deep brownish red. The soft, velvety texture of petals is crumpled or partly folded. Pkt., 5c; oz., 15c; ¼ lb., 45c.

Tall Mixed—Including all of the above and hundreds of other varieties. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 90c.

Dwarf or Tom Thumb Nasturtiums

These are dwarf, compact, rounded growth, and, like all Tom Thumbs, succeed on light, well-drained soil, or in slightly raised beds. The Tom Thumb Nasturtiums are much freer bloomers than any of the other varieties and are excellent for border plants.

King Theodore—Dark foliage and flowers of a rich, velvety crimson. Pkt., 10c; oz., 25c; ¼ lb., 40c.

Empress of India—Deep purplish green leaves, flowers dark rich salmon-scarlet. Pkt., 10c; oz., 25c; ¼ lb., 40c.

Chameleon—It is unique in bearing flowers of quite distinct coloring on one and the same plant. It is one of the most brilliant and showy of all the dwarf nasturtiums. Pkt., 10c; oz., 20c.

Dwarf Pearl—This is a very pleasing, creamy-white, free bloomer and a good plant. Pkt., 10c; oz., 20c.

Tom Thumb Mixed—This mixture is composed of all of the best Tom Thumbs and is remarkable both for brilliancy of color and perfection of individual flowers. The low price at which we are offering this seed brings it within the reach of everyone, and it should be planted liberally. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Phlox

For a splendid mass of colors and a constant display that is not excelled by any other annual, commencing to bloom quite early and continuing until severe freezing. The Phlox colors range from purest white to blood-red or crimson. For masses of separate colors and for cutting for bouquets for vases are unsurpassed. The seed may be planted in the open ground May 1st or in hot-bed or house earlier, and afterwards transplanted to where wanted. Give good, rich ground and set plants 8 to 10 inches apart each way. Hardy annuals; 1 foot.

Phlox Drummondii, Grandiflora—Large flowered section. These are decided improvements over the old class, with much larger flowers, a better range of colors and of more compact growth. Choice mixed, all colors. Pkt., 10c.

Star-Shaped Phlox—The most interesting of the Phlox family, bearing pretty star-shaped and fringed flowers, rich in colors, varying from violet blue to deep rose and blood-red, margined with white. Starred and fringed; choice mixed. Pkt., 15c.

Pansies

One of the most interesting classes of flowers grown. A bed of Pansies in bloom always has something new for you in variety of color and marking, every time you visit it. Although they are in bloom continuously from spring until late in the fall, the flowers are much larger during the cool weather than through the heat of summer. The seed may be sown in the hot bed, in boxes in the house or in the open ground. If sown in the spring, get them in as early as possible, so they will come into bloom before the hot, dry weather comes on. Seed sown in May or June will produce very fine flowers from August to winter. Sown later and slightly protected during the winter with leaves, or other light litter, they will make good, strong blooming plants for early spring. Very best mixed. Pkt., 10c.

Trimardeau Giant Pansy—These include the best of the German Giant Pansies, ruffled edges and various colors. Pkt., 15c.

Howard's New Star—Each flower shows a large, distinct five-pointed white star on a bright crimson or purplish crimson ground. Late in the fall, when the weather becomes colder, the edges of the white star become feathery, with fine lines of rose and crimson, while on other flowers the entire white portion is suffused with soft rose pink. The plants begin to bloom early and flower profusely. Pkt., 15c.

Petunia

For out door decoration or house culture few plants are equal to this class. They commence flowering early and continue a mass of bloom throughout the whole season, until late in the fall; easily cultivated, requiring rich soil and a sunny situation.

Single Grandiflora—Choicest mixed seed, saved from show flowers. Very large. Pkt., 10c.

Hybrida Striped Mixed—Pkt., 15c.

Portulaca—There is scarcely any flower in cultivation that makes such a dazzling display of beauty as a bed of many-hued, brilliant-colored Portulacas. They thrive best in a rather rich, light loam or sandy soil, and an exposed sunny situation. Half-hardy annual. **Single Mixed**—All colors. Pkt. 10c.

Poppies, Annual

This exceedingly showy and easily cultivated class of plants grows and blooms in any ordinary soil, and is among the showiest of all annuals. Sow the seed where the plants are intended to be grown, as they do not bear transplanting well.

Shirley—Fine for cutting, cut in the morning while the dew is on. The colors range from bluish-white through many tints to bright crimson. Mixed, 2½ feet. Pkt., 10c; oz., 25c.

Mikado—Very distinct in character and color from any other class of Poppies. The flowers are brilliant scarlet and white, with beautifully curved petals like a Japanese Chrysanthemum. Pkt. 10c; oz., 25c.

Double Mixed—Annual varieties. Pkt., 5c; oz., 20c.

Single Mixed—Annual varieties. Pkt., 5c; oz., 20c.

New Hardy Perennials, Oriental Red—This new race of Oriental Poppies when once planted, continue blooming for several years without further trouble. The flowers often measure 6 inches across and are of the most intense brilliant red. Pkt., 20c.

Peony Seed

Seedling Peony

Last season after the flowers were gone from our 15 acres of peonies, I found on most varieties a few pods of seed perfectly matured. I went over to the storage house and took a basket and gathered a quantity of these seeds, more than we shall need for our own use in the production of new varieties. Peony seed, you understand, do not reproduce true to their parent, but produce different varieties of flowers, single, semi-double and double. It is really worth while watching them from year to year, and as new varieties are produced in this way, you might secure something better than any of the varieties of today. They are very easily grown and bloom the second year after planting. **Pkt., 15c; oz., 65c.**

Ricinus or Castor Bean

The Ricinus has very ornamental foliage and beautiful showy fruit. Fine for the center of a bed, as it gives a magnificent semi-tropical appearance, or, planted thick, it makes a fine screen or hedge. Plant seed in open, very rich, deep-spaded ground, in a dry situation, as soon as safe in spring.

Cambodgensis—The finest dark-foliaged Ricinus. Leaves maroon; stem nearly black; fruit bronzy purple. Five feet. **Pkt., 5c; oz., 15c.**

Salvia, Scarlet Sage

Splendens (Large-Flowered Scarlet Sage)—Under our hot summer sun this "flame-colored" beauty is the most gorgeous of all plants. For months the blaze of flaming scarlet is intensely brilliant with great spikes of bloom, completely concealing the foliage. A single plant will carry as many as 200 spikes of flowers, each ten inches long. **Pkt., 15c.**

Salvia Volcano—Of all varieties of Salvia cultivated this is undoubtedly the most satisfactory and finest of them all. It grows about 20 inches high, pyramidal form, and is a mass of extra long racemes of fiery red, trumpet-shaped flowers. It is the earliest Salvia of any. Seed planted in the open ground will bloom by July 1st and continue until frost. The plants may be taken up from the open ground before frost and will bloom continuously in the house through the winter. It is easily grown from seed and comes true to name. For earlier flowers should be planted in a hot-bed and given same care as cabbage or tomatoes. Do not plant outdoors until danger of frost is over. **Pkt., 15c.**

Salvia

Salpiglossis

Grandiflora—This has long been one of our Favorite Flowers, but has never attained the popularity to which it is entitled. Nature can only paint its colors. It is a splendid half-hardy annual, with flowers of a peculiar richness, very delicately and beautifully penciled. Very effective in the sunlight, which brings out the beautiful tints and veinings. Unsurpassed for cutting. Plants about 2 feet in height. Mixed colors. **Pkt., 5c.**

Stocks, Gilly Flowers

The Ten Weeks Stocks are generally cultivated, and bloom from 10 to 12 weeks after being sown; they grow from 6 to 18 inches high, and when grown in light, rich soil they bear an immense quantity of bloom, each plant forming a perfect bouquet of delightful fragrance. Half-hardy annual.

Double Giant Perfection Ten Weeks—Tall, late flowering class. Choice mixed. **Pkt., 10c.**

Salpiglossis

Sweet William

The best varieties of Sweet William are of exceedingly beautiful colors, very large and almost perfect in form, with trusses of great size. Treatment as for Carnation. The plants are perfectly hardy, and may be increased by division of the roots. The colors pass from white to pink, crimson, carmine and purple, with distinct eye encircled out flowers. It is well to raise new plants every year from seed, for old plants become debilitated and unsightly, and the flowers decrease in size.

Perfection—(Auricula-Flowered)—Single varieties, mixed. **Pkt., 5c.**

Dwarf Mixed—These seldom grow over 6 to 8 inches high. Profuse bloomers; excellent for borders or edging. **Pkt., 5c.**

Sweet Peas for 1921

Of all the annual flowers, there are none that have come into popular favor over the entire world and have been improved so much in the last few years as the Sweet Peas, and it is marvelous the wonderful improvement that has been made in them. From a few ordinary colors of inferior small flowers they have, by careful selection and breeding, covered almost the entire range of colors and have produced flowers measuring over $2\frac{1}{2}$ inches across, and from the old-fashioned straight-edged type they have produced the ruffled and the butterfly Sweet Peas. The most easily grown of any of the annuals, blooming from early summer until killed by the heavy autumn frosts. No other flower equals them for cutting and few last as well. To bloom to their best, the flowers should be cut every day, in the evening. By morning the vines will be entirely covered with the bright showy flowers.

In visiting the fields of Sweet Peas we found almost thousands of varieties growing, most of the varieties producing very wonderful flowers, but we, by careful selection in the trial grounds, have decided on the varieties that we are listing here as the very best, every season improvement is made in Sweet Peas and the latest introductions are generally the best. We are listing those that pleased us and we are sure they will please you. The descriptions which we are giving will be found very accurate.

\$1.00 Spencer Collection

12 Pkts. of the Best Spencers for \$1.00.

Single Pkts., 12c; oz., 25c.

1. **After Glow**—A new break in Sweet Peas and very hard to describe. The flower has quite a pastel effect; base of standard bright violet blue shading to rosy amethyst; wings electric blue.

6. **Constance Hinton**—A black-seeded, white Spencer of enormous size and fine Spencer form. Young flowers generally tinted a trifle pink.

9. **Dobbie's Cream Spencer**—Supersedes Clara Curtis and Primrose Spencer; grand color and form; strong grower; the best Cream Spencer variety.

13. **Helen Lewis**—Standard orange; wings rosy salmon, large, wavy; one of the earliest Spencers and still a favorite.

19. **John Ingman**—Rosy carmine, showing veins of deeper shade. This variety and Helen Lewis were two of the first from Countess Spencer.

30. **Marie Corelli**—Rose carmine, tinted cherry red; waved; brilliant rose carmine or red.

31. **Marguerite Atlee**—Giant; pink, apricot pink on cream ground. The pink is suffused perfectly over the cream ground; strong grower.

33. **Mrs. Cuthbertson**—The best pink and white bicolor; standard light rose pink and wings are white flushed pale rose pink; strong grower.

34. **Mrs. Hugh Dickson**—Pale salmon pink on cream ground; waved; one of the very best.

35. **Mrs. Routzahn**—Apricot suffused with pink; waved; a very pretty flower.

36. **Nubian**—Chocolate; self wave; better than Othello Spencer.

50c SPENCER COLLECTION

Per pkt., 12c; oz., 25c.

4. **Asta Ohn**—Pinkish lavender, the wings showing a little more clear lavender than the standard, good size and best Spencer form.

12. **Edythe Taylor**—Salmon rose, new shade, between salmon and shell pink. A fine flower for exhibition; the stems are always long and flowers well placed.

14. **Elsie Herbert**—Large, white, with beautiful picotee edge of rose pink. One of the daintiest of the Sweet Peas.

16. **Flora Norton Spencer**—Bright blue with a slight tint of purple wave, a charming color.

17. **Florence Morse Spencer**—Beautiful light pink, deepening towards the edges; very large open wavy form of the Countess Spencer type; long-stemmed.

20. **King Edward Spencer**—Rich crimson, waved; flowers are large and of fine Spencer form. It is a vigorous grower and a good variety for exhibition and for garden.

Mrs. Cuthbertson

30c SPENCER COLLECTION

Pkt., 15c

65. **Martha Washington**—White edged and flushed rose. Similar to Marchioness of Tweeddale, Eric Harvey, etc. Has much more color than Dainty Spencer or Elsie Herbert.

73. **Janet Scott**—Clear deep but bright pink, showing buff at the top of standard, with the upper or top blossomed and the bud lighter pink and more buff. Large size and hooded form. The wings stand upright and are curled, giving the flower an unusual but rather attractive appearance. The color is distinct and is a shade we spent many years trying to develop.

74. **Queen Alexandria**—Bright scarlet red, almost true scarlet, self colored. Medium large, semi-hooded form. Is the same color as Scarlet Gem, but is very much superior since it holds its color well and is much larger.

This lot is bound to please you. A special selection of the best types. Single pkg., 15c; 4 pkgs., 50c; 9 pkgs., \$1.00, your selection.

57. Mars — Bright red (crimson-scarlet), self-colored. Rather above medium size, hooded form. Turns purple quite readily when blossoms are fully matured. Brilliant is practically the same thing, with standard rather more crimped. Salopian, is practically the same; deeper and richer and holds the color better. Firefly, Cardinal, Invincible Carmine and Invincible Scarlet are smaller open forms of the same color.

58. Miss Wilmot—Standard orange pink, showing veins of deeper orange pink. Wings rose, with strong tint of orange, showing veins of orange rose. Very large size, semi-hooded form of the very best type. Stems long and large and plant very vigorous. Lady Mary Currie is similar, but shows a tint of lilac. Oriental, Lady Penzance and Chancellor are practically the same shade, but not so large and effective.

59. Hon. Mrs. Kenyon—Light primrose self. Similar to Mrs. Collier.

60. Katherine Tracy—Standard soft pink, wings a trifle lighter tone, almost a self color. Medium size, open form. Standard is almost round and inclined to wavy edges, which is very attractive. Mrs. Gladstone is similar, but somewhat smaller and the standard is lighter. To get a good idea of the improvement in Sweet Peas, compare this variety with some well-grown flowers of the Elfrida Pearson.

61. Senator—Standard maroon and violet, wings violet and indigo, both striped on white. Large size hood form. Is practically Monarch striped white. Prince of Wales is similar but much lighter.

62. Mrs. Chas. Mander—Rich magenta with rather darker wings. Similar to Tennant Spencer, but for a purple Sweet Pea.

63. Vermilion Brilliant—Scarlet waved. To date this is one of the best Scarlet Spencers. It will doubtless be improved upon sooner or later. The color is rich scarlet, but has some crimson in it. It is a vigorous grower for a scarlet and flowers are of good form. A good number of four bloomed sprays are produced.

64. Juanita—Standard mauve, wings lavender, both striped on white. Medium size, hooded form. Is better understood as Countess of Radnor, striped white.

65. Martha Washington—White edged and flushed rose. Similar to Marchioness of Tweeddale, Eric Harvey, etc. Has much more color than Dainty Spencer or Elsie Herbert.

66. Sutton's Queen—Primrose, edged and margined with buff and rose. The standard is wavy and the full expanded wings fairly large and somewhat wavy. The newly opened wings are small and spherical, a very distinctive feature of the variety.

67. Queen Victoria Spencer—Primrose, flushed rose, waved. A black seeded primrose Spencer flushed rose in the primrose bud stage.

68. Loyalty—Violet flake, waved. Hester Spencer, Bertie Usher, The Earl, Geo. Curzon, are all very similar.

69. Rainbow—Ivory streaked rose.

70. Lady Evelyn Eyre—Pale pink flushed salmon, similar to Elfrida Pearson, but lighter in color.

71. E. J. Castle—Rosy Carmine, with light salmon shading.

72. Primrose—Light primrose, self-colored. Medium size, open form. Standard is inclined to turn back. Supposed to be a shade deeper than other varieties of this tint, but if so is very slight.

73. Janet Scott—Clear deep but bright pink, showing buff at the top of standard, with the upper or top blossomed and the bud lighter pink and more buff. Large size and hooded form. The wings stand upright and are curled, giving the flower an unusual but rather attractive appearance. The color is distinct and is a shade we spent many years trying to develop.

74. Queen Alexandria—Bright scarlet red, almost true scarlet, self-colored. Medium large, semi-hooded form. Is the same color as Scarlet Gem, but is very much superior since it holds its color well and is much larger.

Extra Special Spencers

Janet Scott

Early-Flowering Sweet Peas—Spencer Type

This is rather a new type of Sweet Peas, early blooming and more satisfactory in most cases than the older, later-blooming varieties. These Sweet Peas are used exclusively by florists for forcing purposes, and are equally as good for planting in the open, flowers coming nearly thirty days ahead of the standard varieties. We are offering only five of the latest introductions. These are absolutely the best.

Early Liberty—A rich, deep, sunproof crimson. It is richer than the Australian varieties. Ruby and Emperor. Pkt. 15 seeds, 25c.

Early Heatherbell—Large flowers borne in fours on stout stems; best Spencer form; color rich mauve. Pkt. 25 seeds, 15c.

Henrietta—This is the most charming novelty. It is a double flower and, therefore, a side feeder. We are happy this year to have enough of this seed to offer to our customers. The color of this charming variety is a beautiful, clear light rose pink on a cream ground. The great attractive beauty of the flower, however, is its enormous size and frilled appearance.

It has been remarked that the flowers are more like pink roses than sweet peas. A few sprays look like a bouquet. Pkt. 25 seeds, 25c.

Scintillator—This has been exhibited at the exposition and gained an award of merit in the American Sweet Pea Society. The ground color is cream, very daintily striped and flaked orange, rose pink. In the sunlight and under artificial light the effect is truly beautiful. The flowers are of great size and the standard is bowled, expands well and prettily waved. Pkt. 30 seeds, 25c.

Early Song Bird—Pale rose pink on white ground; a most charming blush pink for florid; flowers borne profusely in threes and fours on large stems. Pkt. 30 seeds, 15c.

Special Spencer Collection

We have of some of the newer varieties and some of the good standard varieties of Spencers, only a few pounds each, too little to catalog. We make up special collections from these of well-filled packages. Thirty packages for \$2.00; fifteen packages, \$1.00; seven packages, 50c, and one package, 10c.

Scintillator

Mixed Spencer's

For those who want to receive larger quantities of sweet peas for the money, will say that our trial ground mixture of Spencer's gives the desired results, as they run in practically every color and shade. This is an excellent mixture, much better than usually offered in mixed sweet peas. Package, 10c; oz., 15c; ¼ lb., 50c; ½ lb., \$1.00; 1 lb., \$1.90.

Verbenas

Very few plants will make such a gorgeous display during the summer months as the Verbenas, or furnish more flowers for cutting. Start seed in the house or under glass early in the spring and transplant after 3 or 4 inches of growth. Good, healthy plants can be produced from seed as readily as almost any tender annual. They flower in July and continue strong and healthy until destroyed by frosts. Our stock today stands unrivaled.

Auricula-Flowered, or White Eyed—Mixed colors. Pkt., 15c.

Mixed colors, pkt., 10c.

Scarlet Defiance. Large trusses of deep rich scarlet. Pkt., 15c.

Zinnia

Few flowers are so easily grown from seed sown in the open ground, or bloom so abundantly and continuously as this hardy annual. Marvelous improvements have been wrought in the newer strains. During the month of August, Zinnias are incomparably bright. We recommend them for groups, beds, borders and summer hedges. Sow seed in the open ground early in spring. Height, 1½ to 2 feet.

New Giant Zinnia Picotee—This novelty is the most attractive thing in all the race of Zinnias. The flowers are of the Giant type, each petal distinctly tipped with a darker shade as in Picotee Carnations. They come in a variety of colors, including Orange, Flesh, Lemon, Pink and Cerise, each with the peculiar marking on tips of petals. This is an odd yet wonderfully beautiful Zinnia. We offer in mixture only, cannot supply separate colors.

Picotee Mixed. Pkt., 25c.

Double Pompon. Flowers small and of good shape; double and of beautiful form; fine for bouquets. Fine mixed colors. Pkt., 10c.

Curled and Crested. The flowers of this fine class of Zinnias are large, full and double, the petals being twisted, rendering them free from stiffness. A variety of splendid colors. Pkt., 10c.

Zebra. Flowers of all colors, many of which are striped and spotted with different shades, hardly any two alike. Mixed colors. Pkt., 10c.

These are not to be confused with the common or small flowered strains, as they are a distinct race and of truly giant flowered Zinnias.

Giant Flowered Double Zinnias

Giant Flowered Crimson. A rich shade. Pkt., 10c.

Giant Flowered Orange. Pure orange. Pkt., 10c.

Giant Flowered Pink. Clear light pink. Pkt., 10c.

Giant Flowered Purple. Clear deep purple. Pkt., 10c.

Giant Flowered Scarlet. A flaming red. Pkt., 10c.

Giant Flowered White. Pure snow white. Pkt., 10c.

Giant Flowered Mixed. A splendid mixture of all of the above and others. Pkt., 10c; ¼ oz., 25c.

Tall Double Large-Flowered. A class too well known to need any description. Double choice mixed. Pkt., 5c.

Dwarf Mixed. Double Dahlia-like flowers of all the best colors. Pkt., 10c.

Double Lilliput. Compact bushes bearing small, perfectly double pompon-shaped flowers of bright colors. Pkt., 10c.

Giant Verbena

The little girl in the picture is now past 16 years.

WILD FLOWER GARDEN

This is a combination of all the very best annuals. We recommend this for sowing in beds where you want a quick showing of bright colors that will last until frost comes. Also recommend it highly for mixture with Lawn Grass where making a new lawn. Do not sow in pod, as it will not be satisfactory to you. Sowed on new lawns, it gives a fine showing of all the best annuals mixed with green grass, where it pleases the eye and the little ones to see fine bright flowers. **Pkt., 5c; oz., 25c; ¼ lb., 60c.**

Japanese Flower Garden

For several years we have been trying to secure from Japan a satisfactory collection of their wonderful flower seeds for planting in lawns and borders. We have secured it this year and believe that everyone ordering flower seed should include at least a package of this. It can be planted with lawn grass or in beds by itself, and will prove one of the most satisfactory flower seed investments of the season. **Pkt., 10c; oz., 25c; ¼ lb., 70c.**

Sweet, Pot and Medicinal Herbs

No garden is complete without a few herbs for culinary or medicinal purposes. Harvest them carefully on a dry day, before they come into full bloom.

Anise—Cultivated principally for garnishing. **Pkt., 5c; oz., 25c.**

Balm—Principally used for making Balm Tea or Balm Wine. **Pkt., 5c; oz., 25c.**

Basil Sweet—The leaves and tops of the shoots are used for soups. **Pkt., 5c; oz., 20c.**

Borage—Excellent for bees. **Pkt., 50c; oz., 20c; ¼ lb., 60c.**

Caraway—Cultivated for the Seed, which is used in confectionery and medicine. **Pkt., 5c; oz., 15c.**

Marjoram, Sweet—For seasoning. **Pkt., 5c; oz., 15c.**

Pennyroyal—A well-known aromatic herb, also useful as a foliage plant. **Pkt., 15c.**

Rosemary—An aromatic herb. **Pkt., 15c; oz., 35c.**

Rue—Used for medicinal purposes, also given to fowls for the roup. **Pkt., 5c; oz., 20c.**

Saffron (*Carthamus tinctorius*)—**Pkt., 15c; oz., 30c; ¼ lb., 60c.**

Catnip—**Pkt., 15c; oz., 45c; ¼ lb., \$1.00; lb., \$3.50.**

Coriander (*Coriandrum sativum*)—Seeds are used by confectioners. **Pkt., 5c; oz., 15c.**

Dill—The leaves are used in soups, and put along with pickles. **Pkt., 5c; oz., 15c; ¼ lb., 35c.**

Fennel—The leaves boiled, used in many fish sauces. **Pkt., 5c; oz., 15c.**

Hyssop—The leafy tops and flowers dried for making Hyssop Tea. **Pkt., 15c; oz., 35c.**

Morehound—Principally used for medicinal purposes. **Pkt., 15c; oz., 35c.**

Lavender—A popular aromatic herb. **Pkt., 15c; oz., 35c.**

Sage—The leaves and tender tops are used in stuffing and sauces. **Pkt., 10c; oz., 45c.**

Savory, Summer—Used for seasoning. **Pkt., 5c; oz., 15c.**

Tansy (*Tanacetum vulgare*)—**Pkt., 15c; oz., 45c.**

Thyme, Broad-Leaved—For seasoning, etc. **Pkt., 5c; oz., 25c; ¼ lb., 85c.**

Wormwood—It is beneficial to poultry and should be planted in poultry grounds. **Pkt., 15c; oz., 40c.**

NORTHERN GROWN SEED POTATOES

We have placed in our immense potato storage warehouses this fall our usual supply of strictly fancy seed potatoes, northern grown, and the very best for seed purposes. The person who plants an acreage of potatoes each year has learned from experience that a change of potato seed from the north to the south pays him better than a change of any other seed. Consequently we grow our seed stock in the extreme north, and the big potato grower farther south sells off all his own grown crops of potatoes and securing new northern stock each season, and in this way often increasing his yield as high as 50 per cent. We are trimming down our list of varieties of that of a few years ago, as it is not profitable to have too many. I attended an auction sale the other day and I saw a lot of potatoes sold. The quality of these potatoes was of the very poorest, such as we would have left on the field or gathered up and screened out for stock food, and probably did not yield more than 25 to 50 bushels per acre. The soil on which they were produced should have given 200 bushels of strictly first-class potatoes to the acre. The party growing these had planted and replanted each season and I suppose had kept the small, or seed potatoes, as he would call it, until they were entirely run out. Prices on all field seeds are subject to change without notice.

We wish to call your attention specially to the above line, as the fluctuation in the price of all foodstuffs and seed is so great that it is impossible to even anticipate what the prices may be in the season of 1921. We shall, of course, hold to these prices through the season if possible. For the last two or three years it has been necessary to change some of the prices; sometimes higher and sometimes lower, and this coming season will probably see some changes necessary.

Bliss Triumph Potato

This is positively the earliest potato grown, except Gurney's White Harvest. It is the variety you find on the market first in the spring from the south. A nearly round red potato. On account of its earliness it brings the highest price of any potato offered, and as the seed for this variety for the entire south is grown each season in the north, the demand is always heavy for it for seed purposes and consequently higher priced than most other varieties. It yields enormously. We have had reports of 650 bushels per acre, and it is not uncommon to take out fifteen good marketable potatoes from one hill. It is freer from scab than most potatoes. The stock we are offering is of specially fine quality, strictly Red River grown, and this season, on account of the high price of potatoes, everyone should plant a quantity of these for first early. **Lb., 35c; 3 lbs., 75c, postpaid; 15 lbs., \$1.00; 60 lbs., \$2.50; 300 lbs., \$11.00; 600 lbs., \$21.00.**

Irish Cobbler

I am quoting from Bulletin No. 176 of the South Dakota State College of Agriculture, on page 700 in a table of a 3-year test, indicating that the Irish Cobbler is the highest yielding early potato at Brookings. On page 718 they again refer to it as the best yielding early variety grown in South Dakota. It is grown in every part of the State and is desirable for early and fall markets.

This is a variety of eastern origin that took Horace Greeley's advice to "Go West, young man, go west." It went west and is prosperous. It has found the climate that it desired and is even more profitable in this western country than in the east, the home of its birth. The Irish Cobbler is fast becoming one of the great northwestern market potatoes. It is second early, nearly round, pure white, a good keeper, and of very excellent quality, always cooking dry and mealy. On account of the short, stocky growth of the vine, this potato can be planted closer together than most varieties, ordinarily about one foot apart in the row. **Lb., 35c; 3 lbs., 75c, postpaid; 15 lbs., \$1.00; 60 lbs., \$2.50; 300 lbs., \$11.00; 600 lbs., \$21.00**

Green Mountain

This remarkably heavy yielding white potato has forced its way to the front in the northern sections, as one of the main crop varieties of late potatoes. It has produced some very remarkable yields, especially in North Dakota and Minnesota, and is adaptable to almost any part of the country. I believe the Green Mountain averages larger in size than any potato of its class. There are very few small unmarketable potatoes in a field of them. This potato is of excellent quality after the first of January and is especially good for baking purposes. It is a good keeper, and commands readily the highest market prices. **1 lb., 35c; 3 lbs., postpaid, 75c; 15 lbs., \$1.00; 60 lbs., \$2.50; 300 lbs., \$11.00; 600 lbs., \$20.00.**

Received your catalog yesterday. Thanks for same. I am going to send you my order in soon. I have been your customer now for several years. Two years ago I got a start of Bliss Triumph and Bugless Potatoes. I have fully 25 bushels of each kind for seed this coming season. I won second prize at our fair last year on my exhibit of Bliss potatoes and I didn't get them planted till the 25th of May. I have about 60 to 75 lbs. of those Edible Peas on hand. I got the seed from you two years ago. I have twelve rows through the garden. I sold \$12.00 worth in the pod, and threshed out over 60 lbs.

Corvallis, Mont., Feb. 5, 1920.

Edm. Kimberly.

Early Ohio—Early Ohio is the most popular early Potato in this country. We have more calls for it than any other variety. Every Potato grower knows what it is, and knows just about what it will do in his locality. It is the Standard Extra Early the country over, and other varieties are measured by it. We will venture to say that not one farmer in ten the country over who thinks he has Early Ohio has pure stock. Most of them do not know that they are mixed. But Early Ohio is an old variety and has become frightfully mixed throughout the United States. Farmers and market gardeners better sell off their own Ohio and get some pure. They are grown under conditions that make them cost more than common stock. They are selected with the utmost care and one who knows and appreciates a good Potato. 60 lbs., \$2.50; 300 lbs., \$11.00; 600 lbs., \$21.00.

Early Ohio

the result is grand, such as to delight every 1 lb., 35c; 3 lbs., 75c, postpaid; 15 lbs., \$1.00;

Six Weeks

Rural New Yorker No. 2—Well known now the country over, and very largely planted for profitable main crop. Rurals are now quoted in all the leading markets of the country along with Burbanks and other standard sorts, and usually they are quoted higher than Burbanks. They are certainly more profitable to raise. When Rural No. 2 first made its appearance as sent out in 1889 by the Rural New Yorker it introduced an entirely distinct class of Potatoes, unknown up to that time. The class is characterized by long, rather spindling vines, with dark colored stalks, dark green leaves and purple blossoms; tubers nearly round, flattened, with very smooth, pure white skin, uniform size, quite numerous in the hill, always very attractive in appearance. Our stock of Rural New Yorker this year is a splendid one, and our prices are certainly very reasonable. 3 lbs., 75c, postpaid; 15 lbs., \$1.00; 60 lbs., \$2.50; 300 lbs., \$10.50; 600 lbs., \$20.00.

Rural New Yorker

California Golden Russet

If you grow potatoes for the satisfaction of eating them, or grow them to sell, expecting to give satisfaction to the purchaser, you should grow California Golden Russet. In quality it is undoubtedly the best, medium size, oval in shape and very seldom any small potatoes. Eyes are level with the skin, cooks easily and is especially nice for baking purposes.

Our seed of this excellent variety was secured from the University of Minnesota and is absolutely pure. It yields equal to any of the standard varieties. It has never been troubled with scab or other potato diseases. Special prices on large lots. 3 lbs., 75c, postpaid; 15 lbs., \$1.00; 60 lbs., \$2.65; 300 lbs., \$11.00; 600 lbs., \$20.00.

Berthold, N. Dak.

We sent to your house for a few Triumph Potatoes. We found there were just ten potatoes. We cut them with one eye to each piece, planted them. I took it upon myself to see to the hoeing, allowing not so much as one weed. The two rows looked fine. The vines were healthy and vigorous. At harvest time the whole family went out to see results. To our great astonishment the yield was so abundant that we could not resist taking various views of our potatoes. Upon counting we learned that the ten potatoes had yielded 651 fine spuds, not counting those under size. Our banker thinks it an immense crop, and others to whom the story has been related think it wonderful, while we do not neglect to add that "Gurney's Seeds beat them all."

MRS. EZRA C. CLARK.

GURNEY'S BUGLESS POTATO

MORE IMMUNE FROM BUGS THAN ANY OTHER POTATO GROWN

WE have been criticised by some of the other fellows for what they term our extravagant claims for this valuable potato. The trouble with the other fellows—they have not yet tried the potato, and they do not believe a potato could be as good as we have claimed this potato to be. We claim:

1st. That it was more immune from bugs than any other potato grown. We are adding to that claim now that it is more immune from other potato diseases. We claim,

2nd. That it out-yields on the average farm any other variety of potato planted.

3rd. The potatoes are always of a marketable size, mighty few small ones in any field, occasionally one grows to immense size, even weighing four pounds.

4th. Without regard to the size of the Bugless they are solid clear through, even the largest potato shown in this picture when opened was sound as a dollar.

5th. The cooking quality is equal to any potato, and better than almost any other. The only potato that I will acknowledge is a better eating potato is the Irish Cobbler; in fact, it is about the only competitor in yield per acre. After midwinter the Bugless is equal to or better than the Cobbler in eating quality.

6th. It will keep better than any other potato under the same conditions. I have seen them stored in an ordinary cellar with the standard varieties like Early Ohio, Rural New Yorkers, and others, and the Bugless would be sound and hard when the other earlier varieties had been sprouted once or twice, and the later varieties had commenced to get soft and withy.

ARE THEY BUGLESS? This is a question that we answer during the busy season hundreds of times per day. We answer always that they are practically immune from bugs, more so than any other variety grown. If they continue to act as they have in the past we will soon be able to say that they are absolutely immune from any damage by bugs. We are going to agree, however, that a great many people have been scared into putting poison on these vines by the appearance of the bugs. You will find bugs on the Bugless vines occasionally, sometimes as many as on other vines. My advice to you when you find the bugs there is just to watch and wait. You will find the old bugs, eggs and the young bugs, but they do not eat the vines enough to damage them; they are merely roomers, not boarders. Other varieties planted in the trial grounds and for experimental purposes by colleges, and private persons, have been eaten to a bare stalk, while the Bugless with their wonderfully luxuriant foliage and vines have escaped and produced big crops of beautiful potatoes.

I am going to give you this year, as I did last, a page or so of letters we have received from people who have grown the Bugless. This will give you the verdict of thousands of customers. The Bugless potato has been, and will be, planted on thousands of farms exclusively. The demand for this seed and this potato increased more than 1000% last year over the year previous. Other people, as they find its value, will offer it to you under another name, making practically the same claims that we do for it, but it will still remain Gurney's Bugless Potato, introduced by us and backed by us through all its early attempts to gain the public favor.

Gurney's Bugless—I am quoting from Bulletin No. 176 of the South Dakota State College of Agriculture at Brookings. On page 700, "in a 3-year test for yield, the Bugless is the best yielding variety." Again on page 712 they say the "Bugless, South Dakota No. 876, is a late maturing variety belonging to the Rural group. It was introduced in South Dakota by the Gurney Seed & Nursery Co., of Yankton. The vines are heavy with medium sized, heavy dark green leaves, which feel leathery. The eyes are comparatively few and shallow. The tubers are large, white and firm. Its cooking and keeping qualities are good. It has proven an excellent yielder when the seasons were favorable to late maturing varieties."

The Bulletin No. 176 should be in the hands of every potato grower and I would advise that you write to the College at Brookings for a copy of it. This bulletin is the best authority in my opinion on the selection of varieties for planting, care, harvesting, and marketing of potatoes, treatment of diseases, of any book or bulletin issued previously.

From "The Lebanon Express,"
Lebanon, Ore., Feb. 4th, 1920.

Lebanon Farmer wins in nation-wide contest. Receives nearly three dollars a pound for a prize potato.

F. M. Sherman, a well-known and progressive farmer living near Lebanon has received from the Gurney Seed and Nursery Co., of Yankton, South Dakota, a check for \$10, a prize for producing the largest potato of the Bugless variety grown from their seed in the United States. The potato sent them weighed 3 pounds and 10½ ounces.

The company has been trying to produce a potato that the bugs will let alone, and think that they have succeeded in the Bugless variety.

This is the second time that Mr. Sherman has won this prize from the same company. His farm is of the famed Santiam bottom soil, and he has received many prizes on his products at the county and state fairs and also at the world's fair at San Francisco.

Lebanon, Ore., Feb. 9, 1920.

As we have a piece of peat land which we are cleaning and expect to plant to potatoes, and as this land with ordinary seed and care has yielded us better than 500 bu. to the acre, the thought struck me today that you might be interested in having a record yield stunt pulled off with your Bugless Potato. Our three trials, two locally, 1915 and 1919, and in California in 1917, has proven that the Bugless will produce some wonderful yields, we believe considerably more than any of the many varieties we have ever tried—better than 100 altogether. In your recent letter with check enclosed you asked for seed stock. This has caused us to conceive the idea that perhaps we can grow you some seed. Would it not be worth considerable to you, in view of the fact that we have twice on very ordinary sand grown you the two largest spuds in two different seasons, and the last the driest, most unproductive potato season we have ever experienced, to have us plant, say one or two acres, giving them extra care and fertilizer, aiming to get a world's record yield, which we have been informed is at present held by someone in England with 2,000 bushels? We are confident we can duplicate or exceed this phenomenal production with your Bugless. It has been my ambition for years to show England that the old U. S. A. can beat her at anything—more particularly the production of potatoes, and with your Bugless we feel we have the variety, so now it merely remains for you to co-operate with us and we can really make the world "sit up and take notice."

F. M. SHERMAN.

Silver Lake, Minn., Feb. 1, 1920.

I got your letter asking me to tell you how much I raised of the Bugless Potatoes. I had two sacks of seed potatoes planted, 20 rows, about 115 ft. long. Out of that I figure that I got at least 125 bus. That is only a guess. I like them well. The bugs don't hurt them so much as the others, because they grow too fast.

JOS. H. BURTON.

GURNEY'S BUGLESS POTATO

The above pictures are both P. S. Gurney, not twins. In the picture showing the whole potato, he is just wondering if this four-pound, two and one-half ounce Bugless potato, grown by A. B. Reamsbottom in Kamloops, British Columbia, can be solid clear through. It did not seem possible to him or any of the rest of us for that matter, that a potato of that size could be solid. But like the woman who received a letter and could not decide from the postmark who it was from, at last opened it and the second picture with the smile shows the potato cut lengthwise sound as a dollar clear through. Phil wanted to get in on the picture stunt and the big potato because he always wants to get in on all of the good things, and he says the Bugless potato is the best of all.

Gurney's Bugless Potato has for one more year absolutely proven that it is more immune from bugs than any other potato grown, that it is seldom damaged by bugs, and that happens only in bad seasons or on extremely poor ground, or in very small patches. We had grown for us this past season fields of Bugless potatoes that produced considerably over three hundred bushels per acre. A single measured field of five acres brought to our cellars more than fifteen hundred bushels of marketable tubers that we sold on the market for just as much or more money than any other potato grown, kept better and are of equally as good quality. Why should we continue to grow other varieties of late potatoes subject to damage by bugs, lower yields and of inferior quality.

We rather judge from our last spring's business that the people were about of our opinion, as we were unable to supply all of those wanting the Bugless, and returned to them more than \$40,000 after our supply was entirely exhausted. We grew on a piece of our land adjoining the city of Yankton a ten-acre field of Bugless. Adjoining this field on the west end was a fraction of an acre of Early Ohios, planted by the adjoining landowner. There was six feet between the last row of Bugless and the first row of Early Ohios. During the growing season the owner of the Early Ohios and his entire family picked bugs. I personally examined our own field day after day, and I did not find during the entire season one single leaf damaged in the Bugless field by bugs, and the yield at the end of the season was satisfactory.

Get into the Bugless game. Plant potatoes that will fill your cellars and your pocketbook. Plant potatoes that produce very few small ones. Plant potatoes that market better than others and taste better.

TEN DOLLARS CASH PREMIUM

Every year we pay to someone \$10.00 in cash for the largest Bugless potato grown from our seed. In 1920 this was won by A. B. Reamsbottom of Kamloops, British Columbia, the potato weighing four pounds, two and one-half ounces, and was of excellent quality when baked. Mr. Reamsbottom has won this premium before, but it has gone to a great many different states in the Union, as well as into Canada, and you stand an equal show if you try.

Remember, send your potatoes to reach us by December 1st, and the check for \$10.00 will go to the winner on December 10th, 1921.

PRICE:—1 lb., 40c; 5 lbs., postpaid, \$1.50; 15 lbs., by express, \$1.50; 30 lbs., \$2.00; 60 lbs., \$3.25; 300 lbs., \$15.00; 600 lbs., \$28.00.

This Is Not the Advance Wagon of a Circus Parade

But is Mr. Wensberg, our purchasing agent, who gets through no matter what the weather may be. In this particular case Mr. Wensberg was desirous of loading a number of carloads of our contract grown **Bugless** potatoes. There had been a heavy snowfall, followed by thawing until the roads were impassable for autos, and in this particular town everyone had an auto but no one a team or buggy. Mr. Wensberg searched in the rear of a blacksmith shop and found the old buggy without dashboard or much of anything else. He gathered up one horse from one man and another horse from another, and finally discovered a harness with rope lines and with this equipment he got out into the country and kept the potatoes coming. It is a pleasure to have Mr. Wensberg go after things. He never delays the game.

Winona, Minn., Feb. 20, 1920.

I was going to write you about my success with your seed last fall. I received a pound of seed of the Bugless Potato. I planted two potatoes. I cut them up in small pieces and planted an eye to each hill. I received 60 lbs. from $\frac{3}{4}$ of a pound. I got three times as many in proportion to the seed as my father did. I also got very many watermelons. I think your seed always takes first class.

DONALD GERNES.

Ray, N. D., Jan. 20, 1920.

The Bugless Potatoes I planted a few years ago did fine and I got a good yield. I did not have a bug to bother them.

LENA THORSON JOHNSON.

Sebekka, Minn., Jan. 30, 1920.

The first two years I grew the Bugless I had a dandy good crop of potatoes. They were almost all of them uniform in size. The bugs hardly bothered at all. We sprinkled them just once and then they didn't need it. We think they are the best potato there is for the table as they are so nice and mellow after they are cooked, either boiled or baked.

EVERETT RAY DENSMORE.

St. Cloud, Minn., Oct. 2, 1920.

Not having heard from you since last spring I thought I would write to let you know how I succeeded in the raising of the potatoes you sent me last spring. They surely were good potatoes. From the 5 lbs. of Bugless Potatoes I got 5 bu. That was surely good.

FRANK HENTGES.

Winona, Minn., Feb. 15, 1920.

I was going to write you last fall about my Bugless Potatoes which I bought from you. I bought one pound of seed and received three Bugless. One was half eaten up, but I planted the part that was good, one eye to a hill. I harvested 60 lbs. of potatoes from $\frac{3}{4}$ lb. seed. My mother took one eye, a big one, and planted it, and she got 10 $\frac{1}{2}$ lbs. We ate some to try them for eating quality. They were excellent. My father had some Burbanks. I got about three times as many potatoes in proportion to the seed. I am always going to raise Bugless, because I think they take first class.

DONALD GERNES.

Newport, Minn., Mar. 16, 1920.

I am sending an order for garden seeds and want to write a few words in regard to your Bugless Potatoes. Have received letters from farmers in many different states inquiring as to yield, etc., and I have always spoken highly about them as they yielded better than any potatoes raised here.

PAUL ODLAND.

Lonsdale, Minn., Mar. 27, 1920.

I will just write you a line and send with my order to tell you about my Bugless Potatoes. I sent for one pound of your Bugless Potatoes last year. When I got them I got two potatoes, but it didn't seem to be so very much for forty cents. I planted them in the garden but they didn't seem to grow very much because it was too dry. There were bugs on them but it didn't seem to effect them any. In the fall when I dug them I had fifty-five pounds. There was some size to them. Nice and solid and white.

I will also tell you about my Rainbow Flint Corn. I got some Rainbow Flint Corn a few years ago from you, and there is no flint corn that can come up to it. Also your vegetable seeds. They are surely seeds that grow and satisfy.

PETER PAULSEN.

Kalispell, Mont., Apr. 3, 1920.

Last season I got one pound of Bugless Potatoes for seed. I raised 50 lbs. from the one pound, some being $1\frac{1}{2}$ lbs. weight. We are planting some of these potatoes this season as the bugs do not touch them to harm them. We had to eat some to sample them, and they are certainly fine.

MRS. W. J. MASTERS.

Frederick, S. D., Aug. 30, 1920.

Last season you sent me one bushel Bugless Potatoes which yielded 54 bushels of good potatoes. One bushel Bliss Triumphs yielded 36 bushels of good potatoes. One bushel Early Harvest, 23 bushels. And your garden seeds were the best we ever planted.

J. A. BRANDEN.

Ogilvie, Minn., Jan. 19, 1920.

I have looked over the farmer paper and see your ad and a couple of testimonials about raising so many potatoes out of $\frac{1}{2}$ bushel. I bought a peck of your Bugless Potatoes last spring and I can beat either of those testimonials. When I got the peck of potatoes I cut them up and only left one eye to the seed and planted them in good fertile soil, and when I dug them I got 24 bu. of potatoes. How is that for a crop? I am going to plant the whole 24 bu. to see how they will yield next summer. Of course the bugs have troubled some, but could be checked. Other potatoes were worse off for bugs. Please send me your catalog, and oblige.

F. J. RUZICKA.

Valley Ford, Wash., Feb. 2, 1920.

The 15 lbs. of Bugless Potatoes I bought of you last spring did very well. Raised 553 lbs. of fine potatoes, four weighed 9 lbs. I think I will send for some of the White Harvest Potatoes a little later. I am interested in Duroc Hogs. I have 14 fine ones, and I would like to have a trio of your breed.

NEIL DETWEILER.

Forestburg, S. D., Nov. 20, 1920.

I have some excellent Gurney's Bugless Potatoes which possess everything claimed for them both as to yield and quality, and are strictly bug-proof in the true sense of the word. Quite a few were raised in this community last summer.

H. J. BESTEEL.

Janesville, Minn., March 6, 1920.

I received your seeds and am sorry you haven't any more Bugless Potatoes left, but am sending you an order for other potatoes. Also received your pumpkin seed. Surely must get ten dollars out of your pocket by fall, Mr. Gurney, as your seeds are all right.

CARL TETZLOFF.

Reliance, S. D., Oct. 1, 1920.

I have raised the best potatoes around here with the seed I bought of you. They are perfectly smooth and from six to ten large potatoes to a hill.

The special seeds you sent me on the Mammoth Squash are good, the biggest measures 3 ft. 8 in. oblong.

The corn is also good. I have had a few ask for seed from my Rainbow Flint.

GEO. DESHENQUETTE.

Gurney's White Harvest Potato

In a class by itself. A nearly round white potato, fully as early as Red Bliss, and Red Bliss is considered the earliest potato grown. We have planted them side by side and you can dig one equally as early as the other. This potato is an immense yielder, often producing fifteen perfect good potatoes in a hill. The big advantage we claim for it over Red Bliss is its white skin. A clear white potato always sells better than a red one. There are occasional pink markings on the eyes. This past season Gurney's White Harvest in a great many instances made for the grower over six hundred dollars per acre. They come into the market when all other varieties of old potatoes are gone and the new potatoes are selling at unheard of prices, consequently you get in at the highest point of the season. Plant these and have absolutely the earliest new

potato in the neighborhood. A great many people depend on a little half-acre garden to increase their income. There is nothing like a half-acre of potatoes to be dug at the right time. When potatoes are being shipped in from the South and sold at six to eight cents per pound this is the time to get in with the home grown ones. One of our employes in the warehouse sold this past season from a single town lot here in Yankton more than one hundred dollars' worth of the earliest potatoes. 1 lb., 40c; 3 lbs., 85c, postpaid; 15 lbs., \$1.35; 60 lbs., \$3.25; 300 lbs., \$15.00.

Sweet Potatoes

I am showing a photograph of a hill of Sweet Potatoes grown on the Missouri River Bottom near Yankton. This is the Early Jersey variety and the most satisfactory for northern planting. We can furnish you for shipment about April 1st, the seed Sweet Potatoes. If you care to grow your own plants, it is necessary to plant the potatoes, grow the sprouts and transplant just as you would tomatoes. The potatoes should be planted by the 10th of April, the sprouts transplanted from the 15th of May to as late as July 1st. The potatoes must be planted immediately on their arrival as they decay rapidly at that time of the year. If you do not care to grow your own plants we can furnish the plants; and refer you to the greenhouse section for prices. Potatoes, per lb., 40c; 5 lbs., \$1.70; 10 lbs., \$2.90.

South Dakota Sweet Potatoes

We are showing a picture of Ben Schlaefli, of Yankton. Ben has a large farm just a little east of Yankton and planted a few Sweet Potatoes last spring to see what they would do. The results were better than he anticipated, and he just couldn't help bringing one of the hills and a single potato to us. We induced him to have his picture taken with the potatoes. The one by the ruler is extra large, weighing three pounds. The quality of these potatoes is certainly fine. I know—I tasted them.

Roundup, Mont., Feb. 16, 1920.

My son, Samuel, received check for potatoes O. K. Will not have any seed potatoes to sell this spring. Sold all the White Harvest we had to spare last fall or summer. Got about 100 sacks on the early market and got from five to six and one-half dollars per hundred for them. Will plant about one ton of the White Harvest seed this spring. Find enclosed order for seed, also check.

C. W. MOSS.

Modern Methods of Seed Cleaning

AN up-to-the-minute modern seedsman takes more pride in turning out to his customers seeds that are absolutely best than any other person in any other business. You see, there is so much depending on the good seed that they should be free from weeds, etc., and the seedsman sees so many seeds sold to people, generally coming direct from the threshing, full of foul seed, dirt, etc., for which all of the people are paying good money and getting very little of anything but grief in return. He gets to be such a crank on the subject that when a traveling man comes along with a model of some other machine that might be better than anything he has now, or will do some work that some of the machines will not do, it is a very easy matter for this traveling man to secure an order for these new machines at a price that would make the price of a Ford car look like Fourth of July or Christmas spending money. I suppose nearly every reader of this catalog has bought some seed of some kind of their neighbors. Ninety-nine times out of a hundred he did not even have an old-fashioned fanning mill with which to clean it, but sold it to you at practically the same price that you could secure strictly first-class seed from the seedsman. If your seed had been re-cleaned, you would have found the price at least 50 per cent higher or that you were buying 50 per cent poor seed, weeds, dirt, etc. I am just going to take you through a modern seed house, our own, in this little talk. We are going to let you come up on our own track in, we will say, a carload of western South Dakota grown alfalfa seed. It is "spotted" at one of the large unloading doors and cleaning commences.

The first operation is to start the electric motor; we make our own electric power and each machine has an independent motor, belted direct to this machine, so that we have done away in our warehouse with nearly all of the belts and all of the shafting that generally run through buildings. The current is carried to all of the machines on small rubber covered copper wires and consequently there is little danger to the workman in operating any of our machinery. The motor which we will start first is the one operating one of the **No. 109A Clipper Cleaners**. The hourly capacity of this Clipper 109A Mill is from 65 to 100 bushels alfalfa seed per hour. The seed passes over four different screens, and the air blast, and is divided by this machine into five different grades. The Clipper machines are located in the basement of our cleaning houses. All of these different grades of seed are elevated to various floors in the warehouse, weighed carefully and sampled. This first operation over, the Clipper Mill has disposed of all the dust and the dirt, the straw and chaff, all small and light weed seed, broken alfalfa seed, and any other weed seed that are larger than the largest of the alfalfa seed. The five divisions that we have made are now taken to various machines, determined by the expert who is operating them, and cleaned again. We will suppose that one of these divisions contained quite a large quantity of Russian thistle seed and a quantity of immature alfalfa seed. It would then be taken to what we call the **Rice Machine**. This machine was invented by a man by the name of Rice in Illinois. The purpose of the machine was to take buckhorn out of clover seed. We call it a fanning mill without fans, wind or screens. It is nothing more nor less than twenty combined machines, all operating on endless canvas around metal rollers. The method of separation is for the thistle seed to stick to the canvas and be carried over and brushed off. The good alfalfa seed is smooth, shiny and works its way down beside the roller until it discharges at the lower end, generally perfectly cleaned, absolutely free from any weed seed with a rough surface.

F. A. Seeley:—I thought maybe you would be getting tired of reading about the Gurneys, and will switch over and talk about Frank a while. Frank has been connected with the company for a great many years as a stockholder and active in the management. He is still on the sunny side of forty, with a family of **only nine** children. Quite a few of those are, and have been working with us for a number of years. Frank's business really is in charge of the field seed department, though he signs himself "Sales Manager." When you get acquainted you will find him a pretty decent sort of fellow, and a credit to the organization. I don't want you to lay up anything against him on account of not receiving all the potatoes you ordered last spring. It worried him a heap more than it did you, for when we ran out he could not buy more. There wasn't any left.

Bridging the Missouri River at Yankton

Yankton City is located on the north bank of the Missouri River with its railroad connections running west, north and east. When the bridge shown in the above picture is completed we will have direct south, southeast and southwest connections, which will materially benefit not only the State of South Dakota, but Nebraska and other states as well. This is a double-decked bridge for both railway and other traffic. It is costing one and one-half million dollars, and active work was commenced in October, 1920. The Gurney Seed Company has been one of the active supporters for the movement, and D. B. Gurney, president of the seed company, is also president of the bridge company.

This machine will take out of any smooth surfaced seed all rough surfaced seed, and while it is very slow in operation, it is a machine we could not get along without. It will separate only a very few bags per hour. It is located on the second floor of the warehouse, has a large supply tank above, and has a large supply tank below. We simply start the motor and let it run, as it is often working twenty-four hours per day, so that in the aggregate a great many bags of seed can be run over it during the season. After this separation is made samples are again taken and examined and if found to be perfectly free from weed or injurious seed of any kind, trash or otherwise, it is then run over the **Specific Gravity** or human machine. The foreman of this department says it will hand pick and sort by color, refuses to work if improperly fed, refuses to do a bad job under any consideration, will work for man or boy and works overtime without a kick; in fact, it is a model hired man. It works on all kinds of seed, will clean Bromus or Parsnip, the lightest seed, and handles Beans, Peas and Corn equally as well. Is it not better to plant seeds of quality? Seed properly graded by size, weight and shape. The growth is more even, produce better yields and this means more dollars per acre to you, and dollars per acre are the goal for which we are striving when we sow and reap.

Specific Gravity machine. This is rather a complicated fellow—lots of spouts, each one of them turning out a different grade of seed, and it is more than human in the separation of the different grades and seeds. After the seed has passed over this machine samples are taken and tested for both purity and germination, and an additional sample is taken at this time to be planted in the trial grounds at the next planting time to determine whether or not this seed was true to type. This last applies more to garden than to grass or alfalfa seeds. We have in our trial grounds each season more than four thousand twelve-foot rows, each row representing a lot of seed that has gone through our warehouse. Some seed may come into the warehouse with a greater amount of moisture than it should have and this is determined by a

Gravity Machine

Hess Moisture Tester. This machine will show in just a few minutes the exact percentage of moisture contained in any seed or grain. If it shows a larger percentage of moisture than is desirable it is then run over the big

Hess Dryer. This machine has a capacity of a good many hundred bushels every ten hours. It is operated with a five horse-power electric motor, turning a three-foot fan six hundred and fifty revolutions per minute. This fan draws the air over a steam coil, temperature one hundred and ten to one hundred twenty degrees. This forces this warm air through the grain or seed at a very violent speed, driving the moisture from the grain quite rapidly. After the usual required time in the dryer samples are again taken and tested and found to contain the proper amount of moisture that should be in this particular grain or seed. After passing over the dryer the samples are then taken and tested in the

Sho-Gro seed tester, where the exact germination is made and recorded. If the seed placed in the Sho-Gro germinator should be of alfalfa, clover, sweet clover, or any of the hard-shelled seeds, failed to germinate up to standard, that lot of seed is then taken and put over the

Scarifying Machine. This machine was invented and patented at the Ames (Iowa) Agricultural College. Its purpose is to scratch or scarify the outside hard hull or the water-proof hull so that the moisture can get into the meat of the seed and cause germination. You understand that sweet clover especially requires this scarifying if you want it to germinate, the same year you plant it. Sweet Clover seed of the very best grade will often germinate as low as fifteen or twenty per cent if taken right from the thresher and planted. By running it over the scarifier this same seed will often germinate 95 to 98 per cent on three days' test, after the scarifying. The method of scarifying is to throw this seed with extreme force against a rough surface. This is done by operating a fan about three thousand revolutions per minute; this throws the seed violently against another part of the machine equipped with a very coarse sandpaper, and while the machine is very simple it is very effective in its work. Do you wonder that when you receive seed from a strictly up-to-date house like ours that it is as near perfect as man and machine can make it?

Hess Dryer

Malung, Minn., Feb. 4, 1920.

Please send me your seed catalog. I will try some of your Bugless Potatoes and likely a few other things. Your ad makes me smile as I grew 150 lbs. of the Cossack Alfalfa seed, and I intend to plant all of this seed, as it really is a wonder plant. I shall advise my neighbors that want Cossack Alfalfa to send to you.

N. A. CARLSON.

GURNEY'S HIGH-GRADE SEED CORN FOR SPRING OF 1921

Did you ever stop to consider the wonders of the most wonderful plant—a stalk of growing corn? You plant in the spring a single grain of corn, and with proper care in just a few days it appears above the surface of the ground and grows steadily for a few short months, and produces more than a thousandfold of the richest grain in the world. The plant itself appears tropical but it grows from the Equator to Central Canada, and its northern limit is undoubtedly not yet reached. It is the king of all the grains. It is the mortgage lifter of the universe, and has made more people independently wealthy than any other known crop. It will undoubtedly stand at the head of the list for profits for centuries to come, and it will become more profitable as we more fully understand its value and possibilities.

Corn requires more care than some other field crops and costs more than most to harvest it, provided you harvest it in the old way. The big manufacturers of farm machinery have endeavored to perfect a corn husker that would do away with hand work, and they have been partially successful. Nature, however, provided a much better way and has been waiting for centuries for us to take advantage of it. We are slow to adopt new methods, especially if they are easier than the old ways. Nature, composed in this case of a field of corn and a bunch of hogs, will take care of your field without charging one cent for husking, will not lay off on rainy days, nor kick on the measure or weight. You do not have to board the huskers in the house, nor furnish a team. They shovel their own corn willingly, and pay you every day with the increased weight that they put on. Possibly your corn acreage is too great to husk it all with the hogs. I am not going to recommend that you decrease your corn acreage, but increase the number of hogs. If you do not care to grow hogs enough to harvest it all, you should plant intelligently the right acreage of the right varieties for the best results for the hogs that you do grow, and for the acreage that you are going to husk and market.

I cannot tell you in this catalog just what you should plant, because I do not know your particular locality or the kind of soil you have on the farm; but I shall be more than pleased to give you, I believe, valuable information if you will ask for it. I might, just in a general way, say that white corn produces better on poor or sandy soil than yellow corn does. I can also tell you what we are going to plant for our hogs to hog off. We have one field of a square 160 acres joining our last hog ranch. This 160 acres is all going to be hogged off, and naturally we shall want to start our laborers, the hog family, to work for us at the earliest possible moment. Consequently a portion of this field, that nearest to the present ranch, will be planted early with the very earliest variety of corn, suitable for hogging off. We shall put in 40 acres of either Northwestern Dent or Gurney's August 15th. This will be followed by 80 acres of Gurney's Rainbow Flint. This by 40 acres of Minnesota 13. These we consider absolutely the best varieties for this purpose in this section of the country. Northwestern Dent or Gurney's August 15th, because these mature first. We will plant this a little thinner than as tho we were going to husk it, at the rate of about five acres to the bushel of seed, and we shall turn the hogs into it just as soon as it commences to glaze. There will absolutely be no waste. We shall plant the Rainbow Flint next. It is one of the early varieties of flint, and out-yields all other varieties, to as much as 60% to 70%. It produces lots of fodder, and the thousands of hogs we shall turn into these fields will harvest this corn rapidly. The Minnesota 13 matures very soon after Rainbow Flint. It yields well and is a mighty dependable corn. If you are not too far north or south of Yankton, plant these same varieties. If your distance is too great, write us, and we will give you information that will be of value.

We are going to plant in the last three forties with the last cultivation at the rate of 5 lbs. of Dwarf Essex Rape to the acre. This will give us lots of summer and fall pasture, and will allow us to secure the maximum income from that 160 acres.

For field crops of corn, those to be husked and marketed or fed to horses and other animals, we would plant according to the location, other varieties listed in the catalog. I do not mean by this that I would eliminate the above four, but I would add other varieties to them, and I shall take this up more fully in the various descriptions.

Our corn this past season has matured perfectly, is all stored at the present writing, and the germinating test is higher than we have ever known it before. We guarantee, as you know, that the test will be satisfactory to you as per the guarantee printed below. A large portion of our seed corn was harvested, husked and sorted before freezing weather. The price this season, while higher than several years ago, is very low.

The space devoted to the curing and storing of seed corn is increased again this season, and we are able to take care of all your wants. We shall be more than pleased to have your order for this corn, hold it in our frost-proof warehouses, and ship it to you whenever you request us to do so.

Our location for the growing of seed corn is undoubtedly equal to any other in the United States. We are in the extreme northern edge of the safety belt for the production of good seed every year. We have introduced and in many cases originated the best varieties of early corn. We claim that we have crowded the profitable production of corn hundreds of miles north by the introduction and origination of varieties suitable for that territory. This has added millions of dollars to the value of land and the wealth of the owners. In the descriptions of the corn listed we are telling you as near as possible the variety of corn you should plant to produce the best and most profitable crop. We are telling you where our seed of these varieties is produced.

In buying seed corn, figure on one bushel for each five to seven acres you wish to plant.

I am going to tell you as I describe some other forage plants, something about the hogs we are growing. I know you will be interested in them.

Fessenden, N. D., Sept. 15, 1920.

I am enclosing my check for \$63.00 in payment of 1,000 choice early tulip bulbs. Please ship these to us at your earliest convenience. Not only that, please see that they are marked and in separate packages as they are listed. We are in the banking business as you will note from the enclosed card, and I do considerable business with your brother's bond company at Omaha. I have purchased from you some Compass Plums and Cherry trees, which have proven more than satisfactory—in fact the trees were so loaded this fall that we had to prop up each limb. I have left no stone unturned that would give your good company credit for furnishing such satisfactory fruit trees, and have given to those who seemed to be interested in the purchase of shrubbery, your address. I will need a few more trees for next spring, and will get my order in in ample time. Awaiting your usual prompt filling of this order, I remain,

T. L. BEISEKER.

WHO INTRODUCED AND ORIGINATED THE BEST VARIETIES OF EARLY CORN?

We are practically the introducers of most of the early varieties that will absolutely mature within the ninety-day limit in North and South Dakota. For instance, most Minnesota No. 13 offered by other parties can be traced back to the original stock from Gurney's. We do not claim to have originated Minnesota No. 13, as it was originated by the Agricultural College of Minnesota, but we do claim to have had more to do with introducing it to the planter and extending the Corn Belt many hundreds of miles north than others. We originated and introduced Gurney's Model Dent, that has given the very best results over the southern half of South Dakota, southern Minnesota and northern Iowa; it is a mighty good corn to tie to in these sections. Our August 15th is of our own origination and introduction and is safe to plant anywhere that corn of any variety can be grown. By purchasing the early varieties you can always get in on the old corn market with new corn. The latter part of October or early part of November the price for shelled corn in the terminal market is always high. By planting early varieties and husking your corn early you can get this high price, which is generally 10 to 20 cents better than new corn moves at. We claim, and justly, that the early varieties of corn, such as Minnesota No. 13, August 15th, Gurney's Rainbow Flint and Gurney's Model Dent have increased the land values of northern South Dakota, Iowa, Minnesota and North Dakota millions of dollars. Previous to the introduction of these varieties it was not considered profitable to grow corn, and land that will not produce corn, but small grain only, is soon worn out and of but little value. Any land in the corn belt that will produce from 40 to 50 bushels of corn per acre per season is worth \$150 per acre of any man's money.

In this section of South Dakota the bulk of our farmers have decided from practical experience that Minnesota 13 will outyield any varieties of Corn that can be planted, and if planted by May 25th they can be assured of an excellent crop of ripe Corn by September 1. This variety is outyielding by actual weight the late varieties. The person who grows corn for market can realize what this means. If you can husk and market your corn in the first half of October, you can always receive old corn prices for it, which generally means from 10 to 20 cents per bushel more than corn is worth in November and December.

In the following descriptions we are telling you just what the corn does here with us, and we also tell you the kinds that you should plant if you want ripe corn. For instance, if you live in North Dakota and you want to grow Corn, not fodder, we tell you to plant Gurney's August 15th, North Western Dent and Gurney's Rainbow Flint. Now, do not buy Silver Mine to plant there, because if you do you will be disappointed.

In buying seed corn, figure on one bushel for each 6 to 8 acres you wish to plant.

Prices of Seed Corn subject to change without notice.

MINNESOTA 13

**THE CORN THAT ADDED MILLIONS OF DOLLARS TO FARM VALUES AND
CROWDED THE CORN BELT 300 MILES FARTHER NORTH**

Our supply of seed, crop 1920, grown from Yankton to the northern line of South Dakota. I have talked to you about Minnesota 13 ever since we received our first lot of five bushels of seed from the Minnesota Agricultural College, and I think every one of you know the value of this corn. We have sold for seed purposes in the last eight years hundreds of thousands of bushels of Minnesota 13 Corn, and it is the satisfactory kind. It always produces a good yield, with the highest protein contents of any corn. This makes it especially valuable for feeding and for hogging off. This corn should be planted for main crop from Aberdeen, South Dakota, to just as far south as the corn belt extends. When you pass Yankton, South Dakota, we would not advise that you plant it for your entire main crop but plant a portion of your acreage to get your early feed, and to allow your huskers to start early before other varieties are ready to crib. To the people of Kansas, Oklahoma, southern Nebraska and other places where on account of the drought of 1918 you failed to grow corn, I would advise planting a quantity of this early, and by the first of August you can be feeding it. Price, 1 lb., 25c; 14 lbs., \$1.50; 28 lbs., \$2.20; 56 lbs., \$3.75; 560 lbs., \$35.00.

Pierre, S. Dak., February 16, 1920.

I have received and carefully examined your 1920 catalog, and it is a beautiful thing. Mark Twain once wrote the Secretary of the Treasury that his annual report would be much more interesting if he introduced a few conundrums into it. You have the idea. The personal note that runs through your catalog makes a strong appeal. Continued success to your big enterprise.

Doane Robinson.

Wimple's Yellow Dent—Probably a larger acreage of Wimple's Yellow Dent is planted in southeastern South Dakota than any other variety of corn. This corn originated in Union County about twelve years ago and has spread in all directions from there, giving good satisfaction anywhere south of central South Dakota, the southern tier of counties in Minnesota and all points south of there. It is a very deep, broadkerneled, rough corn, producing good sized ears and yielding heavily to the acre. It grows well up on the stalks, and stalks 7 to 9 feet high, depending on the location, soil, etc. Grown in South Dakota. 1 lb., 30c; 14 lbs., \$1.50; 28 lbs., \$2.50; 56 lbs., \$3.50; 560 lbs., \$32.00.

REID'S YELLOW DENT

For the last eight years we have grown and selected a **Reid's Yellow Dent** that would be satisfactory to the planter in the southern tier of counties in South Dakota, northern Nebraska and northern Iowa, as well as those farther south. **Reid's Yellow Dent** is the ideal Corn where it can be safely grown. It is too late for any place north of the north line of Iowa and our strain of Reid's is the earliest grown, so do not buy this variety and expect a crop to mature north of the north line of Iowa. **Dakota Grown Reid's**, 1 lb., 30c; 14 lbs., \$1.50; 28 lbs., \$2.25; 56 lbs., \$3.50; 560 lbs., \$32.00.

Dakota White Dent—About ten days later than Minnesota No. 13. Yields with us about 65 bushels per acre. Will be safe to plant in any ordinary season as far north as Madison, S. D. Ears from 8 to 10 inches; very deep kernel; stalks from 7 to 9 feet high, makes lots of fodder. If you live north of the south line of South Dakota and south of Madison, S. D., you will be pleased with it. Grown in South Dakota. **Price, per 56 lbs., \$3.25.**

Dakota Yellow Dent—The description of Dakota White Dent fits this \$6.50 corn exactly, except this is yellow. Don't fail to order some of this if you are located in its territory. It is the yellow Corn for that section. Grown in South Dakota. **Price, per 56 lbs., \$3.25.**

NORTHWESTERN DENT

Our supply of Northwestern Dent Corn is grown from Yankton to as far north as corn matured sufficiently for seed this past season. We place this and August 15th at the head of the list of the earliest varieties of dent corn, suitable in most sections for the early hogging off. The very best in northern sections for the main crop variety. In the southern sections, southern Nebraska, Kansas, etc., where on account of drought you failed to get a good crop last year, you should plant at least an acreage enough to supply your wants until the later varieties mature. This and August 15th are absolutely the earliest varieties of dent corn that will produce a paying crop, and you should take this into consideration in placing your orders for corn. The color of this corn is red. August 15th is a white-capped yellow corn. **Price, 1 lb., 25c; 14 lbs., \$1.60; 28 lbs., \$2.40; 56 lbs., \$5.75; 560 lbs., \$35.00.**

North Dakota White Dent

This extremely early White Dent Corn has been thoroughly tried out in the extreme north and has made good, maturing in North Dakota in any ordinary season.

In size like Minnesota No. 13, Yellow Dent, and, like the No. 13, stands up well even in the extreme North. Stalks grow to a height of seven feet, ears are up three feet from the ground, making it easily harvested with the Corn Binder.

This Corn will outyield any other variety of Dent Corn that can be grown in the extreme North. It has been bred for yield and earliness, and will withstand more extremes of weather than any other Corn grown. Might not be an ideal Corn for some of Iowa and Illinois farmers, who are used to the foot-long varieties, but North Dakota White Dent is a silver mine to the North Dakota, Minnesota and northern South Dakota farmer who has wanted to grow Dent Corn but could not on account of length of season. Do not get the idea that this is a 10 to 20 bushel to the acre Corn and so low down that you cannot find it at husking time. It stands up well, seven feet, and yields, with reasonably good farming, 50 bushels to the acre. Our supply of this Corn grown in Yankton, Bon Homme and Douglas counties, South Dakota. **Price, 1 lb., 30c; 14 lbs., \$1.50; 28 lbs., \$2.25; 56 lbs., \$3.50; 560 lbs., \$33.00.**

Gurney's Hybrid Model Dent

This variety of Red Corn, originated and introduced by us, has become one of the best known in the state of South Dakota and is producing wonderful crops each season. There is no other variety of Corn that will yield with it and mature so early. If you are located anywhere south of Aberdeen, S. D., or Willmar, Minn., and can plant by May 20, plant this Corn for general crop. The past season we sold large quantities to Nebraska and Iowa farmers, and we have received wonderful reports from them. It matures perfectly and is producing 10 to 25 per cent over later and larger varieties, and none of the planters had to worry about the early frosts. Grown in Yankton, S. D. **Price, 14 lbs., \$1.50; per bu., \$3.50.**

Rustler White Dent

We planted a 100-acre field of Rustler White Dent commencing on May 25, 1920, harvested and shelled, and shipped two carloads before the 10th of November that graded No. 2 white on the terminal market. This is a grade that is seldom reached by any variety of corn until it has been in storage for nearly a year. I give you the above to determine its earliness. This Rustler White Dent can be planted safely from the North line of North Dakota South. When I say safely I mean that Rustler White Dent will produce a crop in any of that territory when any other variety of Dent corn matures a crop. It is an exceptional yielding corn, producing in this country this past season better than 50 bushels per acre. We have this seed grown as far North as Southeastern North Dakota. **1 lb., 30c; 14 lbs., \$1.75; 56 lbs., \$3.75; 280 lbs., \$17.00; 560 lbs., \$33.00.**

Early Murdock

We have been watching the Early Murdock for the last several years, and we have come to the conclusion that it is a direct descendant of Minnesota No. 13. A little larger ear, just a little later, probably one week; yields well and is an excellent corn for any part of South Dakota or any point south of the north line of South Dakota. We would not plant Early Murdock beyond the South Dakota line. It will be one of the main varieties in the south two-thirds of this state and all states south of that point. South Dakota grown. **Price, 1 lb., 30c; 14 lbs., \$1.50; 28 lbs., \$2.35; 56 lbs., \$3.75; 560 lbs., \$35.00.**

GURNEY'S AUGUST 15TH

Our supply of seed of August 15th is practically all grown in Yankton County. None south of here. This earliest of all dent corns was originated by ourselves at Yankton, and although it is practically identical with Minnesota 23, ours was placed on the market one year previous to that variety. August 15th, as its name implies, is exceptionally early. It is as early, possibly a little earlier, than Northwestern Dent. It yields equally as well, or better, than that variety, depending of course on soil, care, etc. In color it is a white-capped yellow corn. The ears are almost perfect in shape, and every stalk producing a good ear. We use this corn for earliest feeding, for hogging off, and for farther north main crop variety. This corn has given good results in central Canada. It has saved the pocket-book of the southern farmer by furnishing him feed long before any other variety. Your hogs will enjoy a scrap with a good field of August 15th. Price, shelled and graded: 1 lb., 35c; 14 lbs., \$1.25; 28 lbs., \$2.75; 56 lbs., \$4.00; 560 lbs., \$38.00.

A FIELD OF AUGUST 15TH ON FARM OF C. W. MOSS, ROUNDUP, MONT.

His son, S. E. Moss, doing the harvesting on September 3d. The boy is 5 ft. 7 in.

to a height of 10 to 14 feet. It is easier for the average farmer, and the first cost is less, to sow the ordinary field corn for ensilage purposes, but the thoughtful farmer will consider quantity and quality of the product as of first importance, and will not withhold a small outlay for the best Seed. An increased yield of several tons to the acre and an improvement in quality of 20 per cent, as will surely follow the planting of this variety, will certainly warrant the extra outlay for Seed. 1 lb., 20c; 14 lbs., 90c; 56 lbs., \$2.00; 560 lbs., \$17.50.

Wisconsin No. 7 or Iowa Silver King

Grown in Yankton and Bon Homme Counties, S. D.

This extremely new valuable White Corn originated with the Wisconsin Agricultural College at Madison, Wis., and has been distributed by them over their state generally and over the whole Northwest to some extent. It is the largest early White Corn grown, the deepest kerneled; in fact, the best bred of any variety of White Corn. In Wisconsin it is considered more valuable than any of the yellow varieties on account of the increased yield over those varieties. In earliness it is equal to any Corn, maturing perfectly in ninety days.

It has been recommended by the Ames College for Northern Iowa under the name of **Silver King**, and is certainly king of the White Corn.

This should be planted any place north of Central Iowa to northern line of South Dakota. Height of stalks generally about 7 to 8 feet in this latitude. Ears up about 2½ feet from the ground. Ears very uniform in size and shape. An exceptionally pretty White Corn. Per lb., 30c; 14 lbs., \$1.50; 28 lbs., \$2.50; 56 lbs., \$3.75; 560 lbs., \$35.00.

Red Cob Ensilage Corn—Among all the varieties of Ensilage Corn, this one gives the greatest product of green forage per acre, amounting on rich land and proper cultivation to as much as 10 tons. The fodder is sweet, tender and juicy, growing

Gurney's Rainbow Flint

Matures in British Columbia—Seed Dakota Grown

**2 Ears of Rainbow 15 and 16 Inches Long.
SOME CORN!**

This is a variety of corn that we are proud of. It is the corn child that we think more of than any other. I have never given the history of the origination of the Rainbow Flint, but I am going to give it to you briefly this season. Several years ago, Professor Hansen was visiting us while attending the State Horticulture meeting. As usual, he was talking of the production and the method of production of new varieties. We finally talked corn, and the Mendel theories of production. Professor Hansen made the statement that if we would secure somewhere a variety of inbred corn, the longer it had been inbred the better; go in another direction and secure another variety, inbred just as long so that there would be no danger of these two lots being related in any way; place each variety in separate planters, planting two rows of one variety, then two rows of the other; then detassel one of the varieties and save the other for seed, that we would receive from this seed a remarkable yield of corn, but that we must not continue it beyond one year, as the chances were almost 1 to 1,000 that the second year it would degenerate and show the bad traits of both parents. We tried this by the growing of two flint corns. We planted the seed as directed by him, and produced a wonderful yield of remarkable, large ears of early maturing flint corn, of about every color you can think of. The yield was so great, and so much better than either parent, that we thought we would take that one chance and try it again. Time has proven that we struck the one chance in the thousand, and produced a wonderful flint corn. It is getting to be standard everywhere, as the largest producer of corn and fodder, the finest to look at, and one of the earliest to mature. It has matured perfectly in British Columbia. It produces a remarkable yield in the South. And is the main crop for early hogging off in all sections of the country. It is not unusual to produce a very large per-

centage of 14-inch ears of 14, 16 and 18 rows. Try it in the field and in the hog pen. Price, 1 lb., 35c; 14 lbs., \$1.50; 28 lbs., \$2.50; 56 lbs., \$3.75; 560 lbs., \$35.00.

Squaw Corn, Blue and White Flint

This is the old-fashioned Flint corn that is known by every one the country over as Squaw Corn. It yields an immense ear and an exceptionally large number of them. This is the first year we have catalogued it, although there has been an immense demand for it other seasons. We wish to expressly recommend this to our southern Nebraska, Kansas, Missouri and Oklahoma farmers who failed to produce a crop of corn this last year, and who are just as anxious to secure the earliest possible feed for their stock as we are to have them secure it. Plant an acreage of this corn, and you will be feeding new corn before you know it. In planting Flint corn figure about one bushel of seed to each six acres; it stands planting a little thicker than other varieties, and is really one of the most valuable corns to grow, especially in a season when you want early feed. Price, 1 lb., 30c; 14 lbs., \$1.50; 28 lbs., \$2.25; 56 lbs., \$3.50; 560 lbs., \$32.00.

Dakota White Flint—This is the White Flint used for Hominy and Hull Corn. For table quality, flavor and sweetness is the best variety of Indian Corn. Its ample foliage makes it desirable for ensilage fodder Dakota grown. Per 56 lbs., \$3.50.

Longfellow Flint—A beautiful eight-rowed Yellow Flint, ears from ten to fifteen inches long. Very prolific and early. South Dakota and Nebraska grown. 1 lb., 30c; 14 lbs., \$1.50; 28 lbs., \$2.50; 56 lbs., \$3.50; 560 lbs., \$32.00.

King Philip Red Flint—Very early. About 10 days earlier than any of above named flints. 1 lb., 30c; 14 lbs., \$1.50; 28 lbs., \$2.50; 56 lbs., \$3.50; 560 lbs., \$32.00.

Grown in North Dakota.

South America's Mammoth Corn

What would you think of corn stalks 17 feet high, that caliber $2\frac{1}{2}$ inches at the base, producing ears 12 to 14 inches long, and of immense caliber? Ears often containing 28 rows, the stalks big and strong enough to make side posts for a child's swing. We have grown them to this size in our trial grounds and we have attached the ropes and made swings of them. We exhibited at the South Dakota State Fair one year ten stalks and ears that weighed 82 lbs., the shortest stalk in this exhibit was 15 feet. We do not recommend this corn for general crops, but just for a novelty or for exhibition purposes. We have had reports from North Dakota showing a 15-foot stalk in that state. The corn in very favorable seasons will mature sufficiently for seed purposes at Yankton. If you want the real novelty in corn, try this. Pkt., 10c; 1 lb., 35c.

Primitive or Husk Corn

All our cultivated varieties of Corn have sprung from this original Corn. The ears are of good size, frequently measuring 10 inches. Each individual kernel is covered with a husk and all are enclosed in an outer husk like ordinary corn. In some of the wild and uncultivated parts of South America and Mexico the Primitive or Natural Corn can still be found growing wild.

There are very few articles that will attract the attention in an exhibit that this will. In our exhibit at the South Dakota State Fair, 1919, we had this Corn on the stalk and ear, and it attracted as much attention as anything else in our exhibit. Pkt., 10c.

Sweet Fodder Corn

Sweet Fodder—There is nothing better for summer and fall green feed or for curing for winter than Sweet Corn. Being sweet and palatable, cattle eat every part of the stalks and leaves. Always a great favorite with dairy farmers, and excellent for soiling. Can be planted as other corn or sown thickly in drills or broadcast. Sow $\frac{1}{2}$ bushel per acre in drills, 1 to $1\frac{1}{2}$ bushels broadcast. 12 lbs., \$1.00; 50 lbs., \$3.00; 100 lbs., \$5.50.

Popcorn

About one farmer in ten grows Popcorn, even the little amount that is required for the children's popping during the winter months, when it is enjoyed so much. Give the children this year a little spot in the garden where they can plant at least one pound of the White Rice Popcorn, for their own use this coming winter. I would bet you dollars to doughnuts that the little shavers will never let this popcorn bother you, but they will hoe and cultivate it and produce a greater money yield, per square rod, than you will in the best acre of your own cornfield. Give the kids a try at it. It will yield from eight to ten tons of fodder per acre of as high feeding value as sweet corn. It matures very early, which is an advantage where you are going to be short of early feed for the stock. It can be planted at least twice as thick as other varieties of corn and the yield of ear or shelled corn is usually equal to that of field corn. The market price is much better than for other varieties of corn, and is always marketable. Plant at the rate of 6 to 8 quarts to the acre.

White Rice— $\frac{1}{3}$ pt., 15c; lb., 25c; 14 lbs., \$2.00; 56 lbs., \$6.50; 100 lbs., \$10.00.

Red Rice—Fancy seed, bright red, $\frac{1}{3}$ pt., 25c; lb., 65c.

Japanese Hull-less Popcorn

A hill of Japanese Hull-less produces as high as twenty ears of corn, ears small to medium, rows irregular like Country Gentleman Sweet Corn. It is the best of all the popcorns for popping purposes. Clear, white kernels popping to much greater bulk than other varieties. Much better flavor and the real coming popcorn. $\frac{1}{3}$ lb., 20c; 1 lb., 40c; 14 lbs., \$3.25; 56 lbs., \$12.00.

PEDIGREED STOCK OF SEED GRAIN

I have a great many letters during the season from planters of seed grains, asking for a reduction in the prices at which the goods are quoted. We think a word of explanation here would show the reasonableness of the charge which we make for these grains. There is a much larger cost attached to the production of these better grades of grain than to the grain grown in the ordinary way. In the recleaning there is a great shrinkage, as we take out all of the small grains and light ones, and give you none but the very best grade of grains. We do not believe that you can object to the price we charge for this extra fancy stock. There is but little profit to us in the grain at the prices at which we catalog them.

FLAX, MINNESOTA, No. 25

This wilt-resistant Flax is a selection made by the Minnesota Experiment Station from stock received from the Department of Agriculture at Washington, and in repeated trials at the Minnesota Station and points in the Northwest it outyields all other varieties of Flax from two to four bushels per acre, and where other Flax wilts and fields are entirely destroyed this has stood perfectly. Not in all cases, but nearly all.

If you can increase your yield even one bushel per acre by planting this Flax and have the added advantage of leaving your ground clean and free from foul seed on account of planting absolutely clean Flax, you would be ahead if you could secure the common dirty Flax for nothing. 56 lbs., \$3.70; 560 lbs., \$35.00.

BUCKWHEAT

Buckwheat should be sown about the middle of June, broadcast, at the rate of from one to three pecks per acre.

Silver Hulled—A great improved variety. It is in bloom longer, matures its crop sooner, and yields twice as much as the ordinary sort. In a great many sections of the United States Buckwheat is not a paying crop, if you figure on using it as you would other grains, like wheat or oats. There is no crop that will yield a greater amount of food for fowls than Buckwheat. We know of one case where one quarter-acre field furnished seed for over 300 chickens for three months. They were allowed to harvest the crop themselves. 1 lb., 35c; 12 lbs., 95c; 50 lbs., \$2.70; 100 lbs., \$5.00; 1,000 lbs., \$48.00.

Japanese—Larger seeded than Silver Hull. Seed black, good yielder. About equal to Silver Hull in all ways and for all purposes. 1 lb., 30c; 12 lbs., 95c; 50 lbs., \$2.75; 100 lbs., \$5.00; 1,000 lbs., \$48.00.

SPRING RYE

I think we have refunded more money on account of being unable to fill your orders for Spring Rye in past years than any other one item that we list. It seems that most every farmer wants to plant some of this, but has been unable to secure the seed. In trying to overcome this difficulty we planted last spring a large acreage of the Spring Rye and harvested a very good crop. In fact, the yield was better than 30 bushels per acre. We have saved all the seed of this genuine Spring Rye, and think we have ample to fill all your orders this season with strictly first-class seed.

Spring Rye is equal to Fall Rye for all purposes excepting summer pasture. It allows you to increase the acreage of small grains where you have failed to plant all the rye and fall wheat that you wanted at the proper time. Our last planting of Spring Rye was the 12th of April, and on account of a very dry April did not germinate for more than 10 days after that. It can be sown as late as oats and nearly as late as barley, and still produce a good crop. For bread making purposes it would be identical in value with the Fall Rye.

Sow from five to eight pecks per acre, depending on the average rainfall in your locality. Where the rainfall is apt to be deficient sow a less amount of all kinds of small grain than where the rainfall is ample. You will secure a better yield.

Per lb., 25c; 14 lbs., \$1.00; 28 lbs., \$1.50; 56 lbs., \$2.50; 560 lbs., \$22.50.

Winter or Fall Rye

This valuable forage plant produces pasture from early in the spring until late in the fall if sown in the spring. It seldom produces any head and gives you good pasture all summer. It is also an excellent fertilizer, plowing it under in mid-summer. In sowing the same variety in September it produces a crop of seed for the next year. 14 lbs., 95c; 56 lbs., \$2.25; 560 lbs., \$21.00.

Spring Rye

MARQUIS WHEAT

The World's Championship Wheat—Extremely Early Wonderful Yielder—The Millers Like It

Bulletin No. 400, issued by the Department of Agriculture, goes thoroughly into the growing of Marquis Wheat in all parts of the United States, and as it is actual figures and conclusions, we shall use extracts from that bulletin, and then you can readily determine whether or not it would be profitable for you to change from the ordinary varieties of wheat and grow Marquis. We would say that 99 times out of 100 you should change to Marquis, because the yield of Marquis at almost all stations in all parts of the Northwest is much in excess of the yield farmers are getting from their common varieties of wheat. The following is taken from Bulletin No. 400:

HISTORY OF MARQUIS WHEAT

The Marquis variety is a hybrid wheat bred by the cerealist of the Dominion Department of Agriculture at Ottawa, Canada. All of the details in regard to the origin of Marquis are not available, but it is one of the descendants of a cross between an early ripening Indian wheat, hard red Calcutta, and Red Fife. The cross was made at the Experimental Farm at Agassiz in the year 1892. The high bread-making strength of the Marquis and color of flour were demonstrated in the test made at Ottawa in the early months of 1907, and all of the surplus seed was at once sent to the Indianhead Experimental Farm for propagation. The Marquis variety was tested in competition with Red Fife at four of the Canadian Experimental Farms during various periods during the years of 1907 to 1914, inclusive. At three of the stations, the overyields of the Marquis was from 13½ per cent to 38 2-10 per cent higher than Red Fife, the highest yielding wheat in the Canadian Province. At one station the Red Fife outyields Marquis by four-fifths of a bushel per acre. The Marquis is an early variety. It is three or four days earlier than most of the other Fife varieties. Because of its earliness it escapes the drought of dry years, the rust and fall rains of wet seasons, and also the early fall frosts. These are the characteristics which have made it specially valuable in Provinces of Canada. Tests have been obtained at 22 different Experiment Stations. Results at Ames, Iowa, the data show that the hard red winter wheat of the Crimean group far outyield any spring wheat. The Marquis, however,

is compared with the one other spring wheats, these varieties representing the three different groups of hard spring common wheat, which are extensively grown in the hard spring wheat states. In these two years the Marquis outyielded them all by three to four bushels to the acre. In Nebraska the hard winter wheats again outyielded the Marquis, but the Marquis exceeds the Preston by one and four-tenths bu. per acre. At South Dakota Agricultural Station, in tests including 1913, 1914 and 1915, the Marquis outyields all varieties of spring wheat, including Kubanka Durum, its nearest competitor, by three and eight-tenths bu. per acre. In Minnesota, covering four years, Marquis outyielded all other varieties of spring wheat, its nearest competitor being Preston, yielding an average of one bushel per acre less than Marquis. At Crookston, Minn., in a three-year test, it outyields the Kubanka by 5 per cent, the Preston and Blue Stem by from 25 to 30 per cent. In all cases where the hard varieties of winter wheat, such as Turkey Red, can be grown, they outyield all of the varieties of spring wheat, including Marquis. Marquis outyields all other varieties of spring wheat at all of these stations. The increased yield of Marquis over other varieties is from 1½ to 7 bushels per acre. The gain in yield of the Marquis over Durum wheat is from 1½ to 5 bushels per acre. At Newell, S. D., the Marquis variety outyields all varieties of spring wheat excepting Durum. At Highmore, S. D., it outyields all varieties of spring wheat, including Durum. At Eureka, S. D., it outyields all varieties of spring wheat excepting Durum. At Edgely, N. D., it outyields all varieties of spring wheat excepting Durum. At Williston, N. D., Power, Dakota, Fife and Blue Stem show a slightly increased yield over Marquis, Durum wheat showing quite a heavy yield over any other variety of spring wheat. At Dickinson, N. D.,

Marquis Wheat

the Marquis shows a greater yield than any other variety of spring wheat excepting Durum and Preston, the Preston or Velvet Chaff beating it about one bushel per acre. Summing up the whole matter, the bulletin says that Marquis outyields all varieties of the Preston Group everywhere, excepting Moccasin, Mont., and Akron, Colo. At Moccasin the Fife and at Akron the Red Russian outyielded the Marquis, but by only about 3 per cent in each case.

From these facts it is seen, first, that winter varieties are best where they can be grown in the northern section of the Great Plains; second, that Durums are better than any spring common wheat in some sections; third, that the Marquis variety is better than any of the spring common wheats at most stations, and as good as any of the rest. The Marquis is a safe variety to grow anywhere in this section when spring wheat is to be grown. The Marquis wheat is specially well adapted to central South Dakota; here drought and rust often reduce the yields of later maturing varieties.

The Preston or Velvet Chaff, a bearded wheat, is now the leading variety in that district. The Marquis is beardless, a better yielder, as well as a better milling wheat.

PRICE LIST

Marquis Wheat—15 lbs., \$1.25; 30 lbs., \$2.15; 60 lbs., \$3.75; 300 lbs., \$15.00.
Velvet Chaff or Preston—15 lbs., \$1.50; 30 lbs., \$2.15; 60 lbs., \$3.75; 300 lbs., \$15.00.
Kubanka Durum—15 lbs., \$1.50; 30 lbs., \$2.75; 60 lbs., \$3.75; 300 lbs., \$15.00.

RUST-RESISTANT WHEAT

(D-5)

From 1920 Catalog

We had intended to list and sell this variety, and had our Mr. Wensberg spend two weeks in the North Dakota wheat fields just before and during the ripening and threshing. His report is D-5 absolutely rust-proof and the yield, on account of rust attacking other varieties, from three to five times greater than on other kinds. The grain generally tested 58 to 62 pounds per bushel and was selling on the market at the price of other wheat. On receiving this report we authorized him to purchase large quantities of D-5. Making further investigation we find that D-5 is not a safe wheat to plant on account of its making less flour per bushel and of poorer quality than other varieties. It was thought that it would be suitable for puffed wheat, but has been determined that instead of puffing it is so brittle that it breaks and is valueless for that purpose. Really the only use would be for feeding purposes. We have on this date, December 1st, loaded all of our D-5 and shipped it to the Minneapolis market. We would consider the D-5 a wheat that is well to keep away from. Undoubtedly other rust-resistant wheat will be developed from this strain. Until then it is well to pass it up. Beware of this wheat under any other name than D-5.

Agricultural College North Dakota,

D-5 Vs. D-1—1921

Referring to your letter of August 19th D-5 and D-1 were distributed by this office to about the same extent in 1911. D-5 came under criticism because the buyers could recognize it as a new wheat. D-1 is Amber color and it took them a longer time to find it or re-discover it and you may be sure that I have not helped anybody discover it for fear that it would go the same road that velvet chaff went.

Personally, I believe that both wheats are the **most rust resisting** wheats the American Agricultural World have ever known and I am convinced that you and your men drew the right conclusions last year about D-5.

No doubt, **D-1** is more valuable than D-5 because it will take an expert to tell good **D-1** from Aranautka or Kubanka. As in the case of D-5, I do not profess that it has any milling values. I have given it a chance to be tried. I have never said that it would yield 100 or 200 or even 10 percent more than some other varieties. I am glad to learn that it is being re-discovered.

I can not answer your question regarding its milling value. I am told that millers do not object to it but I am pretty confident that no miller knows it when he sees it. The milling tests here have not been as extensive as with D-5 and I suspect that this wheat, if milled alone might also be found to have its faults, but since wheats are nearly always milled as mixtures its defects may prove to be its highest merit.

H. S. Bolley

I note what you say regarding the head of wheat I sent you. This is D-1 rust proof, and yields very big. The D-5 is the Red Durum, which the mills knock, claiming it did not have the milling qualities. There is no such objection to the D-1, as it sells at Amber Durum prices. The wheat yields much more and is immune to rust, which insures a crop every year. It also stands up well and is also drouth resistant.

Daniel Sachow.

Rust Resistant Wheat D-1.

Last year we warned you against planting D-5 and think that our warning was heeded and timely. D-5 will evidently never be a good milling wheat. D-1 is entirely different. I am printing extracts from letters of Mr. Sachow and H. S. Bolley of the North Dakota Agricultural College. There is a heap of truth in Mr. Bolley's statement and it may be that you will have to accept a little lower price for D-1 than the regular market for Marquis or other standard varieties; but when you harvest, in some cases, two or three times better crop from this Rust Resistant Wheat than from other varieties you can well afford to take a lower price.

Our Mr. Wensberg spent considerable time in North Dakota this Fall determining the values of D-5 and D-1 and found that both of them almost invariably yielded from 18 to 35 bushels per acre while, on account of rust, such varieties as Marquis, Kubanka and other varieties were nearly a total failure. **Per bushel, \$3.25; per 300 lbs., \$14.50; per 600 lbs., \$27.00.**

KANRED WINTER WHEAT

This is not the time to purchase Winter Wheat but I cannot help giving you a little story of the Kanred and its wonderful money making possibilities for the Winter Wheat farmer. A great many more of you are in the Winter Wheat Belt than you know of. The Kanred Winter Wheat, like Minnesota 13 and Gurney's August 15th corn, has expanded the Winter Wheat Belt hundreds of miles in all directions. Can be grown in any part of South or North Dakota as safely as any of the Pife or Blue Stem wheats and with much better assurance of a crop. Kanred is at least ten days earlier which makes it almost escape the rust period. It is hardier than other varieties and more rust resistant. It should be planted in the latter part of August or September, depending on that part of the country in which you are located. Write us for prices.

On a quarter section of land an experiment of raising wheat by summer fallowing was carried out with the following results. This in the year 1919 when labor was high and the excess of straw and tangled wheat made the labor cost much greater than in an ordinary year.

This was on Section 14-4-38, Cheyenne County, Kansas

Total cost per acre for production not including rent for land.....\$25.17

The total yield was 5,150 bushels, making 32.125 bushels per acre. Was sold for \$2.15 per bu., making a gross income of \$11,072.50, with a total cost per acre of \$25.17, or \$4,027.20. This gave a net profit of \$7,045.30, or \$44.65 per acre, which is 74% profit on the value of the land.

The above is an actual test and allows for all labor and board. The next two years this same land will be sowed to wheat at much less cost per acre. This is old ground and part of it has been farmed 30 years.

KHERSON OATS

Made larger yields and weighed better than any others. We believe it to be the very best for the Northwest. This oat is undoubtedly identical with the yellow oat known as Sixty-Day Oat. There were two importations from Russia; one has come out under the name of Sixty-Day and the other as Kherson. They both outyield all others.

Our Seed from this variety is secured from seed of the original Taylor importation, and is absolutely pure Kherson Oats. It is a smaller oat than most and takes at least one peck less per acre for sowing. This oat should be largely planted, as the difference of 10 to 15 days in earliness of maturity will escape the rust period; save that much risk of winds, hail and bugs. It also lengthens the harvest season, allowing you to get along with less high-priced help. Price, 32 lbs., \$1.00; 64 lbs., \$1.90; 320 lbs., \$8.10.

Regenerated Swedish Select Oats

The past season the new Regenerated Swedish Select Oats have made some wonderful yields in the Northwest. They are certainly the leading late oats at the present time and it is probable they will continue to be so. It is not unusual to see fields growing 100 bu. per acre and weighing as high as 45 lbs. per measured bushel. Our stock of this oat is strictly pure and at the low price you should sow a good field. 32 lbs., \$1.15; 160 lbs., \$5.75; 320 lbs., \$11.00.

REAL ESTATE, INSURANCE AND COLLECTIONS

Doland, S. Dakota, Dec. 10, 1920.

The squash which I had the pleasure of receiving from you some time ago was very fine eating, as good as we ever ate. I am also thanking you for the bulbs which we also received.

I received a report of the Company's business for the past year and am delighted with the statement, and I am glad that I have stock in so good a Company. Hoping that I will be able to meet with you sometime in the near future.

Jos. Garthwaite

Regenerated
Swedish Select

Iowa's 103 Earliest White Oat—A Descendant of the Kherson

For the last several years we have been getting some very satisfactory reports of yields of the New White Kherson, or New Iowa 103, and have decided that it is absolutely the best of all the early oats from point of color, earliness and yield, consequently we are strongly urging that you plant a quantity of it this year. Our stock is from seed furnished by the Iowa Agricultural College in 1915 to the growers and they have not grown any other variety on their place, so that it is the genuine Iowa 103, or White Kherson. Under date of March 3, 1916, the following letter was received from Professor J. Buchanan, Secretary and Director of Experiments of the Iowa College.

"Your letter of February 17th, in regard to Iowa 103 Oats, received. This is an early White Oats originated here at the Experiment Station by the pure line selection method. After proving its superiority in the Experiment Station test it was distributed to a large number of farmers for co-operative test throughout the state. In 119 co-operative tests conducted in the years of 1913, 1914 and 1915 the Iowa 103 gave an average of 49.94 bushels per acre, and the home varieties an average of 46.01 bushels per acre, making a difference of 3.93 bushels in favor of Iowa 103. In 32 of the 119 tests the Iowa 103 gave an average yield of 54.4 bushels per acre, and the Kherson an average of 51.50 bushels per acre, making a difference of 2.81 bushels in favor of Iowa 103. I should state here that the Kherson is the parent variety. In 15 of 119 tests the Swedish Select was the home variety used, and the Iowa 103 gave an average of 5.25 bushels more than the Swedish Select. In 11 of the 119 tests the Early Champion was the home variety used, and the Iowa 103 gave an average of 2.8 bushels more per acre than the Early Champion. The demand for this Oat is becoming very large, as in many places, it has outyielded the more common varieties by a wide margin.

J. BUCHANAN,

Secy. & Director of Experiments."

8 lbs., 50c; 16 lbs., 70c; 32 lbs., \$1.10; 320 lbs., \$10.00.

Barley

University, No. 105 (New Barley)—For several years the Minnesota State Experiment Station has been breeding and testing many varieties of barley with a view to producing an improved sort that would lead all other kinds in the matter of yield. This ambition, the station considers, has been realized in the new six-rowed variety here offered under the name of University No. 105. In comparative tests covering a period of several years and made side by side with the best known and most popular varieties, it has proven to be the heaviest yielder, and from any standpoint a most valuable acquisition. It is early, uniform in maturing and pure. 48 lbs., \$1.55; 480 lbs., \$14.00.

Odebrucker Barley—In this age of improvement in grain, barley has come in for its share of attention, and experimenters have shown wonderful progress in securing better grades and yields.

The Wisconsin Agricultural College has taken a leading part in the improvement of barley, and in introducing the Odebrucker they are beyond question several years ahead in improvement of all other varieties. The Odebrucker is a better color, heavier yielder and the very best barley that can be grown. The seed we offer is produced from seed secured direct from the Wisconsin Agricultural College and the quality is certainly fine, and we ask all our intended customers to send to us for a sample of it, which we will be glad to submit. The quantity of available seed of this new variety is not large, and we would advise all barley growers to make their orders early for this. 48 lbs., \$1.55; 480 lbs., \$14.00.

Beardless Barley—This barley will mature in 60 days from date of sowing under ordinary conditions. A barley without beards. This must be admitted by all as a very desirable thing. Most of you have threshed barley and some of you have been in the stack and you know what bearded barley is. The greatest advantage lies in the extreme earliness, which makes it absolutely desirable, if not indispensable, for early feeding when old grain is scarce. Being a sport from the old bearded barley, there may appear a few heads in the field showing beards. 12 lbs., \$1.00; 48 lbs., \$3.00; 240 lbs., \$14.00.

Hulless Barley—Has no beards or hulls. Earliest and best hog feed grown. Yields immense crops. Better for feeding purposes than any other barley. Plant for earliest feed. 15 lbs., \$1.00; 24 lbs., \$2.00; 48 lbs., \$3.00; 240 lbs., \$14.00; 480 lbs., \$27.00.

Speltz or Emmer

It makes a good crop with almost any condition of soil and climate. It is neither wheat, rye nor barley, and yet it appears to be a combination of these. It is more like wheat than any of the others mentioned. For fattening cattle, poultry, horses, sheep, pigs, etc., it is claimed to be ahead of other grains; in fact, all kinds of animals seem to thrive on it. Speltz is claimed to be ahead of corn, superior to oats and more profitable than wheat. Yields 80 to 100 bushels of richer food than corn, besides giving as much as four tons of good hay per acre. Excellent for pasture and can be fed in the green state. As green grass hay food it often gives 100 leafy stalks from one seed, which shows its heavy stooling properties. The heads are somewhat similar to two-rowed barley, the spikeless being separated from each other in such a manner that the crop is not easily injured by the weather. It is a heavy yielder. Will grow well and produce enormous crops on land where wheat will not grow. 25 lbs., \$1.25; 50 lbs., \$2.00; 100 lbs., \$3.20; 500 lbs., \$14.00.

Nelson, Mo., May 20, 1920.

I asked for your catalog and found that you can be proud of it, indeed, and it ought to get a place in any library, because it is not only pretty, but very instructive, too. I thank you. Now I wish to order some nursery stock and other articles.

E. LAIBLE.

I was very much surprised at the results I got from your melon seed last year. I think I bought about \$5 worth of seed and planted less than one-half of them and raised over \$300 worth of melons besides furnishing ourselves and neighbors through the season. They are better than you claim them to be by quite a bit. One of your satisfied customers.

S. VONDRACEK.

CANADA FIELD PEAS

I am of the opinion from experience and observation that Canada Field Peas planted at the rate of 50 lbs. per acre, with $1\frac{1}{2}$ bushels of oats, will produce the most valuable hog and other stock fodder for fall and winter feeding and for early summer pasture that you can possibly plant. Valuable, I will say, first on account of its earliness, maturing four to six weeks earlier than corn. Second, the immense yield of rich, dry fodder. We advise sowing with the peas, the Kherson or Iowa 103 Oats, as they mature at about the same time. If you are going to plant the peas on high poor land, the Swedish Select or taller growing late oat would be better. Plant a field of these oats and peas near your home yards and at the right time turn the hogs in and let them do the harvest. They will pay you for it. If planted alone sow 90 lbs. per acre. **Price: 1 lb., 25c; 10 lbs., \$1.50; 25 lbs., \$2.75; 50 lbs., \$5.00; 100 lbs., \$9.50.**

COW PEAS

The Great Soil Improver. Makes poor land rich, makes good land more productive, enriching the soil even after the crop is cut. Green crops plowed under are one of the best and cheapest ways of improving the soil. For this purpose the Cow Pea is excellent, especially for a medium or light soil. They should be sown in May or June, at the rate of $1\frac{1}{2}$ bushels to the acre, and plowed under as soon as they have attained their full growth. While this crop is very largely grown wherever known, with the results obtained from it, the wonder is that it is not grown ten times as much as at present. There is no surer or cheaper means of improving soil than by sowing Cow Peas.

Cow Peas for Hay—If planted early say the middle of May, in the central corn belt section, a crop can be cut and cured for hay the same as clover, then the stubble in a short time will put on a new growth to be turned under in the fall as a fertilizer.

We suggest sowing Kafir Corn with this crop, at the rate of one peck to one bushel of the Cow Peas per acre. The Kafir Corn holds the vines off the ground, causing a better growth.

New Era—15 lbs., \$2.00; 50 lbs., \$5.00; 100 lbs., \$9.00.

DWARF ESSEX RAPE

This forage plant has rather forced its attention on the grower of stock as the seedsmen, generally, have neglected to tell of its value. A great many farmers have realized its value, and made use of it for a number of years, but the percentage of people planting it is so small that I want to impress it on you, especially this season, that the Dwarf Essex Rape will grow and thrive, and be profitable in so many places on your farm where you are not getting the full benefit of that land, that you should watch for every place, no matter how small, and plant this rape seed. In the spring when you are sowing small grains, sow it at the rate of 2 pounds per acre with your grain. This will furnish valuable pasture after harvest, and on account of the start it has before harvest, requires but little moisture in the latter part of the summer to make a good crop. Plant it with fall rye at the rate of about three pounds to the acre in the months of April or May, and it will make you a good pasture with the rye in summer. Plant it by itself at the rate of 5 lbs. per acre and see the immense yield of forage it will produce. Sow it at the rate of 3 lbs. per acre with your last cultivation of corn. This is undoubtedly the most profitable place to sow rape seed. If you are hogging the corn down, the hogs will clean the rape as well as the corn. If you husk your corn and pasture the corn stalk all kinds of stock eat it readily, and this gives them green food with the dry. Dwarf Essex Rape is the only variety that is valuable. This season there is a less quantity of seed than ever before, and while we are well supplied, we do not expect it to last through the season. We would advise placing your order early. **Price: 1 lb., 25c; 10 lbs., \$2.00; 25 lbs., \$4.00; 50 lbs., \$6.00; 100 lbs., \$11.00.**

Canada Field Peas

Winter Vetch
for Canary Birds. We have determined the formula by consulting with the best of the experts and know that the bird seed offered to you will be satisfactory. 1 lb. cartons, 20c postpaid; 5 lbs., 75c.

Sand or Winter Vetch—(*Vici Villosa*)— Sometimes called Hairy Vetch. Thrives surprisingly on poor, light land, and well withstands extremes of drouth, heat and cold. It may be sown either in the spring or fall, usually with Rye. In the North it remains all winter under the snow, and it is invaluable for early pasturing or soiling. It is valuable as a fertilizer, being a great nitrogen gatherer. For Hay, cut when commencing to pod. Fifty pounds Seed per acre. **Lb., 35c; 10 lbs., at 30c; 100 lbs., \$25.00.**

Kaffir Corn—Grows from 5 to 7 feet high, making a straight upright growth with enormous wide leaves. The stalks keep green and are brittle and juicy, not hardening like other varieties of Sorghum, making excellent fodder, either green or dried, which is highly relished by stock. The Seed heads form at the top of each stalk. For the grain sow in rows three feet apart, three to five pounds of Seed to the acre. For fodder sow 50 lbs., either broadcast or in drills. **Lb., 25c; 100 lbs., \$4.80.**

POP CORN FOR POPPING

We make a special selection of White Rice Pop Corn which we put up in beautiful 1-lb. cartons and which will pop about 95% and will keep in these cartons almost indefinitely. **Per 1-lb. carton, 20c postpaid; 5 lbs., 75c.**

DWARF BROOM CORN

We have discontinued offering any of the tall growing varieties of Broom Corn. We have sold that continuously for years and without cataloging the Dwarf variety we have sold each season, through correspondence, several times the quantity of Dwarf than we have of the tall. This demonstrates to us that the grower wants the Dwarf variety, which is better from every standpoint. The Dwarf Broom Corn stands up better than the taller varieties, is practically free from crooked brush. The fibre is long and fine and commands always the highest market price. **1 lb., 25c; 10 lb., \$1.80; 50 lbs., \$5.00; 100 lbs., \$9.00.**

BIRD SEED

We are putting up in 1-lb. cartons net, the best possible food

CANE OR SORGHUM

Sorghum (or Sugar Cane) in the West is not at all appreciated, and we wish to call the attention of farmers everywhere to the great value of Sorghum as a pasture and fodder crop, and to the particular advantage to be gained by growing it. Sorghum may be made to furnish the principal provender for cattle and horses from August until the following spring. As a summer pasture for sheep, a wide field is likely to be opened up by it. As a soiling food for swine it is most excellent, and the Seed furnishes a splendid food for fowls. It grows right along through the severest and most prolonged drouths.

Early Amber Cane—This popular and well known variety is the earliest. **Lb., 30c; 10 lbs., \$1.05; 50 lbs., \$2.75; 100 lbs., \$4.75.**

Dakota Grown Amber Cane—We have quantities of cane grown for us each season in Dakota, and while we do not claim better yields for it than other canes, we do claim earliness and drouth-resistant features over other canes. **1 lb., 30c; 50 lbs., \$3.50; 100 lbs., \$6.50.**

BRANCHING YELLOW MILO MAIZE

Grows from 5 to 7 feet high, stooling from the ground, sending out heads of great size, often weighing three-quarters of a pound, sometimes a full pound after ripe. Cattle, horses and hogs will eat it readily. Tests show that during the severe drouth corn dried up within a few feet of it. Five to ten pounds will plant an acre. **Lb., 25c; 10 lbs., \$1.00; 100 lbs., \$5.00.**

FETERITA

Kaffir Corn

This is another valuable stock food. It has been recommended generally for chickens and other fowls. It is probably the best of all the grains for that purpose, but that is only a portion of its value. All kinds of stock relish it, and on account of its immense yield, producing in a reasonable reason 100 bushels per acre, it makes it almost necessary that you plant a quantity of this in order to secure the greatest profit from your farm. I might say that the greatest advantage in planting Feterita over other grains is its drought-resisting qualities. It will produce a crop on probably less moisture than any of the farm crops; yielding better, of course, with more moisture. But to guard against crop failure you should have a field of Feterita each year. The heads grow and resemble the white Kaffir Corn, but the grain is one-half larger, the heads plumper and better filled, and it matures three weeks earlier than any of the Kaffir Corns. This makes it possible to grow Feterita profitably each season in any part of the Northwest. We shall grow a large acreage of Feterita this year for the benefit of our large herds of hogs. **Price: 1 lb., 30c; 10 lbs., \$1.50; 25 lbs., \$2.25; 50 lbs., \$4.00; 100 lbs., \$6.50.**

Soja Beans (or Soy Beans)

During the period of the World's War the Department of Agriculture spent considerable time and energy in educating the growers to a greater diversity in farming. They were ably seconded by the various State Agricultural Colleges and on account of the propaganda there was a very heavy demand for some of the items, especially the Soja Beans. The demand for the early variety suitable for Northwest planting was so great that seed enough had never been produced to supply the intended planter and consequently a great amount of the Southern Mammoth Soja Beans were shipped into the North and were sold to seedsmen as early varieties Northern grown. The grower of these beans was disappointed with the results as in a great many cases they did not mature.

I am using here parts of letters and circulars sent out by various agricultural colleges as to the best varieties for this country. We have located a few lots of the **genuine Northern Grown** early varieties which we have purchased direct from the growers and have had to pay a very high price for this seed, several times the retail price of the Southern seed, but we consider that you will be well repaid by purchasing a few pounds of this seed so that you may get a start in the true **Northern grown**. When we run out of these **Northern grown** lots your money will be refunded. **1 lb., 35c; 3 lbs., 90c; 10 lbs., \$2.75. Southern grown: 10 lbs., \$1.25; 50 lbs., \$5.50; 100 lbs., \$9.00.** These should be planted at the rate of 20 to 25 lbs. per acre.

From South Dakota Agricultural College

Soy beans are drought resistant and furnish a forage rich in protein, have been grown at the experiment stations for quite a number of years. A large number of varieties have been tested and a general idea can now be formed as to their value. Their principal enemy is frost, but there are varieties that can be matured between the frost-free dates in the various parts of South Dakota. The soys are also valuable for planting with corn in order to make the silage produced richer in protein.

Varieties—Manchuria, S. D., 507, Manchuria, S. D., 508, Mandarin and Ito San. They make a large growth of forage and rarely fail to mature seed.

Seed Growing—There is always a big demand for soy bean seed of the adapted varieties, because of the fact that large acreages of soy beans and corn are planted together each year for silage.

Seeding—The seed is sown in rows far enough apart to be cultivated. The most convenient distance is 42 inches. All corn planter manufacturers provide bean attachments, which represents a big saving when we consider the time saved by being able to plant two rows at a time. An acre requires about 20 pounds of seed when sown in drilled rows 42 inches apart. When the beans are planted for silage purposes with corn, a half peck of corn and 8 or 10 pounds of beans are sufficient per acre. The seed should be inoculated in order to insure plenty of nitrogen fixing bacteria and thus increase the yield.

Iowa State College, Ames, Iowa

October 27, 1920.

You remember last Spring we had more or less trouble in securing Soy Bean Seed that was true to name.

A good deal of Southern grown seed which was not suitable for Iowa conditions found its way into the State. I am sure that we can count on your hearty cooperation to see that this condition does not occur again the coming Winter and Spring.

During the summer I have visited a number of different counties and find that a great many men who purchased what was supposed to be the Medium Early Yellow Soy Bean, really received the Mammoth Yellow Soy Bean. In many cases it is rather hard to identify or distinguish between the threshed grain of these two varieties, but when you see the plants well advanced in growth they can readily be identified.

I am drawing your attention to this matter at the present time because I know that in the near future you will be looking for a supply of Soy Bean Seed for next year.

I know you are anxious to conduct your business in the future on the same high standard you have followed in the past and feel sure you will do your best to prevent the sale of varieties of Soy Beans not suitable for Iowa conditions.

Thanking you for your hearty cooperation in the past, I remain

F. G. CHURCHILL,

Extension Professor of Farm Crops and Soils.

Fifty Cents Per Acre For Dependable Seed Corn

This is all it will cost you to plant Gurney's Dependable High Germination Seed Corn that will grow, yield and mature as we tell you it does. We have originated, introduced and distributed more bushels of the early varieties than other people. We have assisted in extending the Seed Corn Belt several hundred miles to the North, which has made your land worth millions of dollars additional.

Wonderful growth of nodules, containing the nitrogen gathering bacteria, on upper portion of sweet clover root. Found growing in the beach sand of Lake Michigan in North Chicago.—Kindness International Harvester Co.

SWEET CLOVER, MELLILLOTUS ALBA

The White Blossom Kind

A great many years ago a Nebraska farmer called at our office and wanted to purchase one bushel of the white flowered Sweet Clover seed. We were both pained and surprised to think any man wished to plant the so-called weed. We told him so in a few harsh words, and refused to sell it to him. He told us if we did not get it for him he would buy it himself and plant it anyway. We finally consented to get it and told him we would watch results. This was planted opposite Yankton, on the Missouri Bottoms, and produced an immense quantity of bee feed, for the purpose for which this man purchased it. After it had grown one or two years he commenced to take a crop of hay from it and found that it produced more bee feed and a good crop of hay that his stock was equally as fond of as alfalfa. The next party to whom we sold seed was a man at Bassett, Neb.; he came to our office and wanted 500 lbs. to sow on sandy land for fertilizing purposes. We told him something of the results of the Nebraska farmer's one bushel, and he said that it might make hay but he wouldn't risk it; he wanted to plant it in the fall and plow it up the next mid-summer. He said that by doing this he could produce as much corn on his very sandy land as we could on the best \$100 per acre land near Yankton. This last customer, from Bassett, Neb., increased his purchases each year until he was buying in ton lots. Then we commenced to wonder why so much, and inquired, and found that he was using it for hog pasture, pasture for his immense herd of cattle and horses, and was making excellent hay of it besides using it for fertilizing purposes.

Then we commenced to write about it, and urged its planting almost everywhere. Today

there is as great demand for the white flowered Sweet Clover as for Alfalfa, but the demand cannot be supplied, as the seed is very difficult to save. It will outyield Alfalfa as far as seed production is concerned, but the seed drops so easily that no one has been able to discover a method of harvesting that will save more than 10 to 20 per cent of the crop.

Scarified Sweet Clover Seed

White Blossom Sweet Clover has become such a necessary crop on the farm, and under old conditions there was so much trouble having satisfactory germination, that we shall **scarify** all of this sweet clover seed that goes to our customers and we will not charge you one cent more for this than you would have to pay for that which is not scarified. On numerous tests of sweet clover seed, unscarified, we find the germination from 25 to 50 per cent; on the same seed, scarified, we often have 95 per cent germination in a seven days' test. We also find in the unscarified seed that the largest, plumpest, hardest seed, and consequently the best seed are those that did not germinate, but probably stayed in the ground one year before germination. By this scarifying process we scratch the hull of this hard seed, which allows the moisture to get in and hastens germination. Do you see the difference?

PLANTFOOD FROM BRICKS

Sweet Clover Found Growing Under Remarkable Conditions in Logan County, Illinois

By H. A. McKEENE, Secretary Illinois State Farmers' Institute

The picture represents an abandoned tile kiln in Logan county, Illinois. Our attention was called to this remarkable demonstration by Mr. Ralph Allen, of Delavan, Illinois. This old structure is about 35 feet in diameter and about 10 feet high. It is encircled by large iron bands, and there is no soil or decaying organic matter nearer than its earth foundation, except possibly the small amount which may be carried to it by the winds in the form of dust particles, and yet from the spaces between the bricks on the sides of the kiln and on the top, there is a luxuriant growth of sweet clover. There, high above the earth's surface, in the summer sun, without soil and apparently without moisture or food, these plants thrive better than some of our grain crops that are given great thought and care.

Sweet Clover on a Brick Kiln

The following analyses were made by the Wyoming Experiment Station of Sweet Clover and Alfalfa grown on the experimental farm, and published in Wyoming Bulletin No. 70, pages 70 and 74. These analyses show Sweet Clover to be richer than Alfalfa in protein (muscle, bone and tissue material), and in either extract, or fat-forming substance.

	—SWEET CLOVER—		ALFALFA	
	Cut Oct. 4, 1904	Cut Aug. 10, 1905	Average of 11 Samples	
Water	6.02	6.88	6.57	
Ash	9.57	11.03	8.79	
Ether extract ..	4.42	1.96	1.66	
Crude protein ..	21.77	22.27	31.25	
Crude fibre ...	18.00	22.19	15.14	
Nitrogen free extract	42.22	35.67	36.59	

It is shown by experiments at the Cornell University, Ithaca, N. Y., that grasses grown with legumes contain more protein and consequently are of more economical value than when grown alone. It would seem that while they are both growing together, the grasses receive directly from the roots of the legumes a large supply of available nitrogen which makes not only more feed, but richer in feeding values.

The following table is taken from Cornell Bulletin No. 294:

Crop	Protein in Dry Matter Per Cent	Protein per ton of Hay (10% Moisture) Pounds
Timothy grown alone	17.19	309
Timothy grown with Clover	24.56	442

Protein is the most expensive constituent of farm foods. Comparative analyses of sweet clover, alfalfa, red clover, timothy, and cow peas showed that only the alfalfa and cow peas excelled sweet clover in percentage of protein, the alfalfa by one per cent and the cow peas by three per cent. Considered from the standpoint of digestible nutrient, we find the following comparative values for the different feeds:

	Per Ton	Price and Sow Per Acre
Sweet Clover hay	\$18.49	If for seed purposes, 5 lbs. For hay purposes, 15 lbs. We would advise that you place your order very early, as there will be an immense demand for it this season. Per lb., 45c; 10 lbs., \$3.00; 50 lbs., \$15.00; 100 lbs., \$25.00.
Alfalfa hay	20.16	
Timothy hay	9.80	
Red Clover hay	14.12	
Cowpea hay	19.76	
Shelled corn	20.16	

YELLOW BLOSSOMED SWEET CLOVER

This is preferred by some to the white blossomed for pasture and inoculation of soils on account of lower seed cost. We have tested it out and found it equal to or better for crop rotation, but does not produce an equal tonnage per acre with the white. A very valuable clover, however, and will be used in greater quantities each year. **Pound, 40c; 10 lbs., \$2.75; 50 lbs., \$13.00; 100 lbs., \$24.00.**

A South Dakota Field of Medium Red Clover

Medium Red Clover

Our Red Clover Seed is all northern grown. It is first-class in every particular. This seed will be much better for the northern planters and also for those south of us than seed grown in Iowa, Kansas and Nebraska. Our grass and clover seeds are good enough to comply with any state laws. It's the kind we sell always, not sometimes.

This species is regarded by far the most important of the whole genus for the practical purposes of agriculture, being valuable not only as a forage plant, but also for its fertilizing properties on the soil. It has very long and powerful tap-roots, and when these roots decay they add largely to that black mass of matter called the soil. As a forage plant it makes an excellent quality of hay, and can be cut at least twice a year. Sow about 12 or 15 pounds to the acre. Weight, 60 lbs. per bushel. 1 lb., 45c; 30 lbs., \$11.50; 60 lbs., \$19.00; 100 lbs., \$35.00.

Mammoth Red Clover—This grows much taller than Red Medium, with larger, leafier stalks and large, slightly pointed leaflets. It will produce more hay on poor ground than any of the other clovers. (60 lbs. per bu.) Pound, 45c; 30 lbs., \$11.50; 60 lbs., \$19.00; 100 lbs., \$35.00.

Alsike, or Swedish Clover—This clover comes from the little province of Alsike, in Sweden. It is one of the hardiest varieties known, being perennial and absolutely refuses to winter kill; it is alike capable of resisting the extremes of drouth or wet. It is a great favorite with all who have tried it. Produces annually a great quantity of herbage of excellent quality. Sow in spring or fall about 8 to 10 pounds per acre. Weight, 60 lbs. per bu. Pound, 50c; 60 lbs., \$20.00; 100 lbs., \$37.00.

White Dutch Clover—An excellent pasture Clover, forming in conjunction with Kentucky Blue Grass the finest and most nutritious food for sheep and cows. Sow 5 or 6 pounds to the acre. Weight, 60 lbs. per bu. Pound, 75c; 10 lbs., \$7.00; 20 lbs., \$14.00.

Alsike and Timothy—In the Northwest there is a great demand for a mixture of Alsike and Timothy Seed mixed in the right proportion ready for sowing. This mixture is especially valuable for low, wet places, for permanent meadow or for pasture, and on account of the very low price at which we offer it you can seed down more ground for the Grass Seed Line. Pound, postpaid, 30c; 50 lbs., \$10.00; 100 lbs., \$18.00.

Grasses for the Lawn, Pasture and Hay

This chapter is headed generally by description of varieties without any particular argument for planting. It is to the owner of high priced land the most important of all of the crops, and I want you to read this carefully and figure out in your own way just how much you have been losing by not planting more of the grasses and forage plants.

This season 1920 has witnessed the greatest advance in land values in the history of the United States, and lands that were valued at \$50.00 per acre a year ago are in some cases worth \$200.00 per acre now, and lands in southeastern South Dakota have changed hands at as high as \$600.00 per acre; and it stands every one in hand who owns or is farming this high priced land to get a fair return from it, and it can be secured only by using modern methods. You may have on your farm a few acres of wild pasture land, something that has never known the plow, you may be using this for pasture or meadow; if you are, I want you to figure just what you could get for this land if you were to sell it, and then figure your income per acre from it, and then figure just what it would bring you if it was planted to some of the tame grasses, alfalfas or clovers. I venture to say that on this wild pasture land you are not pasturing more than one critter per 3½ acres. The interest on what that land would bring you if sold is almost the price of the critter per year. If the conditions were reversed, and this same 3½ acres was planted to the tame grasses, clovers or alfalfas, you could average nearly one critter per acre, and in this way secure a good income on the amount the land is worth.

I cannot tell you without knowing the land just what you should plant to get best results. It may be that your land would be best for alfalfa, possibly sweet clover of the white blossom variety will give you the best results. And I want you to look well into the sweet clover and alfalfa proposition before you pass them up, they are the big money makers.

We have a 40-acre tract of exceptionally rough land within the corporate limits of the city of Yankton, this is high priced land, it is planted to Dakota No. 12 alfalfa, and we harvested from it more than 135 tons of hay this past season. That hay is worth today in the stack \$17.00 per ton.

There are grounds that will not grow the alfalfa and clovers profitably. In these grounds use the timothy, red top, and others. Get away from the wild grasses that do not produce tonnage enough.

Alsike Clover

Bromus Inermis

5,500 Pounds Dakota Grown Bromus for One Planter

Dakota grown Seed only. New settlers west of the Missouri River in North and South Dakota and Western Nebraska should use this grass almost exclusively on their land. An exceedingly valuable grass; succeeds and produces immense crops of high nutritive value on the sterile and arid plains of our Western States, growing luxuriantly on dry, sandy soils where other grasses would perish. It is perennial and once sown down will stand for ten years. It is one of the surest to obtain a catch, establishing itself very rapidly, so much so that a good hay crop can be had the first season, followed afterwards by an immense amount of succulent pasturage. On and after the first season two crops a year can be had from it. When fully grown the plant stands 4 to 5 feet in height and stools out freely. It is ready to cut the latter part of June. This grand grass has been highly endorsed by the Experiment Stations, a few of which we give below. Prof. Shaw of Iowa says: "This grass cannot be obtained too soon by the farmers of the West." Notes on the Grasses and Forage Plants of Iowa, Nebraska and Colorado, published by the U. S. Department of Agriculture, says: "Bromus Inermis withstands drouth and cold, and is perfectly adapted to conditions existing in Iowa. It makes an excellent growth, and more nearly reaches the ideal of a farmer's grass than any other sort introduced in recent years." Sow broadcast at the rate of 20 lbs. per acre (14 lbs. per bu.). We have this variety true to name and absolutely pure. Per lb., 40c; 10 lbs., \$3.00; 50 lbs., \$12.00; per 100 lbs., \$22.00.

Meadow Fescue, or English Blue Grass—One of the best of the so-called natural or permanent Meadow Grasses, and has so well adapted itself to our Northern and Western States as to have become invaluable; in fact, it thrives over as wide a range as any of our grasses, succeeding as far south as Tennessee. It is greedily eaten by all kinds of stock, is very fattening, and makes excellent hay. It is very hardy and succeeds in almost all soils, but attains its greatest perfection in moist, rich land. Coming into use very early and again late in the fall, it should form a prominent part in all permanent pastures and meadow mixtures. (22 lbs. to the bu.) Per lb., 45c; 50 lbs., \$20.00; 100 lbs., \$37.00.

Orchard Grass—(*Dactylis Glomerata*)—It is of exceptional value for permanent pastures and for hay crops. It is very early, coming in ahead of all other grasses, recovers quickly after being cut, and endures close cropping by cattle. All kinds of stock relish it greatly, and if cut when it comes into flower makes excellent hay. Thrives well on all soils and attains its greatest perfection on strong, moist and clay lands. (14 lbs. per bu.) Per lb., 45c; 10 lbs., \$3.70; 100 lbs., \$30.00.

Tall Meadow Oat Grass—(*Avona Elatior*)—The earliest of all the grasses and the one that has naturalized itself all through the Western States. It is the first grass to show itself in spring, and grows rapidly in good soil, showing a height of 4 feet by June. It should be cut for hay just as coming into bloom; will furnish two and three cuttings per year, and is invaluable for early and late pasturage, furnishing a nice, sweet and tender herbage. Sow, when alone, 20 to 25 lbs. per acre. (10 lbs. per bu.) Per lb., 55c; 10 lbs., \$4.50; 100 lbs., \$40.00.

Kentucky Blue Grass (June Grass, or Smooth-Stalked Meadow Grass; Fancy Cleaned)—(*Poa Pratensis*)—One of the first grasses to start in the spring; much relished by all kinds of stock, and succeeds on a great variety of soils, particularly on rich, moist lands. Fancy cleaned seed. (20 lbs. per bu.) Per lb., 50c; 20 lbs., \$7.50; 100 lbs., \$36.00.

Kentucky Blue. **Orchard.** **Red Top.** **Timothy.**

Red Top, Choice—(*Agrostis Vulgaris*)—Grows on almost all soils, but best on moist lands; should be included in all mixtures for seeding down wet or marsh lands. (15 lbs. per bu.) Per lb., 40c; 15 lbs., \$4.50; 100 lbs., \$25.00.

English Rye Grass—(*Lolium Perenne*)—One of the best and most nutritious grasses for permanent meadows and pastures; it endures close cropping and recovers quickly after cutting. Does best on strong, rich soils. (24 lbs. per bu.) Per lb., 35c; 24 lbs., \$4.50; 100 lbs., \$16.00.

Italian Rye Grass—An excellent variety producing a nutritious feed in early spring; if sown early will produce a large crop the same season. (18 lbs. per bu.) Per lb., 35c; 10 lbs., \$2.25; 100 lbs., \$16.00.

Timothy—(*Phleum Pratense*)—Dakota grown; thoroughly re-cleaned; the best Timothy Seed on earth. You know what Timothy is, and you can grow it. A few years ago it was almost unknown to the farmers and stock growers of South Dakota; today it is growing successfully in the eastern half of South Dakota, from the south to the north line. Most farmers have their Timothy and Clover meadows and pastures. Our seed is all northern grown, and of the very best grade. (45 lbs. per bu.) Pound, 25c; 10 lbs., \$1.75; 50 lbs., \$7.00; 100 lbs., \$12.00.

For Permanent Upland Pastures—Farmers frequently desire to lay down certain fields on account of inaccessibility or difficulty of working, as a permanent pasture for their stock. It is highly desirable that the right grasses be selected for the purpose and the location. The ordinary May grasses, as a rule will not answer at all, as they will not maintain their growth under the tramping and close cropping of stock. Other grasses, while succeeding well in meadows, are totally unfit for uplands. The seed we offer under this head is made up of varieties particularly qualified for permanently settling upland pastures. Pound, 35c; 100 lbs., \$30.00.

For Permanent Meadow Pastures—The object to be obtained in this case is exactly the same as under the last heading, but the location and condition being entirely different, a totally different set of grasses must be used in making up the mixture. The use of this mixture may be relied upon by farmers to give a satisfactory, permanent meadow pasture. Pound, 35c; 100 lbs., \$30.00.

Slender Wheat Grass, also Called Western Rye Grass—This valuable forage plant grows wild over North Dakota and, in fact, all of the northwestern states, and is considered one of the best hay grasses in those sections. I have seen it growing abundantly and luxuriantly on some of the poorest rocky land along the railroads in some of the western states. I consider it one of the most valuable grasses for those sections. If wanted for hay, should be cut early, as it is relished better by stock. It thrives on all soils, but is peculiarly adapted to prairie soils. It gives good returns on land quite strongly impregnated with alkali and fits it so that grain may be grown successfully.

The seed being quite heavy, may be sown with any ordinary grain seeder. When sown alone as is the common practice, the seed should be put in from 1 to 3 inches deep according to soil and season, 15 pounds to the acre. If with *Bromus Inermis*, 7½ lbs. of each. 1 lb., 35c; 10 lbs., \$2.50; 50 lbs., \$9.50; 100 lbs., \$18.00.

South Dakota State Capitol Building

Lawn from Gurney Seed

We are showing here a photograph of the new Capitol building at Pierre, South Dakota, together with the lawn surrounding same. These grounds were planted with our special lawn mixture in May; this photograph was taken in early September and shows something of the luxuriant growth of the grass and the beautiful lawn surrounding this elegant new Capitol building. The marvelous beauty of this perfect lawn produced in so short a time has created a great deal of favorable comment among the newspapers of the Northwest, some of them devoting columns to it this past summer. Gurney's Lawn Grass will produce this kind of a lawn anywhere. South Dakota is to be congratulated on its fine building and beautiful lawn.

Capitol Lawn Mixture—It is made up of the seed of several fine leaved grasses, selected and recommended by the experts of the Agricultural Department at Washington, after a series of most careful experiments extending over several years. We can conceive of no better authority on the subject than these painstaking investigators. It may be said here concerning all these special purpose grass mixtures that they are based mainly on the results of these field trials at the department and at various State Experiment Stations. The mixture offered here for lawn purposes has been tested thoroughly under the severe conditions of our climate, and has proven so generally satisfactory as to fully warrant us in claiming them to be unexcelled. Pound, 55c; 10 lbs., \$4.50.

For shady places, certain fine grasses are used that show a particular aptitude for maintaining their growth in the shade of trees. These grasses are generally shy seeders and consequently the seed is high priced, as will be noted in our price list, but the results obtained will fully warrant the cost. Pound, 55c; 10 lbs., \$4.50.

Millet

Early Fortune—This has come to be one of the most valuable crops that the farmer can raise, the seed being the richest and most valuable stock food that can be produced, while the hay is very valuable for stock. A very much prized peculiarity of this millet is that the seed ripens while the hay is yet green, when, if cut properly, can be threshed for seed, while the hay makes excellent fodder after being threshed. Pound, 20c; 100 lbs., \$4.00.

Liberty Millet—Planted on good land, produces a large crop of hay or forage during the summer months and leaves the ground in the finest condition for wheat. There is no larger yielding forage plant. Seed is valuable for poultry. (Bushel, 50 lbs.) Sow $\frac{1}{2}$ bushel to the acre. Values constantly changing. Write for prices. 1 lb., 20c; 50 lbs., \$2.50; 100 lbs., \$4.50.

Japanese Millet—All things considered, we call this the most valuable thing in our whole list of forage plants. It has been sold under different names, as "Billion Dollar Grass," "Steel Trust Millet," etc. We recommend it for the following reasons: First, it makes more hay than German Millet or any other. Second, although it grows so large, sometimes seven or eight feet high, the hay is of the most excellent quality, superior to corn fodder. Third, it is adapted to all sections and a great success wherever tried. It does well on low ground. Fourth, two crops a season may be cut from it, or, if left to ripen, it will yield almost as many bushels of seed per acre as oats. Fifth, it requires less seed per acre than any other millet, 20 to 30 pounds being sufficient. Sixth, it makes fine silage, especially if mixed with soja beans or sand vetch. Seventh, it is highly endorsed and recommended by the U. S. Department of Agriculture, by all Experiment Stations and by seedsmen generally. Be sure to order of us, as we are headquarters. Treat it exactly as you would German millet, only sow it a little earlier for best results. We know it will please you. (40 lbs. per bu.) 1 lb., 25c; 10 lbs., \$1.50; 40 lbs., \$4.50; 100 lbs., \$7.00.

Pencilaria Pearl Millet—This mammoth millet is unlike any other millet grown, and is often referred to as Cattail Millet on account of the resemblance of the head to that of the cattail, grown in the sloughs. The millet grows to a height of 10 feet; produces a wonderful amount of forage and will produce two crops in one season. After the first crop is cut, it immediately sprouts up from the roots and gives you another good crop. It can be sowed broadcast or in drills and cultivated. It requires about 12 lbs. of seed per acre. Price, per lb., 40c; 10 lbs., \$3.25.

The New Siberian—The most wonderfully productive and satisfactory forage plant, possessing in a superior degree all the essential merits of any of the older sorts, besides many other points of excellence that distinguish it and render it a most valuable addition to the list of forages and which destine it to take front rank if not lead all the rest. It is said to have come from Russia, which would, of course, give it vigor and hardness not possessed by those originating in a warm climate. 1 lb., 25c; 50 lbs., \$2.25; 100 lbs., \$4.00.

Kursk Millet—This very valuable millet is one sent out by the Department of Agriculture several years ago. We find that it will produce more hay in the dryer regions than any other variety of millet you can plant. The color of the seed is red like the Siberian, only a little darker in color. It yields heavy crops of seed and forage. We especially advise the planting of this in any section where the rainfall is not ample and regular. Sow 20 pounds to the acre. Price, 1 lb., 25c; 20 lbs., \$1.50; 50 lbs., \$2.65; 100 lbs., \$4.75.

HOG MILLET

We have tried in the last two catalogs to discontinue the use of the words "hog millet." The millet known as hog millet is also known as Broom Corn, Manitoba and Early Fortune Millet. It comes in several colors, the clear white, which is the genuine Hansen's Siberian Proso, the yellow, the red and the black, all of these millets yield immense quantities of seed which is exceptionally valuable for feeding purposes. There are several varieties of Proso; we are listing them under the name of Proso and under their old names which should not have been given them; it would be just as reasonable to call corn "cow corn" as it was to name the Proso "hog millet." These Prosoes are not as desirable for hay as for grain and millions of pounds of this grain is used in the Siberian and Russian countries for human food, in fact, we have used it and found it extremely palatable. 1 lb., 20c; 10 lbs., 85c; 50 lbs., \$2.25; 100 lbs., \$3.75.

PROFESSOR HANSEN'S SIBERIAN PROSO

There are a number of varieties of Proso brought over by Prof. Hansen previous to this one. This is the best, and other varieties should not be confused with this large seeded Hansen's White Siberian Proso.

In Professor Hansen's various trips to the Siberian country he has brought many valuable forage plants, vegetables and flowers to the United States. The Siberian Proso is one of the very valuable ones, especially at this time, when we are trying to conserve wheat. The protein contents of Proso compares very favorably with that of wheat and is an excellent food for human consumption. It can be ground with wheat and makes excellent bread, and it alone makes one of the very best of breakfast foods, higher in food value than probably any grain now used for the purpose. Professor Hansen's description of the Proso is given in one of the bulletins issued by the Brookings College in 1914. We are copying in part from that:

"A large-seeded white-grain millet of the Proso type grown by the Kirghiz Tartar nomads in the Semipalatinsk region as a grain for their stock; also grown extensively by the Kirghiz or themselves, produced in their climate, where the annual rainfall is about eight inches. It will probably yield well on the driest upland in the driest years in all our western states. When it is hulled and cooked for the table the Russians call it 'Kasha,' and it is very extensively used in European Russia, Siberia, Turkestan, Mongolia, and other parts of Asia, especially the driest regions.

"I was favorably impressed with its table qualities near Semipalatinsk, Siberia, in 1913. A favorite method is to boil the hulled seed in water, season it with salt, then serve with milk or cream and sugar. The seed is very easily hulled. The Russian peasants use hand hullers. The Kirghiz nomads often merely pound the sack with a stick, then winnow it in the wind.

"This variety was extremely productive here at Brookings the past season, the yield being over four bushels of grain from one pound of seed sown thinly at the rate of five pounds per acre."

This is a specially valuable grain now, as you can produce large crops of it and conserve the wheat where you have been using wheat. For feeding stock, poultry, and everything of that kind Proso is equal to or better than the wheat.

Proso is also specially valuable as a summer catch crop, something that can be planted very late. It can be planted as late as July 15th and still mature a crop of grain and hay. Do not consider that Proso is going to produce much hay to the acre or be of great value. It is a grain crop, the hay or straw being equal to, at least, that of wheat or oats straw.

There are so few late catch crops that Proso will be used extensively on land that has had an early crop removed from it or where it has been drowned out and not in shape to work until mid-summer. Sow 12 pounds per acre. Price, 1 lb., 35c; 3 lbs., 70c; postpaid; 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$3.25; 100 lbs., \$6.00.

Sudan Grass

Sudan Grass was introduced into the United States in 1909 from Sudan under the name of Garawi. One-half pound of seed was received, and the results were so very promising that plans were immediately made for testing it out thoroughly in all parts of the United States. As a result of these tests, the Department of Agriculture reports that Sudan Grass will be of the greatest value in the Central States, and especially in the parts of Texas, Kansas, Oklahoma, Nebraska and Colorado that are deficient in rainfall. These dry regions have no other satisfactory hay crop and Sudan Grass will be of immense value there.

Sudan Grass is strictly an annual and dies each year like millet and must be seeded again each spring. This makes it fit admirably into any system of rotation, and while it does not benefit the soil like legumes, it does afford a change in crop and this is a good thing for the soil. Sudan Grass is tall, reaching a height of from 7 to 9 feet. The stems are very small and are rarely thicker than a lead pencil. The plant stools wonderfully and produces, under favorable conditions, as many as 100 stalks from a single root.

Makes good when it is dry; makes better when it rains.

Produces from 3 to 5 tons of hay per acre when planted in 3-foot rows.

Takes about 4 pounds of seed per acre to plant in 3-foot rows.

Can be cut from two to four times per season.

Stock eat it in preference to all other hays, including alfalfa.

Analyzes 9.13 per cent protein.

Has been grown successfully in all kinds of climate under all sorts of conditions.

Prices: 1 lb., 30c; 3 lbs., 85c, postpaid; 10 lbs., \$1.70; 50 lbs., \$7.25; 100 lbs., \$12.75.

LEEDS, IOWA

We are well pleased with your seeds.
How is this for Sudan?—Henry W. Elias.

SOUTH DAKOTA STATE COLLEGE

Brookings, South Dakota.

Dear Sir: In reply to your inquiry regarding Sudan Grass, I would state that it is a fine stemmed specimen of sorghum, introduced from Africa by the United States Department of Agriculture and tested at the South Dakota Experiment Station for the past three seasons on the Brookings and Highmore farms. It has given excellent results at Brookings, and, moisture conditions being considered, has given good results at Highmore. It will make two crops a year with plentiful moisture. It is very palatable and is readily eaten by cattle. I think it would be safe to count on a yield of three tons per acre in the eastern part of the state and one and one-half tons in the central part of the state, although much higher yields might be obtained under favorable conditions. It requires from four to six pounds per acre to seed in rows three feet apart, or about thirty pounds per acre for solid seeding. The former method has several advantages, because it insures a crop in a dry season, saves on the cost of seed and leaves the land in good condition for the ensuing crop.

MANLEY CHAMPLIN,
Assistant Agronomist in Charge of Field Experiments.

Alfalfa Seed, Dakota No. 12

Dakota Grown, 99½ Per Cent Pure, Guaranteed

FOR more than forty years the state of South Dakota has been producing crops of alfalfa that are profitable. When I say profitable I mean that when the first acre of alfalfa seed was planted in South Dakota and that seed commenced to grow and they cut the first crop, that acre of alfalfa was producing a profitable crop, more profitable than other crops, no matter what they were, in that neighborhood. When that single acre of alfalfa has increased to more than one hundred thousand acres the state was made richer by millions of dollars, and today South Dakota and the world feel the effect of the single acre of alfalfa planted in South Dakota more than forty years ago. We do not know the source of the seed first planted in South Dakota, but we do know that by process of elimination and the "survival of the fittest" the present day alfalfa seeds being produced in South Dakota owes its parentage to the original field planted; that South Dakota is producing alfalfa seed that in turn produces the hardiest alfalfa plants, and those that will yield greater returns in hay than seed sown in any other part of the world. That is a broad statement, but it has been demonstrated, and today alfalfa seed produced in South Dakota is worth and sells for from two to six cents per pound more on the open market than seed produced in any other state. The alfalfa seed which we are offering you as Dakota grown is known as DAKOTA No. 12. This seed is produced from old fields or from fields whose parentage is the old Dakota fields. Our seed is all from the high and dry section of western South Dakota (where the rainfall is much less than in Minnesota, the home of the much advertised high priced Grimms Alfalfa), where the snow covering is very light or none at all, where the temperature drops from five to fifteen degrees lower than any other point in the state. These strenuous conditions have eliminated any plant that may have been tender, leaving nothing but the hardiest to produce seed, and in each successive generation any plant showing any inherent weakness has been destroyed by these conditions and the fittest has survived. Alfalfa growing in the United States is no longer an experiment. There is not one state in the Union but what can produce alfalfa on most of its land profitably, and with the advent of DAKOTA GROWN SEED, GROWN ON VIRGIN SOIL, FREE FROM FOUL SEED OF ANY KIND, IT MAKES THE PROFITS LARGER AND THE TASK OF SECURING A PERFECT STAND VERY SIMPLE.

DAKOTA 12 ALFALFA AND AEROPLANES IN TENNESSEE

Our Mr. Seeley takes a trip to Tennessee at least once each year to get lined up on the alfalfa seed business. We sell carloads of alfalfa seed in the South each year, and the picture was taken of Mr. Seeley and one of our customers in an alfalfa field grown from Gurney seed. This field was rented by the government as a landing field during the war, and Mr. Seeley met many of the aviators. One-half of the field was planted to southern grown seed, and the other half to Dakota No. 12. The aviators remarked to Mr. Seeley that they always "cushioned" down in the heavy alfalfa (from Dakota grown seeds), and "taxied off" in the short grass (from southern grown seed).

Every bushel of alfalfa seed offered by us is re-cleaned and first class in every respect. Any acre of land, no matter where located, if it will produce either a crop of alfalfa seed or hay, is worth \$200.00 per acre or more and will pay a good income on that amount. It will produce more forage, either green or dry, than any other known clover or grass. It successfully resists the fiercest drought; in the driest weather, when every blade of grass withers for want of moisture alfalfa stands up bright and green as in the spring. **South Dakota No. 12** is proof against our severest winters. It is adapted to dry and sandy soil where other plants fail to grow, as well as those that are deep and rich. Its roots, often measuring twenty to thirty feet in length, force their way down deep into the subsoil in search of moisture and plant foods that cannot be reached by any other plants. It draws nitrogen from the air and stores it in the soil more than 100 per cent faster than any other clover excepting sweet clover. Alfalfa is better than a bank account, for it never fails or goes into the hands of a receiver. It is weather proof, for cold does not injure and heat makes it grow all the better. The rust does not affect it. A severe hail storm might beat it into the ground, but in six weeks from that date you could cut a crop of from one to two tons of hay per acre. Fire will not kill it; fields can be burned over safely early in the spring. When growing there is no stopping it. Begin cutting a 20-acre field, and when your last load is handled at one end of the field it is ready to cut again at the other. For fattening your cattle and hogs it will save one-half of the grain commonly used. This has been absolutely demonstrated by the best feeders, and in this time of high-priced grain, and lots of alfalfa hay, you can feed stock profitably. If your ground will grow alfalfa, you have "the world by the tail with a down hill pull."

A WORD OF WARNING—We wish to impress on our readers that nearly all of the alfalfa offered under various names and at high prices are nothing more nor less than the western South Dakota grown alfalfa seed, and this seed you could not make any better than it is no matter what price you pay for it. Consequently you had better purchase it under its correct name and at a reasonable price, rather than at a high price, and secure the same seed. In some cases this is the fault of the growers, who find that by changing the name they can secure a higher price for their seed, and judging from reports from our purchasing agents they have caught a crop of suckers. It is absolutely impossible for you to get better alfalfa seed, in commercial quantities, than **Gurney's South Dakota No. 12 Alfalfa**. We guarantee it to be 99½ per cent pure. Sold for just what it is and at a price that brings it within the reach of all. **Lb., 55c; 10 lbs., \$4.00; 50 lbs., \$18.00; 100 lbs., \$34.00.**

**PROFESSOR NEILS E.
HANSEN AND A COS-
SACK ALFALFA
PLANT**

Does it look as though the people of the state of South Dakota and of the United States have squandered one cent in sending Professor Hansen through the wilds of Siberia in search of this wonderful alfalfa? This plant was grown in Lyman county, South Dakota, on a high, dry place, and produced eight pounds of dry hay from the one plant in one season. We will be pleased to send you a reproduction of this picture of Professor Hansen and his Cossack Alfalfa on very best paper, without printing, suitable for framing, if you request it when you order Cossack alfalfa seed.

Professor N. E. Hansen's Cossack Alfalfa

Every pound of Cossack Alfalfa seed sold by us was purchased by our own buyer of the original growers on their own farms, brought into our warehouses, cleaned carefully, placed in sealed bags. This insures you genuine Cossack Alfalfa. This insures you alfalfa seed that will grow and produce crops on the highest and driest places in the country. It insures you a crop of alfalfa where the annual rainfall is eight inches or better; it insures you a crop of alfalfa even though it gets so cold the mercury freezes. This insures you a better crop of hay, under adverse or good conditions, than can be secured from any other variety of alfalfa, no matter what it is.

Mr. D. B. Gurney,
Yankton, S. Dak.
Dear Mr. Gurney:

In reply to yours of the 18th inst., the Cherno has been consolidated with the Cossack alfalfa. The Cossack has certainly pushed very quickly to the front, as it is very resistant to both cold and drought.

The Cossack has shown such great superiority that the acreage will increase very rapidly. As you indicate, a fair price will make the seed sell better and be better business for all concerned. I am very glad to note your intention of being a leader in the great work of distributing this variety. The Cossack alfalfa can no more be held back than a bull can be kept in an ordinary poultry yard. The bull will go through

the wire and take some of the posts along with him.

The Semipalatinsk is just what I judged it at the beginning: it is especially a plant for the driest uplands. As a seeder it cannot be grown in comparison with the Cossack. All I claim for the Semipalatinsk is that it will make an abundance of hay on 8 inches of rainfall per year. I have very good reports of the Semipalatinsk in the driest regions from the Mexican border north to Alaska. Will be pleased to write you further at any time.

Many farmers who have tested Cossack alongside of Grimm write me they find Cossack greatly superior in every way.

N. E. HANSEN.

Boise, Idaho, July 11, 1918.

Dear Sirs: The Cossack alfalfa seed which I got from you last spring germinated very nicely. When the plants were about 10 days to two weeks old, we had six nights of very severe weather, water freezing from one-half to one and one-half inches of ice. The plants had from three to nine leaves at this time. The frost did not seem to injure them at all to speak of, only the edges of the leaves being affected a little. Other alfalfa in the same vicinity, that is the ordinary variety and the Grimm variety, very much older plants, being four or five years old, was frozen entirely to the ground. This convinces me that the Cossack variety is almost frostproof.

W. L. FRAZIER, M. D.

Extracts From Bulletins Issued by Prof. N. E. Hansen ALFALFA AND OTHER SEEDS FROM SIBERIA

Gathered in 1913 by Prof. N. E. Hansen.

These seeds were gathered upon my fourth expedition to Siberia on the dry, open steppes near Semipalatinsk, southern Siberia. This is a region with a total annual precipitation of eight inches, including both rain and snow, and with a temperature range of from 106 degrees in summer to 50 degrees below zero Fahrenheit in winter, often without snow. The expedition, was authorized by the South Dakota State Legislature, March, 1913.

Planted in rows 2x4 feet or 5,444 plants to the acre, this figures out 8 to 12 tons dried weight, per acre. You could cut this twice in two and still do very much better than we are doing from buffalo grass. I ask no one to believe any faster than can be demonstrated by field tests.

As to how far north this will go, some encouraging reports have been received from Canada: F. MacIure Sclanders, of Saskatoon, Saskatchewan, Canada, reports it hardy after three years' trial and states: "My own experience with Hansen's alfalfa leads me to look upon them as the most important agricultural innovations for very many years."

In a circular sent out by Prof. Hansen on the date of February 12, 1914, (he headed it "Siberian Upland Alfalfa") there has been a great deal of criticism by an envious few of his work in introducing these new alfalfas. The following are extracts from his answers to them. You will see by this he strongly recommends the Cossack Alfalfas for the highlands and the dry places where other alfalfas are not a success:

"The history of all new plants, inventions and methods shows that unfavorable evidence can be secured in abundance from experts on any new proposition. When the first steamboat was about to cross the ocean, experts figured out the utter impossibility that any boat could be made big enough to hold enough coal for the voyage. A similar incredulity is evident when I express my belief that we can raise this Siberian alfalfa on the highest and driest uplands from the Panhandle of Texas to the Canadian boundary. The fact that this plant is native in an 8-inch rainfall climate, with a temperature ranging from 50 degrees below in winter to 106 degrees above in summer gives me confidence in the ultimate outcome.

My work aims to add many millions of dollars to the value of our western uplands. Three years ago, in my address on 'Hardy Alfalfas

for Northern Prairies' at the State Conservation Congress at Pierre, January 27, 1911, I made the following statements:

"Some people are inclined to shut their eyes and ears to the fact that the common alfalfa is sometimes winter-killed, and to blame the farmer for all the failures, such people like to tell only about its successes and to disregard the failures. This is not the best way. The other extreme would be to wait with sowing any alfalfa until seed of perfect hardy plants is obtained in commercial quantities. either view is extreme and unwise."

Creston, Mont., Jan. 19, 1920.

We would like to have one of your booklets telling of Prof. Hansen's trips to Siberia and his plants that he has brought to this country. The Cossack Alfalfa which we got from you last spring has certainly given a good account of itself. We think it is wonderful the way it held its own against the weeds and extremely dry weather of last summer.

NEIL C. PARKER.

Rosthern, Sask., Dec. 9, 1920.

Replying to your letter of Dec. 1st I may say that I am enclosing what photos I have on hand of Cossack Alfalfa plants. These are the fifty mother plants I received from Prof. Hansen in 1912, and as you will note, they reached a height of over seven feet this season when a hailstorm stripped them badly and checked the growth. In 1915 these plants grew vigorously and reached a height of six feet on a three-inch rainfall, and produced seed abundantly. I have now about two acres planted, and this area I might have increased but in two years out of four hail destroyed the seed. I consider Cossack the best of all of Prof. Hansen's introductions, not only in the production of forage but in seed production, and will largely replace the variety which I am at present growing when it is better known and seed is available. Trusting these photos may be acceptable to you.

SEAGER WHEELER.

Mortlach, Sask.

Some little time ago I bought from you 4 lbs. of alfalfa seed and sowed it about June 1st, with a garden seeder, covered about an acre in drills about 1 ft. apart. It has come up very thick and is now about 4 to 6 in. high. This is Cossack Alfalfa and I plan to transplant it but do not want to until fall or next spring, and as I see by your catalog there is a bulletin on the subject issued by the South Dakota Agricultural College, and described on page 87 of your catalog, I would consider it a great favor if you can get me a copy of this or let me know how I can get a copy. Also any other bulletins which will throw any light on the subject. I have successfully transplanted about 8 acres of cabbage with a Bemis Transplanter.

C. H. BAGG,

We are showing photographs of a forty-acre field of Cossack Alfalfa in Lyman County, South Dakota. This you can see is planted right over the tops of the high hills of that section of the country. This forty-acre field is planted in rows three feet apart, and is cultivated after each cutting. The picture, showing the automobile on top of the high hill, is taken when the field is in full bloom, and shows the field ready to be saved for the seed crop.

Extracts from an Article Written by Hugh Jeffries of Wisconsin

We are using the Cossack (Russian) alfalfa, imported from Siberia a few years ago by Prof. N. E. Hansen, the plant explorer for the United States Department of Agriculture, as it does not winter-kill nor kill out from drought, and has a more widely spreading root and crown, than the tap-root alfalfas. It also produces a heavier crop of both hay and seed than the ordinary varieties.

The Cossack alfalfa crowns spread underground until they are about 16 to 18 inches across and each crown will send out up to 500 stems, and stems all send out side branches, beginning right at the crown and continuing all the way up until each stem will have from 10 to 20 side branches. This makes the very best quality of hay.

It is quite resistant to frosts and gets a very early start in the spring, having a good crop made before it is time for hot, dry weather. It grows in the fall until the ground freezes and is not injured by late cutting or fall pasturing.

Hugh Jeffries.

D. B. Gurney says: To sum up the whole matter of the Siberian Alfalfa: The United States invested a few thousand dollars in the several exploring trips of Professor Hansen in search of these alfalfas. The State of South Dakota invested about ten thousand dollars for the same purpose, and the people of the United States are millions of dollars better off today than they were before this expenditure of a few thousand dollars, for the reason that Professor Hansen has discovered and brought over an alfalfa that will grow on the millions of acres that would not produce alfalfa previously, and the seed will be distributed just as rapidly as possible. Every farmer owning land that would not produce the common alfalfa profitably and successfully is now assured of a hardy alfalfa that will produce paying crops on that ground. Consequently his land is equally as valuable as the more fortunate neighbor owning the low or bottom land. This **Cossack Alfalfa** has extended the alfalfa growing territory hundreds of miles north and over an area of millions of acres of the higher and dryer parts of the United States from the Gulf of Mexico to northern Canada. These trips to Siberia and Asiatic Russia made by Professor Hansen were trips that required lots of endurance, many dangers, and all of the inconvenience that one could possibly suffer, traveling as he did thousands of miles into the interior among the half-civilized tribes in that country. These trips were made by Prof. Hansen without a thought of ever receiving one dollar additional for himself, and he will probably not receive much proof of appreciation from this great American people until he has passed from this world. Then the millions of acres of Cossack Alfalfa and thousands of acres of orchards and gardens produced from fruits, etc., that he has originated will be the most lasting monument and tokens of appreciation that a man could need.

We have prepared a small booklet giving some of the more important points and experiences of Professor Hansen in his various trips, and telling something of his introductions and inventions in the vegetable, grass, grain and fruit line. We shall be more than pleased to send one of these booklets, free of charge, to anyone asking for it. This little booklet is written on a very conservative basis and after you have read it you will realize something of the difficulties he has surmounted in his work.

This little history book of Professor Hansen which we are publishing will tell of his three separate trips to Russia and Siberia as an American Agricultural Explorer. It will tell of his trips into the Province of Semipalatinsk and from there into the land of the Don-Cossack, of his failure to secure any quantity of seed in his first and second trips, and the success in his third trip. Tells of the land where they milk five different animals, of the land of the big, fat rumped sheep, sheep that weigh twice that of the American kind and store up in the summer forty to fifty pounds of pure mutton tallow on their rump. This is their winter food. It will tell of how he has in the Brookings College produced the new small fruits, raspberries, etc., the wonderful Hansen Plums that have made it possible for you to have all of the plums you want for yourself and the market. It tells of the things that Professor Hansen will do in the future.

We find the Cossack Alfalfa is very frost resistant; in fact, almost frost-proof, as heavy freezes in the middle of May killed back and destroyed the first cutting of the common alfalfa, while the Cossack continued to grow and produce its regular crop of hay. We find in the fall it will be green and suitable for pasture long after all other varieties are spoiled for that purpose by the freezing.

In purchasing the Cossack Alfalfa, we advise that you look over the Planet Junior section and select a drill. In sowing, we will say, 10 pounds of Cossack Alfalfa, you would probably save nearly half the cost of one of the Planet Junior drills in the saving of seed or in the greater space of ground that you could cover with the 10 pounds, and on a sowing of 20 or 30 pounds I venture to say that you would save the entire cost of the machine in the one operation. **Price of Cossack seed in sealed bags, 1 lb., \$1.50; 3 lbs., \$4.50; 5 lbs., \$6.50; 10 lbs., \$12.50, postpaid; 100 lbs., \$100.00.**

Duroc Hogs in Alfalfa

This picture shows a bunch of our September pigs in the alfalfa field in the latter part of May. I do not know that Durocs like alfalfa any better than other pigs, but if others like it as well as the Durocs and thrive as well, the man who neglects raising alfalfa for his pigs is missing a bet. We had 160 head in this 10-acre field and it made a heap of pork.

Alfalfa for Hogs

We had an auction sale at our hog ranch yesterday, and we sold quite a few hogs at rather good prices, and we wondered as the various lots were taken away by their new owners whether or not they would be cared for to get the best results. In most cases they would be. Occasionally a man grows hogs without profits. To grow hogs profitably you must know the costs of the various feeds and their food values. We find that a mighty few acres of alfalfa will pasture 100 head of hogs; we find that during the pasturing time it takes a very small quantity of grain. Consequently, we bring our hogs up to the first of November at a trifling cost compared to the regular grain fed pig and hog. We find after the alfalfa fields are beyond the pasture stage in the fall that they go naturally and willingly from the green alfalfa in the field to the well-cured alfalfa hay, and with only a slight increase in the grain ration they keep on growing and fattening. Hogs should be fed alfalfa hay and given alfalfa pasture just as regularly as you feed them corn or other grain. You can produce 8,000 pounds of dry alfalfa hay per acre on any good land that is suitable for alfalfa in the Northwest, and a ton of alfalfa hay has the same value as 1,700 pounds of shelled corn. Figure your corn crop at a much higher yield than the average, say, 50 bushels per acre, and you have 2,800 pounds of shelled corn, and you can produce this 8,000 pounds of alfalfa hay cheaper than you can produce the 2,800 pounds of corn. In planting your alfalfa seed you put your ground in first class condition, just as you do for the corn; you plant the alfalfa seed, spending as much time as you do in planting your corn; and then you are through with your alfalfa until the first crop is ready to harvest. With the corn you cultivate it to get 50 bushel results at least four times; then you husk it at considerable expense, and you put into the crib the equal of 2,800 pounds of shelled corn, worth at the present time, early in November, \$55.00. With your alfalfa you have harvested the 8,000 pounds at about the same, or a little less expense per acre per annum than you have your corn; you have a sale value at the present time of \$100.00 per acre, and a feeding value, comparing it with the 50 bushels of corn, of nearly twice \$100.00.

I do not want you to think that I am trying to have you decrease your corn acreage. I am not. The corn acreage is a mighty important proposition, and you must have both the corn and the alfalfa. One without the other for feeding purposes would lose you money.

Cossack Alfalfa Plant Over 7 Feet Tall, grown by Seager Wheeler at Roseton, Saskatchewan, Canada, 1915. Are still there producing bigger growth than ever. Good letters from Alaska, Canada, as well as those from the cold and dry countries, but Cossack out-yields all in the best alfalfa producing states. It costs more for the seed but it's worth it.

LISCOMB HARDY VARIEGATED ALFALFA

It belongs to the same type as the noted Grimm variety, having the variegated flower, receding root crowns and the branched roots, and is eminently suited to our Western Country on account of its hardiness, which is characteristic. It has given every evidence of ability to resist winter killing and withstands drought. Studies and experiments in Alfalfa during the recent years have brought a new era in Alfalfa production. The demand for hardy seed is bound to increase and Liscomb will undoubtedly meet it.

We believe there is no hardier strain of alfalfa except Cossack grown anywhere, and this is the only absolutely hardy alfalfa that can be bought now at a reasonable price. Our seed of this strain is first-class in every respect, free from noxious weeds and of the highest vitality and purity.

The Liscomb alfalfa is a variety that is practically identical with Grimm's. The first planting of Liscomb goes back to 1877 in Montana and the original fields are still there in good condition. The characteristics of the Liscomb is a spreading root system with several tap roots. This alfalfa stands pasturing and cutting equal to any other and in quantity of hay compares favorably with Grimm's and Dakota 12. One lb., 65c; 10 lbs., \$5.50; 60 lbs., \$28.00; 100 lbs., \$45.00.

GRIMM'S ALFALFA

Undoubtedly this variety has in recent years attracted the attention of Alfalfa growers more than any other variety.

It is said that a small seed stock, sufficient to raise a few plants, was brought to one of the Northern States of America from Europe a little over forty years ago. In recent years great care and watchfulness has been exercised in the further development of this variety. It possesses a variegated flower, a very branching root system, the plant itself being of spreading habit. One of its distinctive characteristics is ability to withstand the rigor of the coldest winter. The seed of this variety commanded nearly twice the price of any of the "blue flowered" varieties.

We have a splendid stock of Grimm this season. The seed is plump, uniform in size and color, of high germination and purity. It will not fail to please the most critical Alfalfa expert.

Grimm's alfalfa is the much advertised variety that has sold at such high prices for the last ten or fifteen years. It is undoubtedly one of the hardiest strains of alfalfa. It was brought to this country by a farmer named Grimm, from Europe, and was planted in Minnesota and the original field still stands. It has obtained an enviable reputation for hardiness and yield in the extreme north. We have a reasonable supply of this variety of seed from fields that we have traced back to the original, and furnish certificate of genuineness with each shipment. This Grimm's alfalfa has been planted from the extreme south even into Canada and from east to west in the United States, as it has been one of the best advertised varieties. Our seed comes from Montana and South Dakota.

The following is an extract from the Farmers' Bulletin, No. 757, entitled Commercial Varieties of Alfalfa: "On account of its superior hardiness, Grimm alfalfa is particularly recommended for the northern part of the Great Plains region and all parts of the Northwest. It has also proved better able to survive the winters in the colder portion of the humid section of the country where winter killing is a serious factor. The supply of seed on the market is still rather limited and commands a high price. As a result unscrupulous dealers have offered for sale large quantities of common alfalfa, under the name of "Grimm." 1 lb., 80c; 10 lbs., \$7.25; 60 lbs., \$42.00; 100 lbs., \$67.50.

Fairbanks, Alaska, June 26, 1920.

I am writing you this letter to let you know that I received the seed o. k. yesterday and also that F. Jay received his all o. k. Cossack Alfalfa is doing fine from the seed I received from you two years ago. We can thank Prof. N. E. Hanson for his travels to Siberia, for he has done remarkable things for the U. S. A.

H. H. Berry.

Almont, Mich., June 24, 1920

I bought from you last year some of your Siberian Cossack Alfalfa. We had a very dry season and I planted it in hills three feet each way. I took the plants that grew and have got about fifteen rows twelve rods long that look very fine, and is from three to four feet high and full of blossoms.

F. E. McGeorge.

Saskatoon, Sask., Jan. 26, 1920.

In a short time I shall order 100 lbs. Alfalfa seed (80 lbs. Cossack, 20 lbs. Semipalatinsk) from you. This is just to ask you to reserve that amount for me. I would like your experience with Cossack and Grimms—comparative tests. These two appear to be practically one as regards variety. Last summer we had an exceptionally dry season. After seeding, we pastured 12 work horses, 2 colts, 3 cows and 20 hogs on about 2 acres of Siberian Alfalfa, and they had abundant feed up to harvest or about Aug. 1, seeded in rows 30 in. apart at the rate of $\frac{1}{2}$ lb. per acre.

Paul Gerlach.

Elgin, Ariz., June 14, 1920.

Enclosed find check for \$12.50 for which please send me postpaid 10 lbs. of Cossack Alfalfa seed. I planted one pound of seed last August and it grew all winter in spite of cold weather as low as 18 degrees above zero. It has made a growth of two feet so far this year, and we have had no spring rains and our summer rains do not begin until July 1. This alfalfa is being grown at an altitude of one mile. With the growth it has made so far this spring without rain I am expecting it to do wonders in growth from July to December. I am planning to put in 50 acres next year if the alfalfa meets with my expectation this summer, which I am sure it will.

Leonard W. Kline.

GURNEY GREENHOUSE COMPANY OF YANKTON, SOUTH DAKOTA, and MITCHELL, SOUTH DAKOTA

We have been particularly fortunate in securing managers for both of our greenhouse plants, the one at Yankton and the one at Mitchell; men who have had a lifetime experience in the greenhouse business and are absolutely A-1 in every respect.

The growing and supervision of all orders shipped from Yankton are handled by Mr. Topp, President of the Greenhouse Company; that at Mitchell is handled by Mr. Helm, manager at that place. Any orders intrusted to the Gurney Greenhouse Company at either Yankton or Mitchell for cut flowers for funerals, weddings, or any other purpose will receive special attention. Vegetable and flowering plants will be packed in the best manner and shipped at the proper time. Orders for cut flowers received by us just a few minutes before the train departs will be taken care of and rushed to that particular train. No disappointments—our motto.

This season, as you will see, we are in much better shape than other times on account of more than doubling the area under glass. We have added a new house at Yankton, 26x150 feet, principally for the growing of vegetable plants, and 70,000 feet at Mitchell. This will grow an immense quantity and we will not disappoint any of our customers this spring.

The Greenhouse Company has purchased at Yankton twenty acres, inside of the corporate limits of the city of Yankton and will construct more than two and one-half acres of greenhouses. Our greenhouses are by far the largest in the State and in coming into Yankton on any of the railroads and on one of the most important highways you will go right by the greenhouses and we shall appreciate your watching for them and where it is possible to do so, we invite you to visit the houses at every opportunity both at Yankton and Mitchell. You will find them interesting.

Our plants for house and bedding purposes are grown in greenhouses with the temperature as low as possible and with plenty of ventilation, so as to make the conditions nearly like the conditions they will meet when transplanted. This makes the plants much hardier and stronger than those ordinarily grown in greenhouses of high temperature.

Postage prepaid in all cases except where noted. We prepay the postage or express on the plants named in this greenhouse section.

We guarantee all plants ordered from this greenhouse section to reach the purchaser in good condition in any part of the United States; if they reach you otherwise, notify us promptly.

Greenhouse Orders on Separate Sheet

Please write your greenhouse order on a separate sheet so that it can be sent direct to the greenhouse for filling; this will avoid delay and error.

Time of Shipment

We ship all plants as soon as order is received, weather permitting; or, if your order calls for plants that should not be sent until some further date, we hold them until the proper time for planting out. If plants are ordered during the cold months for immediate shipment we send them at buyer's risk.

Abutilon, or Flowering Maple—With its maple-like leaves in various colors and its large bell-shaped flowers in various shades of orange, pink and red, make it one of the best house or bedding plants we have. **Each, 20c; 10, assorted, \$1.70.**

Araucaria Excelsia—This beautiful evergreen plant resembles a pine somewhat in appearance, though much finer, and is particularly adapted to table decorations; its beautiful feathery foliage, arranged in whorls, rising one above the other, makes it a beautiful plant, readily grown in the house. **Price, \$2.50.**

Asparagus Ferns

Plumosus Nanus—This beautiful fern-leaved Asparagus is easily grown even in the north windows of a residence. Very satisfactory for cuttings used with cut flowers and for porch boxes. **Each, 20c; 4 for 60c; large plants, 25c and 50c.**

Sprengeri—A splendid plant for hanging basket or porch boxes; it droops most naturally, sending out numerous feathery prongs, making a growth in a short time of three to six feet; it produces a small white flower and the red berry of the regular asparagus. **Each, 15c; 5 for 60c; large size, 25c and 50c.**

Ageratum—Color of blossom a deep, even blue and forming a mass of flowers all summer; dwarf compact growth, very fine for borders. **Each, 12c; doz., \$1.20.**

Aster Plants—Nothing produces so grand an effect as the asters for bedding purposes; solid masses, borders, rows or planted otherwise. We grow these in large quantities in all the best varieties, in separate colors and mixed. **Mixed, per doz., 60c; 100, \$4.00. Named varieties separate colors, per doz., 85c; 100, \$5.00.**

Sweet Alyssum—Largely used for borders and edging. Nice little pure white flowers. **Each, 12c; per doz., \$1.00.**

Antirrhinum, or Giant Snapdragon—Colors, white, yellow, pink and brilliant red. **Each, 15c; doz., \$1.20.**

Begonias—Begonias are almost necessary in every collection of plants in the bay window and can be used (some varieties) in the flower beds and gardens. We have a very fine selection of Begonias. On account of lack of room we are not quoting the various varieties. The Begonia is sometimes called "Elephant's Ear," on account of the shape of the leaf; it is undoubtedly the best of all the Begonias, with their immense leaves, rich coloring, running from green to very dark red. **Each, 25c.**

Centaurea—A dwarf, silvery foliage plant, used largely for ribbon beds or borders. **Each, 12c; doz., \$1.00.**

Cyclamen, Giant Flowered—One of the very best for pot plants for winter and spring blooming; foliage broad and tropical looking, variegated with silver and rose. The immense flowers are carried on long stems and produce in profusion for several months. **Each, 50c.**

Coleus—Whenever you visit the large city parks, the street corners or the parking in some of the better cities and private grounds, everywhere you are impressed with the beautiful beds of Coleus with their various colored leaves, running through the various shades of green, yellow, red, and variegated. These inexpensive plants make the greatest summer decoration, beds, borders, etc., of anything you can plant. We have these in a great many varieties. Just tell us the colors you want and for what purpose—whether for borders or for solid beds—and we will send you the assortment that will be the very best. **Each, 12c; doz., \$1.25. Our Special Velvet Coleus Bed, 50 plants, \$4.50; 100 plants, \$7.50.**

Cuphea—This is the old-fashioned cigar plant with narrow tubular flowers of scarlet, tipped with white. Popular because it is always in bloom. **Each, 15c; 10, \$1.00.**

Carnations—These are the carnations that you get commercially from the greenhouse, the large fragrant flowers with their spicy odor; these are easily grown and bloom freely either in the house or out doors. We are listing only the best of the varieties in the various colors.

White Enchantress—The finest of all the white carnations; flowers extra large and of purest color. **Each 20c; 10 for \$1.50.**

Rose Pink Enchantress—The best of all the pink carnations; extremely large; has probably won more prizes at flower shows than all others. **Each, 20c; 10 for \$1.50.**

Mrs. P. W. Ward—A beautiful pink shade, some lighter than the old Daybreak; is of much better growth than any of the other carnations and the one grown more in its particular shade by greenhouses than others. **Each, 20c; 10 for \$1.50.**

Victory—Many growers claim that this is the finest scarlet of any carnation; we find it produces more flowers and larger than any we have ever grown; it has the spicy fragrance, probably more so than any of the other carnations. **Each, 20c; 10 for \$1.50.**

Chrysanthemums—These are the best of all the autumn flowers, producing flowers from one inch in diameter in the pompon varieties to flowers measuring seven and eight inches across in the large-flowering. We are not going to attempt to describe the several varieties, but will give you the names and the colors; the plants are all that are to be desired. To produce the largest flowers the plant should be disbudded previous to their forming large buds, leaving only one bud on each stalk.

Golden Glow—The earliest blooming of the mammoth yellow-flowered sort.

Mary Anne Pocket—Dwarf, bushy grower, upper part of petals a beautiful red, under side bronze; when in full bloom a variegated ball of bronze and red.

Charles Razor—Early, pure white, in-curve.

Clementine Touset—Early white.

Yellow Touset—Bronze-yellow, early.

Mrs. Robert Holliday—Yellow, out-curve, Japanese.

October Frost—The earliest of the whites.

Golden Chadwick—An improvement over the yellow Chadwick; the Chadwicks are now considered the best of all the late blooming autumn Chrysanthemums.

White Chadwick—As fine as the Golden Chadwick.

Major Bonaffon—A perfect ball of yellow, with in-curved petals.

Pompon Chrysanthemums—Produce an immense number of flowers measuring from one to two inches across; these are exceptionally good for cut flowers, as they last for several weeks after cutting.

Mrs. Harvey—Beautiful white-feathered.

Alice Fox—The finest of the white pompons; this forms a perfect ball and the most flowers of any.

King of Plumes—This is a yellow, feathery, plume-like flower; the best yellow.

Bessie Flight—Anemone-center, pink.

Lydia Thomas—Anemone-center, white with yellow center.

Mensa—Exactly like Shasta Daisy; a beautiful Chrysanthemum.

Price of large-blooming Chrysanthemums: **20c each; 10 for \$1.50.**

Pompon Chrysanthemums, **15c each; doz., \$1.35.**

Dracene Indivisa (Falcon Plant)—Quite generally listed among Palms. It is a decorative plant, growing about two feet high, with drooping green leaves, long and narrow. Especially used for porch boxes, hanging baskets and centers of beds. **Each, 45c.**

Double Daisy—Very double, pure white and pink flowers; it blooms freely from early spring until fall; is a good plant to put in with the pansy beds, or for borders alone. **Each, 12c; doz., 70c.**

Feverfew—This well-known old-fashioned plant is one of the best bloomers we have, furnishing an immense number of pure white flowers with yellow center from early in the season until fall; especially good for cemetery work. **Each 20c; doz., \$1.75.**

Ferns—We are growing only the best varieties of these, such as will do well in ferneries or in the ordinary bay window or fern dishes for table decoration.

Boston Fern, The Improved Sword Fern—This plant produces fronds as much as six feet long in a single season, plants increasing in size for a great many years; the hardiest of all the ferns for house culture. **Each 15c to \$2.00.**

Whitmanii—A cross of the Boston Fern and others, combining all the gracefulness of the Boston Fern with the added wide, fluffy fronds and more dwarf growth; one of the very beautiful ones. **Each, 25c to \$2.00.**

Roosevelt—An improved variety of Boston Fern, much more striking and attractive than the parent sort, it produces a greater number of fronds than the Boston, appearing more compact, bushier and handsomer; fronds have undulating pinnae, giving a wavy appearance to the fronds not given in any other fern. **Each, 20c to \$2.00.**

Fuchsias—This plant produces one of the most beautiful flowers in all the list and is too well known for description. We have these in the various colors from pure white to crimson. **Each, 10c.**

Heliotrope—These are favorites on account of their delightful fragrance. They bloom equally well as bedding plants in summer or pot plants in the house during winter. **Each, 20c.**

Hibiscus—Large, shrublike, woody plant, bearing immense single and double flowers; colors nearly white to the most glowing scarlet. **Each, 25c.**

Hydrangea—These beautiful pot plants bear immense clusters of flowers, often measuring 10 inches through. Flowers on opening are green, changing to the clearest white, and then to bright pink; last a long time. **Each, 35c; large plants, 60c; extra large, \$1.00.**

Jerusalem Cherry—An old-fashioned plant grown for its showy berry fruit which remains on the plant for a long time. **Each, 20c.**

Lantana—This is one of the most satisfactory plants. It is good for outdoor bedding, blooming all winter in the house, and is a mass of flowers at all times. Colors, orange, sulphur, lilac, red, pink and white, all on the same plants, changing the colors from the time the flower opens until it closes. They resemble the ver-bena. **Each 15c; doz., \$1.25.**

Geraniums

Are undoubtedly the most satisfactory of all bedding plants. Getting them from us, most of the plants will be budded and in bloom. Plant them out as soon as danger of frost is over and you have a mass of flowers running from white to the most vivid scarlet all through the summer until fall. They can be taken up in the fall, potted and bloom continuously during the winter in the house. In varieties we have made the selection of those producing the best flowers for bedding and house purposes. There are hundreds of varieties, but only a few of them that are better than others.

Single Geraniums

Alice of Vincennes—White, veined with scarlet.

Mrs. E. G. Hill—Light salmon, bordered with rose.

Eugene Sue—Brilliant shade of russet orange.

Snowdrop—The best single, pure white geranium in existence.

Queen of the West—Beautiful scarlet.

Peach Blossom—Pink.

Rose—Sweet-scented leaves.

American Beauty—Red, best.

Price, each, 15c; \$1.75 per doz.; \$11.00 per 100. From four-inch pots, each, 25c; 10 for \$2.25; 100 for \$16.00.

Double Geraniums

Apple Blossom—Shining salmon, tinted white.

S. A. Nutt—Absolutely the best bedder of all the geraniums, furnishing more flowers than any other variety. Color, dark crimson.

La Favorite—This is the white geranium of the S. A. Nutt type and should be used where white geraniums are wanted.

Mrs. Frances Perkins—Bright pink, the best of the pink bedders.

Each, 15c; doz., \$1.75; 100, \$11.00. From 3-inch pots, 20c each; 10 for \$1.80; 100 for \$15.00.

Pelargonium Lady Washington Geraniums, each, 20c.

Ivy-Leaved Geraniums—These run through various colors, sweet scented, etc. **Each, 20c.**

Special Geranium Bed—12 each of the best scarlet, white and pink. **From 2½-inch pots, \$3.50, postpaid; 4-inch pots, \$6.00, express collect.**

Primrose, Mexican—A perpetual bloomer, has flowers about two inches across, of beautiful colors; keeps well for a great many days before fading. **Each, 15c.**

Chinese—A very popular flower for winter and spring blooming; the flowers vary in shade of color and distinct and beautiful markings. **Each, 15c.**

Rubber Tree—With their large, tropical, leathery foliage, and their ability to stand lots of abuse, making them one of the very good decorative plants for porches or for indoors. **Each, 60c; large size, \$1.00 to \$1.50.**

Vegetable Plants

All of our Vegetable Plants are grown from carefully transplanted stock and must not be confused with the regular bed plants, which will endure less shipping and will not produce as strong, healthy plants as the transplanted stock. We can furnish the cheaper stock at about one-half the prices given below, but do not recommend our customers to purchase any but those which have been transplanted. Packing charges are included in the prices given, but purchaser must pay transportation in every instance. Plants of all kinds should invariably be sent by express, as they will arrive at destination in less time than if sent by freight and will also be given better care and attention in transit.

Cabbage, Early—Ready by April 1st. **Per 1,000, \$7.00; 100, \$1.25; doz., 25c.**

Cabbage, Late—Ready by June 1st. **Per 1,000, \$5.50; 100, 90c; doz., 20c.**

Cauliflower—Ready by April 1st. **Per 100, \$2.00; doz., 35c.**

Celery—Ready in June. **Per 1,000, \$6.00; 100, 90c; doz., 20c.**

Egg-Plant—Ready May 10. **Per 100, \$3.00; doz., 40c.**

Parsley—Ready by April 1st. Curled. **Per 100, \$3.00; doz., 50c.**

Pepper—Ready by May 1st. Ruby King. **Per 1,000, \$10.00; 100, \$2.00; doz., 35c.**

Sweet Potato—Ready by May 20th. **Per 1,000, \$7.00; 100, \$1.00; doz., 20c.**

Tomato—Ready by May 1st. **Per 1,000, \$10.00; 100, \$2.20; doz., 25c.**

Topp Tomato—Per 12, 75c; each, 10c.

Tobacco Plants—12 for 75c, 25 for \$1.25.

Swansonia—This beautiful climbing fern-leaved plant produces an immense number of sprays of pure white flowers resembling the sweet pea in form; exceptionally good for cut flowers. **Each, 15c; 10 for \$1.00.**

Stevia—Growing about 18 inches high, producing numerous sprays of small white flowers of delightful fragrance; it should be taken from the garden and potted in the fall for winter blooming. **Each, 20c.**

Cobaea Scandens—A climber of rapid growth, bearing large quantities of purple flowers of cup-and-saucer shape; good for arbors, and will cling to rough surface without wire or string. **Each, 15c; doz., \$1.25.**

Moonflower—These are rapid growing climbers, as rapid as the morning glory; flowers coming during the night and early morning; a great variety of colors. **Each, 15c; doz., \$1.25.**

Ivies, English—An old favorite vine, showy the year around if properly grown; will not stand the temperature of the north out during the winter; must be taken in in the fall. **Each, 25c.**

Smilax—This is the vine that is grown by florists for the largest quantity and best green for cut flowers and floral work. **Each, 15c.**

Marguerite Daisy—The well-known daisy, producing large white flowers with yellow center. **Each, 20c; doz., \$1.75.**

Oleander—These old-fashioned shrubs are popular once more; no plant makes a better specimen in tubs for verandas or yards. We have these in pink and white. **Each, 45c.**

Palms—The most elegant and highly decorative of all plants; we are offering only such varieties as are desirable for ordinary indoor culture.

Kentia Balmoreana—This is the hardiest and best of all the palms in cultivation; a rapid grower. **Each, 50c; large plants, 70c to \$2.50.**

Areca Lutescens—A graceful, strong, upright grower, with long, finely-cut leaves; easy to grow. **Each, 50c; larger plants, 70c to \$2.50.**

Double Petunias—The double petunias are extremely popular, growing more so each season for both indoor and bedding purposes. The variation in color of flowers on the same plant and their extremely large size and rich markings make them a flower to be desired. Growing the double petunia from seed is almost impossible, as they do not reproduce true. **Plants, each, 15c.**

Vinca Rosea—This is the perfect bush with glossy dark green foliage, covered every day in the season with white and pink flowers measuring about one inch across, a very desirable plant. **Each, 15c; doz., \$1.25.**

Vinca, Major—One of the best vines for window boxes, hanging baskets, porch boxes, etc. Leaves dark, glossy green, variegated white, **doz., \$1.50.**

Wandering Jew—The old-fashioned trailing plant, used for hanging baskets, etc. Too well known to need description. **Each, 10c; doz., \$1.00.**

Bedding Plants

We grow these in large quantities, all of them being transplanted at least once, and perfect specimens of healthy plants. At the dozen price we pay the transportation charges; at 50 and 100 prices transportation to be paid by the purchaser.

	Per doz.	Per 50	Per 100		Per doz.	Per 50	Per 100
Ageratum	\$1.50	\$2.50	\$4.00	Geraniums	\$1.75	\$5.00	\$11.00
Alyssum	.85	1.75	3.00	Heliotrope	1.50	4.50	9.50
Dusty Miller	.85	2.25	4.00	Lobelia	.30	2.50	4.50
Asters, Named	.85	1.75	3.50	Pansies, Giant Mixed.....	.75	2.50	4.25
Asters, Mixed	.60	1.50	3.00	Petunia, Double Fringe.....	1.00	4.00	7.00
Cannas, Growing Plants.....	2.50	6.00	11.00	Petunia, Single Fringe.....	.60	2.00	3.75
Coleus	1.50	4.50	7.50	Salvia, Extra Heavy.....	1.25	4.50	7.00
Feverfew	1.75	4.00	7.00	Stevia	1.25	3.50	6.00
				Verbena	.75	2.50	4.50

Notice

If you want larger or specimen plants of anything from the greenhouse, we will give you the size and price of the plant. We can furnish specimen plants in anything we offer. These for quick effect in landscape work, in the house or garden.

Cut Flower Department

We have at all times a supply of fresh seasonable flowers; these consist of Roses and Carnations twelve months in the year; Chrysanthemums, from October to January 1st; Lilies, Hyacinths, Tulips, and a great many other flowers from January to June; large quantities of Peonies and Gladiolus and Dahlias during the summer months.

Floral emblems for all purposes can be made up promptly, and your wire orders will be appreciated.

Our New Greenhouses and Their Managers

We take pleasure in announcing to our trade that we have completed, at Mitchell, South Dakota, the largest and finest greenhouses in the Dakotas. Each of these houses is nearly 300 ft. long and nearly 50 ft. wide and is of the most modern construction. The houses there are in charge of Mr. Helm and those at Yankton in charge of Mr. Topp, who is president of the Green House Company. With this new equipment we are better than ever equipped to supply you with everything in the greenhouse line, including fresh vegetables, such as Lettuce, Radish, Tomatoes, Parsley, etc., during the winter months. These houses will be used especially for the growing of Roses and Carnations, and on account of the favorable location of our houses at both Yankton and Mitchell we can give the Dakotas better service than from elsewhere in the state. We give you the very best service in flowers for special occasions, weddings and funerals. Last year the greenhouse business grew so rapidly that a great many orders were not filled in full. With this new equipment you can't swamp us.

Landscape Your Ground

We have discontinued the old plan of planting your ground for you. We found that in the spring when the planting should be done we had other work for men who were competent to do the planting; consequently had to abandon it. But this does not mean that we have abandoned the making of plans. We have in our employ the best landscape artists and we shall be glad to make plans for you, charging only a nominal fee. Write our Landscape Department and they will ask for such information as they may need before proceeding with the plans. Will also be able to give you an approximate cost of the plants and shrubs necessary to complete the planting.

Toronto, Canada, Nov. 8, 1920.

My dear Mr. Gurney: A number of years ago my brother located in Tsin Feu, China, and while there purchased and received from you quite large quantities of agricultural seed and trees. On account of failing health he was obliged to return to the United States and has since that time passed away. He reported to me, however, after his return to this country that the seeds and trees shipped him by you were of uniformly good quality and gave good results and have materially increased the resources of that part of the country.

I am enclosing with this letter a rather extended order for various seeds, vegetable and field, weighing approximately 600 pounds. I am sending this order to you on the recommendation of my brother, knowing that I will receive goods that in your judgment are best suited to the conditions under which they will be planted.

You have undoubtedly seen reports in the newspapers of the distressing conditions now prevailing in North China. May I say, as a member of the faculty of the Pekin University, that it is our purpose in founding an agricultural experiment station to do our utmost as Christian Americans to assist the Chinese to solve their agricultural problems.

S. MOORE GORDON.

Gurney Seed & Nursery Co.
Yankton, South Dakota

Gentlemen: Please send me the following goods by.....

		Amount Enclosed	
Name.....		P. O. Order	
Post Office.....	R. F. D. No.....	Exp. "	
Shipping Point.....	(Name of R. R. Town)	Bank Draft	
Name of R. R.....		Cash.....	
County.....	State.....	Check.....	
Is there an agent at your R. R. Station?.....		Stamps.....	
I live.....	Miles from R. R. Station...	TOTAL	

[illegible]

NURSERY ORDER SHEET

Nursery Department

Free From Dangerous Insects and Disease

My nurseries are inspected by the state inspector each year and the certificate showing freedom from insects and diseases is printed below:

STATE OF SOUTH DAKOTA
Certificate of Nursery Inspection
Office of State Entomologist
Brookings, S. D.

Brookings, S. Dak., Sept. 8, 1920.

THIS IS TO CERTIFY that the nursery stock grown in the Gurney Seed & Nursery Co., of Gurney Seed & Nursery Co., proprietors, at Yankton, South Dakota, has been inspected by J. W. Bulger, a duly appointed inspector of this office, in accordance with the provisions of Chapter 260, Laws of 1917, State of South Dakota, and permission is hereby granted said nursery to sell and ship nursery stock which has been officially inspected and found apparently free from injurious insects, Arachnids, worms and dangerous plant diseases.

This certificate is valid until July 1, 1921, unless revoked.

Resident Nursery Certificate No. 81.

No. of acres inspected, 200.

(SEAL)

H. C. SEVERIN,
 State Entomologist.

Packing is done in the best manner with proper packing material and every order rolled or made into a neat bale, burlapped, papered and encased in straw, or boxed.

Terms: Cash with order, or if you prefer, one-third cash with the order and the goods will be shipped C. O. D. for the balance with the privilege of examination. We cannot book orders excepting where remittance or partial remittance is received with order.

If anything appears wrong with trees or package, notice should be mailed or wired to us immediately.

Quantities Ordered—One to 9 at single rates; 10 to 99 at 10 rates; 100 to 499 at 100 rates; 500 and up at 1,000 rates, unless priced otherwise.

Instructions—With each order will be sent a pamphlet giving full directions for the proper care and handling of everything sent out.

"Experience" is said to "teach a dear school." I have had a long experience in this school and what I learned at the greatest cost may be yours for the asking. Write what your conditions are, soil, exposure, surroundings; write and tell me what you want and you will receive a prompt answer with all attainable information. **YOU DO NOT HAVE TO BUY ANYTHING TO GET THE BENEFIT OF THIS OFFER.**

Shipping—We have the Great Northern, North-Western and Milwaukee railroads. I will ship by mail, express or freight, as directed, but where no directions are given I will use my best judgment.

Prepaid Stations—Some stations are called "Prepaid" as the company has no agent there; in such cases all transportation charges have to be paid at this end. The goods are taken from the trains at these prepaid stations and left there at purchaser's risk only.

Nursery Stock by Express—I earnestly advise that you have your nursery stock shipped by express, so that your goods are not so long on the road.

Parcels Post—I have fine success sending nursery stock by parcels post. I can make shipments of up to 70 lbs. in the 1st and 2nd zones, and up to 50 lbs. in all other zones. I cannot ship trees of over 4 ft. in length by parcels post. Where postage is not included I will send the goods and you pay the postage on receipt of trees.

Water proof paper is used in wrapping all parcels post shipments.

Guarantee—I will guarantee everything sent out to be true to name and in good growing condition. If otherwise, money will be refunded or other stock sent free of charge. All stock that fails to grow will, on application, after July 15th and before August 15th, be refurnished at one-half price the following spring or fall, **PROVIDED INSTRUCTIONS ARE FOLLOWED. WE MAKE NO OTHER GUARANTEE.**

Five Per Cent Off for Early Orders

Early orders for nursery stock are more valuable to us than late ones, and I will, on all orders received before March 10th, allow you to add in stock 5 per cent of the amount of your order. Thus, for \$20.00 you can buy \$21.00 worth of goods, when full remittance is received with the order.

Ten Tree Commandments

1. Trim all broken roots with a sharp knife, cutting slantwise from the under side.
2. Dig a hole larger than the space the roots will take up.
3. Place the top soil on one side of the hole and the sub-surface soil on the other.
4. Slightly loosen the soil at the bottom of hole.
5. Bed the tree on the good soil, pressing it well around the roots.
6. Fill up with subsoil, packing and watering it well.
7. Set the tree about two inches deeper than it was.
8. Never let the exposed roots dry for one minute.
9. Prune the top until the branch system is slightly smaller than the roots.
10. Cultivate the soil around the tree every two weeks commencing middle of May, last cultivation about Aug. 20th.

The Growing of Fruit Trees and Flowers

WE plant in our nursery and grounds hundreds of acres of these each year and the stand is invariably almost perfect, or in other words, what we plant grow and continue to grow. We wish each one of you purchasing and planting nursery stock would read carefully the book of instructions which we send you previous to receiving your goods, these instructions are very simple and it is just as easy and in a great many cases less work to handle nursery stock right than in the altogether too common method that results disastrously to the planter, it is better not to purchase nursery stock at all than it is to purchase it and then fail to give it reasonable care. Without this care it will be an eye-sore and a loss instead of a thing of beauty that is both satisfactory and profitable; just read the instructions and follow them and you can be as expert in one season as we are.

Higher Prices for Nursery Stock

You will note in going through the nursery section of our catalog this year that the prices are advanced on some items over previous years. I am going to show why this is necessary. All nursery stock is produced in the soil, all nursery stock going on to the market must be arranged for or planted, in most cases, two or three years previous to placing it on the market. At the beginning of the war, or after the United States took active part in it, it was the general opinion that the acreage devoted to nursery stock should be cut down and food stuffs or crops maturing in one year planted instead. This was followed out by practically all of the nursery men of the United States and consequently the smallest acreage of nursery stock ever planted was planted in the spring of 1917 and 1918 and the result is today, that the United States and the world is bare all nursery surplus, especially of fruit trees. The increased price of lands, the extremely high prices of labor that enters into the growing of nursery stock so largely has made it absolutely necessary to advance the prices. As I stated before, it takes several years to produce nursery stock for the planter. Our acreage of nursery stock compares favorably, if not better than most nurseries, and the stock is of excellent quality. We are keeping the price down just as low as possible as we want the planters to plant at least a portion of their wants each season. We shall give you the very best service and the best quality of stock. We have increased our facilities to handle 100 per cent more business this year in the nursery line than last year, and we have enough of the standard varieties, those most wanted, but we do not have as many varieties in apples, plums and cherries as other years, in fact, the crop of cherry trees is not one-tenth of the normal supply.

Kewaunee, Wis., May 10, 1920.

I want to call you down for a couple of things you have in your catalog. You list Maliner Kren Horseradish. When you say "Maliner Kren" you have said it all. Kren (pronounced Kershner, that is as near as I can tell it to you, if you can twist your tongue to pronounce the "r" as "ersch" you will strike it pretty close) means horseradish in Bohemian. So when you say Maliner Kren Horseradish you say Maliner Kren Horseradish Horseradish. I note that you have Wealthy apples in good condition Nov. 6th. I used to pick my Wealthies and put them in the cellar and in about three weeks my wife would tell me to take them out and dump them. Now I pick them and put them in a barrel in the barn and let them stay until the weather gets to freezing pretty hard, once in a while I get the apples frozen a trifle, then I put them in the cellar and they do not wilt then as when they are stored immediately after picking. I have them in good condition until Christmas or New Year if any are left at that time. Try it.

C. H. PLUMMER.

Mr. D. B. Gurney:

I do not know that you will consider of value the opinions expressed in this letter. In fact I know of no reason why you should. All the same I cannot resist the temptation to thus write you.

I have just completed a careful reading of a copy of your 1919 catalog. I have, of late, glanced at, looked over, or more or less studied a great many catalogs. But I READ yours. And because I was something more than interested I am writing you. I think I am indebted to you at least to the extent of "telling you some things."

Why did I read your catalog carefully page by page, and why did it so interest me? Chiefly because of the sincerity of every statement; because of the candor evident in every assertion; because of the close sticking to the truth in regard to the value of every offering made; because running through all and appearing in every line of description of seeds, vines and trees is the evidence that the writer thereof has put his heart, soul and conscience into it all, and that he would be more disappointed than the customer could possibly be if stock purchased did not possess the quality attributed to it.

It does me good to find a catalog that is something more than a bid for dollars, and to know that above the desire for dollars you have placed the desire to serve in the permanent upbuilding of the agricultural and horticultural interests of our country.

THOS. F. RIGG.

STRAWBERRY BOXES

Each year we have calls from a great many of our customers for strawberry boxes. We have always handled them in a local way, but never through the catalog. It is impossible at this time of the year to give you quotations. We look for a much lower price on strawberry boxes for 1921 and if you can anticipate about what you will need write us and we will give quotations.

LILAC MARIE LEMOIN

Of all of the Lilacs I consider the Marie Lemoine the best for all purposes. Until the arrival of Marie Lemoine it was almost impossible to secure White Lilac blossoms. All other specimens are shy bloomers, coming into maturity late in life and then with only a few scattered clusters.

Marie Lemoine blooms profusely at two years old, is covered with large spikes of double white flowers and are very fragrant and last longer than most other varieties. It is particularly desirable as a single specimen plant on account of its very large tropical appearing foliage. It is also desirable for hedge purposes as it stands trimming and always has that glossy, leathery leaf so desirable on hedges. We offer these in one size only. 2 to 3 ft., 40c each; \$3.50 for 10; \$7.50 for 25.

Asparagus

This much neglected, easily grown vegetable should find a place in every garden,

whether on the farm or in town. You can grow such an immense quantity of it on so small a space that you certainly cannot afford to neglect it. Asparagus roots should be planted in a well-prepared bed, the roots covered about five or six inches and the soil made very rich with fertilizer each season in order to produce the maximum amount of very large shoots. Asparagus should be cut for use at the top of the ground, and when it stands about three to five inches high; this gives you the best flavored, tenderest shoots you can get at any time. If planted in rows the plants should be about one foot apart in the row, and the rows far enough apart for cultivation. If in a bed in the garden, plant them about one foot apart each way and cultivate with the hoe.

Conover's Colossal—A standard variety of large size. 25 plants by parcel post, 75c; 100 plants, \$1.50; per thousand, \$7.50.

Palmetto—A very early variety, even, regular size. 25 plants by parcel post, 70c; 100 plants, \$1.50; per thousand, \$7.50; 2-year plants, per 25, \$1.25; 50 plants, \$2.00; 100 plants, \$3.25.

Asparagus

Horseradish

New Bohemian Horseradish—Malner

This horseradish is perfectly hardy anywhere. Is a very desirable article as a relish. Its roots are dug in early spring, grated fine and vinegar added, and it is ready for use. The proper method for planting and care is first to plant the roots about two inches deep in a desirable location where they can be left permanently. Give it good cultivation. Keep the soil well fertilized and you will always have plenty of horseradish roots.

The Malner Horseradish roots were introduced by the U. S. Dept. of Agriculture; they are much earlier, and produce better than the ordinary sort. Roots grow larger, are whiter, and quality is far superior. All who grow horseradish should use this variety; we have discarded the old standard kind, as Malner will outyield and is much more satisfactory in every way. 5 for 60c; per 10, \$1.00; 25, \$2.25.

Rhubarb or Pie Plant

This is where the fellow with a little piece of ground in town, as well as the man with the big farm, can take a solar plexus punch at the high cost of living, and live better and feel better than you can without this saving. You can grow pie plant so easily and in such a small space, and produce such an immense crop that makes the most excellent sauce and pies, that you are certainly neglecting one of the big little things if you fail to have a supply. If you could grow the ordinary farm crops as easily as you can grow rhubarb, you would simply plant the crop and take a vacation, because it will grow and produce anywhere and under almost any condition. I do not want you to think, however, that it is the proper way to grow rhubarb. It responds to better care and better conditions just as any other crop will, and consequently makes greater returns. Be sure, no matter where you locate, to include rhubarb in your order.

Rhubarb

Linnaeus—Large, early, tender and fine; we consider this the best of all. Large, whole roots, each, 10c; 10, 85c; 100, \$5.00.

Delicacy—Has round red stalks and red flesh; very tender; it has very few fibers, and its fine salmon red color when cooked brings the highest market price, and is the finest of all for table use. It can be cut practically all summer. Each, 20c; 5, \$1.00; 10, \$1.80.

The Original Pyrus Baccata Tree at Ottawa, Canada

The spread of this tree is more than sixty feet. It is very old and as sound today as it was fifty years ago. Possibly, you do not know about the Pyrus Baccata. This is the original apple growing wild when apples were first thought of. In size it is about three-eighths of an inch through, generally borne in clusters of three or four, bright red in color and mostly all seed. Every apple today, even to the big two-pound one that took the premium at the St. Louis World's Fair, is a descendant of the Pyrus Baccata. All that has been added to the size and flavor of the Pyrus Baccata has been done by man, but he has never succeeded in adding to its hardiness. The Pyrus Baccata is absolutely the hardiest apple tree that can be grown. It will stand the winters in any part of the world where trees of any kind exist. This makes it especially desirable as a stock on which to graft and bud other varieties that are hardy enough above ground, but often kill back and are damaged under ground.

You are all familiar in your own locality with the orchard situation. You see a fine tree producing big crops of fruit flourish, produce and die, and you come to the conclusion that it is not worth while. The reason for failure nine times out of ten is root killing caused by what nurserymen call a "test winter." The test winter is generally one where there was lack of rainfall in the fall and the ground freezes up dry. This followed by an extremely cold winter without snow covering, makes a test winter and root kills and damages the trees. The next year these trees leaf out in a sickly fashion, they sometimes survive the next and maybe several summers, but are unhealthy and a breeding place for insects and eventually die.

This is all overcome by the use of the Pyrus Baccata as a root stock as these conditions do not affect it. The Pyrus Baccata has gone through the worst winters uninjured, and the top of whatever variety if hardy enough for the section in which it is growing, has come through the winter in perfect condition, made its usual growth and big crop of the best fruit.

Another advantage of the Pyrus Baccata: it has a tendency to dwarf the rapid growing, late-bearing varieties, bringing them into bearing often in the nursery row. Little trees six to eight feet high have produced fairly good crops of full-sized beautiful colored apples. It is a pleasure to watch your Pyrus Baccata orchard grow and know that it will live after you are gone.

The seed of the Pyrus Baccata has been very difficult to secure. There have been only a few trees in the United States and these scattered over a wide territory. A number of years ago we planted an orchard of these trees that we could gather our own seed and they are coming into bearing, and for the last several years we have been able to secure more or less of the seed. Now we can announce to you that all apple trees grown by us and sold to you in the future will be on the Pyrus Baccata root. The variety will be large enough so that you of the North at any rate will never need to buy another. Those further South who do not need the Pyrus Baccata, can buy the apple trees grown on the ordinary apple root and be safe, but as a second measure of safety we advise the use of the Pyrus Baccata root everywhere. It costs a little more to produce the tree on that root but the few cents in the original investment will be taken care of a hundredfold the first test winter.

Apples—The Right Size to Plant

I have visited most of the commercial apple growing sections of the United States, and have always found that the commercial grower of apples refuses to plant an apple tree over one or two years old and about five feet or less in height. An apple tree at this age and size has a very large lot of fine feeding roots, and the top has not developed enough so that you will have to mutilate it by trimming for planting. It will recover from its pruning the first season at that age, while the larger, heavier trees require two years or more, and will never grow as well nor live as long as the smaller tree. The objection of the few to the smaller tree is that it takes it longer to come into bearing. By the use of the Pyrus Baccata as a root on which to work these varieties, we have overcome the late bearing and all varieties produce while very young. We want to furnish you that which will do best for you, produce the quickest, be most satisfactory, and live the longest, and we are going to advise that you purchase the two to three foot or three to five foot trees. The two to three foot trees will be especially valuable to those who have to have their packages go by mail, and will produce excellent trees that will not be stunted or culled but will be strictly good apple trees, small in size. The three to five foot trees are excellent trees and in the fall after planting they will be larger and better than trees that were twice as heavy when planted.

Hardy Heavy Bearing Apples and Crab Apples on Hardy Siberian Pyrus Baccata Roots

Varieties marked "First Hardiness" are good for as far north as you wish to plant. "Second Hardiness" for all points south of Huron, S. D. "Third Hardiness" for all points from Yankton south.

Six Reasons Why You Should Plant Apples on BACCATA Roots

The Baccata roots are the hardiest of any root that can be secured for grafting or budding apples.

They increase the hardiness of the tops of the trees.

They will produce healthier trees.

They ripen up the wood earlier than other roots.

They produce fruit earlier than apples worked on ordinary roots.

They are semi-dwarf.

They produce longer lived trees than trees worked on ordinary roots.

Notice. We can furnish all varieties listed on Baccata in the two to three foot size, and the following in the three to five foot and the five to seven foot sizes: Duchess, Patens, Hibernial, Anisim, Brier's Sweet, Wealthy, Whitney, Salome and Florence.

Anisim—Season, early winter. Prof. Hansen reports this Russian apple proving very valuable in the northwest; the tree is a strong grower and a prodigious bearer. The beautiful color of the fruit attracts favorable attention. Fruit medium in size; surface, greenish yellow, covered almost wholly with a beautiful dark crimson. First hardiness. On Baccata.

Ben Davis—Late Winter. The Ben Davis reigns over a much greater extent of country than does the Baldwin; it is unquestionably the leading commercial sort. It comes into bearing at an early age and usually bears annually and abundantly. Fruit above medium to large. Skin tough, waxy, bright, smooth, usually glossy, clear yellow or greenish, mottled and washed with bright red; mildly subacid, good. Third hardiness.

Duchess of Oldenburg—Early summer; is one of the most valuable of the Russian apples thus far introduced into this country; it is a good size and attractive in appearance. The fruit ripens in succession, so that several pickings are required in order to secure the crop. This variety can be used when it is about half grown, and makes equally as good sauce or pie at that time as when thoroughly ripe, making the season probably the longest of any of the varieties grown. Color, pale greenish yellow, almost covered with regular splashes and stripes of bright red, mottled with crimson. First hardiness. On Baccata.

Well Rooted Trees

Delicious—This apple is the one that has been advertised more than any other the past few years. The fruit is large, quality excellent, very fragrant, will keep until March or April; skin dark red, shaded to yellow. The Delicious originated in Iowa twenty years ago. The original tree still stands and is nearly an annual bearer. Second hardiness. On Baccata.

Hibernial—September and October. A Russian variety, which is proving very valuable on account of its ability to withstand the rigorous climatic conditions of these regions. Prof. Hansen says that this variety represents what is probably the hardiest type of the Russian race of apples. Fruit large; surface greenish-yellow with a dull bronze mixed red on sunny side, with a few dull crimson splashes. Flesh yellowish, crisp, tender, juicy; quality above medium. First hardiness. On Baccata.

Iowa Blush—Winter; tree very rapid spreading grower, comes into bearing as early as any of the winter apples, produces immense crops, very long lived; fruit below medium in size; quality very good. Season all

A Loaded Wealthy

winter. Color light green with blush on one side. Second hardiness. On Baccata.

Jonathan—Early winter. It is a very beautiful apple, of brilliant red color, highly flavored, and of excellent quality for either dessert or culinary use. Very hardy and productive, healthy and vigorous, and is adapted to a wider range of territory than most apples of this class. It is the great market apple of the west and south. Third hardiness.

Longfield—Season, September and October. Fruit medium size, decidedly attractive in appearance, being clear waxen yellow, lightly brushed with bright red. Flesh white, crisp, fine, very tender and of the most pleasant quality. It can be classed among the fancy dessert apples. On account of the hardiness and productiveness of the tree and the beauty and quality of the fruit, Longfield is recommended for planting in almost any section of the country. First hardiness. On Baccata.

A Foundation for Your Orchard

A foundation for a large building is never built of mud; the architect in making the plans knows that it is necessary to build this of concrete, granite, or other very durable material and specifies it in making his plans. The owner of the building follows the specifications, knowing, as the architect did, the necessity for a good foundation; in fact, it is the important part of the whole building; if the foundation settles or goes to pieces the balance of the building goes quickly and the money invested and the work of the one or two years it took to build it are lost.

It is just as necessary, probably more so, that the foundation for your orchard should be right, because an orchard is the work of a lifetime and is expected to last a lifetime. You builders of houses and large buildings never attempt to commence operations unless you have first made your plans from the foundation to the last item of furnishing. In starting the orchard it is just as important that you make the plans also and then follow them carefully. First, choose the location, bearing in mind convenience, quality and lay of land; the best location for an orchard is a north or northeast slope; the poorest a sharp southwest slope. The quality of land is not so important, as you can always give the land what it lacks. Protection should hardly be considered, as you can always make that faster than you can the orchard, and we want to say a few words about the protection of an orchard.

Windbreak: A windbreak of several rows of trees should be planted to protect the orchard from the south and west; that is, the windbreak should be planted on the south and west sides of the orchard. This windbreak should be planted far enough away from the orchard so that the snow will not drift in and destroy the trees, and so that the orchard will not be robbed of its food and moisture.

A light windbreak on the north is necessary, although some planters prefer a row or two of the hardier varieties of apples or crabs for such purpose.

Orchards are not always injured by the cold, but more often by the heat. Orchards planted on the south side of a north and west windbreak are in more danger than if the windbreak was not there. The damage to orchards is caused more often in March than any other month. At that time we often have a week or ten days of rather warm weather, and the sap starts to flow; the warm weather is followed by a severe cold which injures the wood cells, causing the tree to gradually decay.

If the protection had been on the west and south they would have been protected from this warm spell, the trees would remain dormant and in good condition in the spring.

Trees planted on the south of a windbreak bloom much earlier and are caught by the frosts. Where possible, have the windbreak on the south and west rather than on the north.

Second, figure the number of trees you are going to need. Apple trees should be planted from 20 to 30 feet apart, depending on the section in which you live; the farther south, the greater distance apart; the farther north, the closer together.

Plums and cherries can be planted from 10 to 16 feet apart, and we find it a saving of ground to first plant the apple orchard, then in the square of each four trees place a plum or cherry; by the time the apple trees need all the ground the plum and cherry have outlived their usefulness and can be removed.

Third, select your varieties. This is the most important step of all, and should be considered carefully. To show you the importance of the selection of varieties, I wish to call to your mind the nearest bearing orchard to your place. In every community there is a bearing orchard. If this has been planted a good many years you will note that a great many of the trees are missing; there are a few exceptionally healthy varieties that produce large annual crops; these are the varieties you want in your orchard. If you could find the original planter of this orchard and he had kept a record of his purchase, you would find a selection of a great many varieties planted there, and only two or three, or at the outside, five or six varieties have done well in that particular section of the country. When you build your house or the big building you tell the architect about what you want, and you leave the details to him, for the reason that he has experience along these lines and you can depend on him. Do you realize when you are dealing with us that you are dealing with men who were born in the nursery business, have never been in any other business; our father was a nurseryman before us, and his father before him, and that this catalog is our 55th annual catalog; that our experience in tree planting extends from coast to coast, from the Gulf of Mexico into Canada, and that we know the best varieties for your particular locality? And we are going to advise that you leave the selection of varieties as much to us as possible, giving us always as much information as you can as to your choice and to the names of the bearing trees in your particular locality.

I want to say that the first good apple orchards that were planted in Madison County were Gurney trees.

Sheridan, Neb.

A. E. Bentley.

PLANTING AN APPLE TREE

This picture shows a perfect apple tree, planted at the right distance from other trees, ground cultivated, and in good condition. Apple trees should be planted far enough apart so that the sun and circulation of air can get to all parts of them. If planted too close the under limbs are shaded and the crop is forced toward the top of the tree, and eventually the tree becomes of no value. Plant apple trees in the extreme north not less than 20 feet apart each way. Head them just as close to the ground as possible. Farther south they can be planted farther apart, and can be headed a little higher.

Patten's Greening, the Great North Dakota Apple

Malinda—Season, late winter. Fruit above medium to large. Skin rich yellow, with dull red blush. Flesh yellowish-white, firm, juicy, very mild sub-acid, with sweet after-taste. Fair quality. The best winter apple for the North. First hardiness. On Baccata.

McIntosh Red—Season, September to January. The fruit is very attractive in appearance, of bright, deep red color, and good size. The flesh is very tender, perfumed and delicious. This is another of the great western and southern market apples. Thousands of acres of these are being planted in that section and are proving the most profitable of any of the orchard trees, especially in the west. Exceptionally heavy bearer at an early age. Second hardiness. On Baccata.

Northwestern Greening—Winter, very attractive in color. Is valuable for the northern apple growing districts. Quality as a dessert apple is fair to good. The tree is hardy, vigorous, a fine erect grower, and comes into bearing reasonably early, and as it grows older is an exceptionally heavy cropper. Skin smooth, somewhat waxy, clear pale yellow or greenish, sometimes faintly blushed. Flesh tinged with yellow, crisp and firm; mildly sub-acid, fair to good. Second hardiness. On Baccata.

Patten's Greening—Season, October to January. A seedling of Duchess of Oldenburg, and on account of its hardiness and productiveness and the uniformly large size of its fruit, is valuable in the northern portions of the apple-growing regions of the country. It is grown as far north as the Canadian line, and in other regions where the winters are correspondingly severe. It is attractive in color for a green apple. Very good in quality; comes into bearing moderately young and is an annual cropper, yielding moderate to full crops. First hardiness. Specially good in North Dakota. On Baccata.

Price's Sweet—Season, August to November. Very upright grower, early, and annual bearer of medium sized, excellent quality, green striped with red, sweet apples. This is the best of all of the sweet apples for the extreme north planting. In Yankton County it has produced more dollars per tree probably than any other apple excepting Wealthy and Duchess. Second hardiness.

Salome—Late winter. Fruit of medium size and attractive color. Tree vigorous, very hardy, comes into bearing early and is a reliable cropper, yielding moderately to good crops nearly annually. Skin yellow, more or less mottled and blushed with pinkish-red, rather obscurely striped with carmine. Flesh tinged with yellow, moderately fine-grained, rather tender, juicy, good to very good. Second hardiness. On Baccata.

Stayman's Wine Sap—An improved Wine Sap; fruit red, juicy, sub-acid, a long keeper; apple is larger than the old Wine Sap; a better tree, and longer lived; one of the Great Western commercial apples. Second hardiness.

Instructions for Planting a Fruit Tree

When the trees which you order reach you, they will come, either balled and burlapped, or packed in a box. They have been protected from sun and wind, and are alive. Do not expose them unnecessarily. The best way is to place the bale or box in the cellar until the holes are dug, then take them into the field where you are going to plant, open the box, take all of the trees or shrubs out and heel them in. This means to cover the roots with plenty of earth so that the air cannot get to them. Take out one tree at the time, cut off from the underside with a sharp knife any bruised or broken portion of the root, trim the top at least two-thirds of last year's growth, plant the trees 2 or 3 inches deeper than it stood in the nursery, fill in around the roots with the top soil, working it well in among the roots with your fingers, fill the hole to within 2 or 3 inches of the top and then pack solid. This is best done with your feet, making the ground just as solid as you can. Throw over this packed soil an inch or so of loose soil. If you follow these instructions and keep your trees cultivated, they will practically all grow and you will be satisfied.

Wealthy on Baccata

A Journey Through Nurseryland

A LITTLE story of some of the things you would see and be interested in if you were to come to Yankton and spend a little time with us. This trip which may take only a few minutes to read of, would consume a good many hours in the making, and if you were to take all of the trip that I am going to describe, and at the times, it would cover a full year. But I am going to suppose that all of the conditions that I tell you of could be here at the same time, and could all be seen in the one trip.

I am going to start you from your own home, wherever that may be. First, you have written us telling you were accepting our invitation to visit the plant and grounds of our company. You tell us in this letter when you will leave, and we determine the time and train on which you will arrive, and we meet you at that train and take charge of you for your trip.

We don't have these signs at our place.

We shall drive first to the main office. I want to take you into the office and show you something of the system of handling our immense business, which has reached the Million Dollar per annum mark. The office is located on the ground floor of building A. You enter through the main entrance, and the Cashier greets you and shows you something of his department, which includes all of the bookkeeping. He will show you his twelve ledgers, each weighing more than 30 lbs., his Burroughs Bookkeeping Machine and his Cash Register. I mention these two items as they are absolutely the best of their kind, and are equal to anything found in the biggest cities and the biggest institutions. He will show you in the office a great many other labor-saving devices—the check-protector, the letter-opener, the letter-sealer and the dictaphones on which during the busy season nearly all of our letters are written.

You will leave the office and go to the second floor of Building A. There the foreman of this room will show you the Addressograph, with a room filled with the address plates of over 500,000 friends and customers. This machine and the equipment in connection with it, costs enough to buy a good sized farm even in this community, but it enables us to send to you at any time bulletins of information, or the catalog and other matter, without delay. In fact, we can address and place in the mails, a letter of information to every one of our customers within five days. This you can readily see could only be accomplished by absolutely the best equipment. We will show you next the Multigraph, and the devices in connection with it, by which we can print and fold 4,000 bulletins per hour. These are the really interesting pieces of machinery in the office equipment, and all of the machines described above you can see in operation every work day in the year, and in the busy season way into the night. We will take you next into the Packing Room of Building A, where all of the small orders for vegetable and flower seeds are packed and shipped out by parcel post or express. This is an interesting room, and a mighty busy one from about the first of January to the first of June. Your order has been received by us through the

(Continued on page 125)

Austinville, Iowa, Jan. 19, 1920.
I notice your ad in the "Nebraska Farmer," and would like your illustrated catalog. I remember when we lived in Centerville, S. D., we bought an acre of nursery from you. It is about 30 years ago. I am thinking of getting some of your Bugless Potatoes this spring.

ANDY JOHNSON.

Wealthy—Season, September to January. This variety we consider the most valuable of all of the market apples and for home use. The tree is exceptionally hardy, comes into bearing as early as the summer apples, producing immense crops annually, and we believe it is the most valuable apple today for the small or the large orchard. We have shipped this past season from Yankton County thousands of bushels of Wealthy. This was originated by Peter M. Gideon, of Minnesota. Fruit above medium to large; color, underlaid with pale yellow, blushed and marked with stripes and splashes of red, deepening in highly colored specimens to brilliant red; very attractive. Flesh, whitish, tinged with red when thoroughly ripe. Moderately fine, crisp, tender and juicy, agreeably subacid; good to extra good. First hardiness. On Baccata.

Yellow Transparent—Earliest summer. This is the best of the extra early apples, being excellent for culinary and dessert. It ripens earlier than the Early Harvest; fruit medium to large. Tree moderate grower, very hardy, healthy, comes into bearing very young. Imported from Russia by the United States Department of Agriculture in 1870. Skin thin, tender, smooth, waxy, pale yellow, changing to an attractive yellowish-white. Flesh white, tender, juicy, with a pleasant flavor; good to extra good. First hardiness. On Baccata.

I notice in your catalog for spring and fall of 1920 that you speak very highly of the Wealthy Apple, but you did not speak of its keeping quality. At this writing I have in my cave Wealthy Apples which were picked last fall (1919), hauled 12 miles, thrown out (in a sack), then carried and dumped down the five stone steps end over end, not intending to keep them and no special care was taken of them all winter, and they are sound and firm now, and will be so until March or maybe longer if they are not used up. These Wealthies were from an orchard which had not been cared for in any way, but let grow wild after planting. In fact, the weeds were so large they nearly stalled the team driving through them.

Lincoln, Neb., Feb. 15, 1920.

W. H. C. MILLER.

Yellow Transparent. Very Early Apple

Twin Brook, S. D.
Gentlemen: This is a picture of the Wealthy tree I got from you in 1911. This tree would show more apples but I picked one-half bushel from the side of the tree where the picture was taken.
F. E. SIERS.

Crab Apples

Briers Sweet—Season, September and October. Tree vigorous, hardy, comes into bearing young and is productive. Fruit pale yellow washed with lively red, striped with carmine. Flesh yellowish, fine-grained, juicy, pleasant, good in flavor and quality. First hardiness. On Baccata.

Florence—Very desirable for commercial planting because the tree commences bearing very young, is a reliable cropper and extremely prolific. Fruit good size, very attractive in appearance and good quality. Originated by Peter M. Gideon in Minnesota. Color, yellowish white, overspread with brilliant pinkish-red. Flesh tinged with yellow, crisp, tender, juicy, very brisk subacid; good. August and early September. First hardiness. On Baccata.

Hyslop—Season, September and October. Fruit large, very brilliant color, dark red or purplish, overspread with thick blue bloom; borne in clusters. The tree is a good grower, very hardy and a reliable cropper, yielding good crops annually. It is desirable for both home use and for market. First hardiness. On Baccata.

Soulard—This is a hybrid between the native Wild Crab and the common apple. It is a very desirable crab for several purposes. It is delicious baked, and makes excellent preserves, and one of the best for jams and jellies. The tree comes early into bearing, makes rapid growth while young, slower as it increases with age. Season, all winter. First hardiness. On Baccata.

Sweet Russets—Season, August and September. This is the best of all the sweet crab apples. Fruit large, green, russet, with faint blush. It is the very best of its kind for eating from the tree and especially for pickles and preserves. Very hardy, and regular bearer. First degree hardiness. On Baccata.

A Journey Through Nurseryland

(Continued from page 123)

office, has gone through the necessary pieces of machinery in that department and sent up to this packing room. It is received and recorded there, and put in process of packing and shipping. If you would follow it through from the time it reaches this room until it goes to the postoffice or express office you would see how impossible it is to make an error in the filling of that order. The system of checking and re-checking is so perfect, that an error, if made, would be almost intentional. We shall show you also in this room, the methods and the filling of the ounce, $\frac{1}{4}$ -pound, $\frac{1}{2}$ -pound and pound packages of garden and flower seed. This is mostly done by machinery, but this machinery assisted by very accurate human help. We shall also show you on this floor the seed testers—the records, and methods of testing—and it will convince you that nothing but strictly first-class seed ever leaves this place.

We shall go to the third floor of Building A, which is very important but not quite as interesting as it is used for storage of vegetable and flower seed. There are thousands of sacks piled in this room, and the man in charge can take you instantly to his supply of any kind or variety.

We shall go from this room to the third floor of Building B which is mightily interesting from about December 1st until some time in June. This room is where all the little packages of seed that you receive, and that you see in all the merchants' stores all over the country are put up. Millions and millions of these little packages go through the package-filling machines each season. These machines are so accurate in filling, that you can weigh any one package and weigh 100 more and they will weigh exactly 100 times what the one package would. These machines will fill, seal and count, and average 25,000 packages per nine hours, per machine, and run 24 hours per day part of the year. In this room we pack all of the seed cases that go to the thousands of merchants all over the United States. Arranged around the outer sides of this room in hundreds of divisions, are the cases containing the millions of filled packages of vegetable and flower seeds and the hundreds of thousands of cartons of peas, beans and sweet corn, and the orderly rows and piles of sacks of seed from which we fill millions more.

We will go from here to the second floor of Building B, which is interesting on account of its magnitude. On this floor are stored train lots of field seeds—grasses, alfalfas, clover, corn and grain.

We will go from this room to the ground floor of Building B, which, from mid-summer until mid-winter, is filled with the seed cases that have come back from the merchants. Here they are repaired, repainted, and put in order for the next season's business. This floor is also used during the harvesting of our fruit crop, as fruit storage and shipping room, and it is a busy, pleasant place during that time. We ship through this room in the fall more than 8,000 bushel baskets of apples.

We will now go into the basement of building A. This is again storage, and you will find carloads of rape, cane, and other exceptionally heavy seed stored here. The walls around this are nearly two feet thick, with moisture proof floor of concrete and other material that could not be broken by any weight.

From there we will go into the basement of Building B, which is a cool, moist place and as the nursery stock is dug it is placed here for packing. This room will hold 25 carloads of nursery stock, and keeps it in the best possible condition. The packing of nursery stock is all done on the ground floor of Building B, directly above this basement. This basement and ground floor of Building B are equipped with everything that will assist us in caring for and getting to you your nursery stock in the best possible condition. It does not have to be exposed to the sun or wind from the time it is dug until it is unwrapped.

Dahlias from Trial Ground

(Continued on page 127)

Whitney—Season, August and September. One of the most popular of the large crab apples, particularly in the west and north; the fruit is attractive, yellow, striped with lively red, good for dessert and very good for canning. Tree is a thrifty, upright grower, comes into bearing very young and is extremely productive. First hardiness. On Baccata.

Yellow Siberian—Fruit medium size, clear pale yellow; an excellent crab for pickles and preserves. Tree very hardy, healthy, comes into bearing very young. First hardiness. On Baccata.

Virginia—Season, September to November. Fruit medium-sized, dark red, and good quality. One of the hardest and very free from blight. A strong grower. This variety will produce fruit under more adverse conditions than any other tree we know of. First hardiness. On Baccata.

Prices Apples Not on Baccata

We can furnish Ben Davis, Jonathan, Stayman's Winesap, and Price's Sweet on ordinary roots only, not on Baccata. 4-6 ft., 80c each; per 10, \$7.00; per 100, \$60.00.

Prices Apples on Baccata Roots

	Each	Per 10	Per 100
2-3 ft.	\$0.65	\$6.00	\$58.00
3-5 ft.	.80	7.00	60.00

Larger Apple Trees

For those who plant only a few trees and want a larger tree we have them, and can furnish you a five to seven foot tree on a Baccata root. These are strictly first class and will do better than trees of the same size worked on other roots. To assist you as much as possible in making these larger trees grow, remain healthy and produce fruit quickly we are going to trim them back before shipping out, just as they should be planted. We have found by sending them out with all limbs on that three-fourths of the planters fail to cut them back and with the dry hot mid-summer though they have already started to grow they die and you are disappointed. We are going to help you over that period.

	Each	Per 10	Per 100
5-7 ft.	\$1.00	\$9.00	\$80.00

Something About Fruits

I have talked to you on the last few pages about apples. I want to add just a few words more. In making your selection of varieties confine them surely to those best in your own neighborhood. I would say for a small orchard for your own use select the following, all hardy and ripen in rotation as named: **Yellow Transparent, Duchess, Longfield, Wealthy and Malinda**. This gives you apples from July to May. Select a few crab apples, not many; just enough for home use. **Whitney, Florence and Sweet Russet**.

There are other fruits just as easily grown as the apple and your orchard should have as complete assortment as possible. **Early Richmond Cherry**, if you are located south of **Huron, S. D.** Not profitable north of that. **Compass Cherry** and **Hansen Plums** take the place in the north of

all cherries, and of a great many other fruits. In fact, I consider them the all-purpose, easiest grown fruit for this great American people—the fellow with a little piece of dirt. They grow easily, produce immense quantities of fruit the next year after planting, and what's the use of waiting for slower-bearing kinds? When I get to talking "Hansen"

A Basket of Malinda—The Best Winter Apple

fruits I have to put on the brakes or I would use the whole catalog. They're great, that's all, and I want you to know it.

Don't forget the small fruits—the strawberry — everbearing and common — the raspberry, gooseberry, currant, the Buffalo berry and choke cherry, for a hedge, maybe, around the orchard. A row of mulberries, fruiting heavily for the birds and lots over to can with currants and gooseberries. You can all grow fruit; you can live better; you can live cheaper, and at such a small initial cost, so little labor, and such pleasant labor. Did you ever plant a tree, watch it grow, produce flowers, then the ripe fruit? And then the delicious baked apple, the plum jelly, the big dish of strawberries—all you can possibly eat, and just wish you could eat more? Will you plant this year? Enough said.

Notice—We can furnish all varieties listed on Baccata in the two to three foot size, and the following in the three to five and five to seven foot sizes: **Duchess, Patters, Gibernal, Anisim, Briers Sweet, Wealthy, Whitney, Salome and Florence**.

A Journey Through Nurseryland

(Continued from page 125)

From basement B we will go into the alley-way between Buildings B and C. This is an ordinary city alley, 20 feet wide. We have, however, excavated the full length of both of these buildings down 12 feet. We have placed I-beams across this alley, imbedded them firmly into the walls of Buildings B and C at either end, and have placed 12 inches of concrete reinforced pavement over the alley. This alley contains the heating plant, and the plant that furnishes steam for the big grain and seed driers and furnishes heat for every room in all of our buildings. It took several car loads of pipes and radiators, valves, etc., to properly heat the buildings.

We will go from this alley into Building C, the basement of which is potato storage, and has a capacity of 30,000 bushels and at the proper season of the year is well filled with strictly seed stock of all the varieties that we list in the catalog. We shall also find in the basement of Building C from October until spring thousands of flower pots and boxes in which Holland, Japanese and French bulbs are planted for winter blooming in the Greenhouses, of which we will tell you more later.

The balance of Building C is used strictly for storage of heavy field seeds and machinery of various kinds sold by us through the catalog. A carload or two of Clipper Mills always on hand. A carload of Standard Bushel Baskets with covers for the shipping of apples, onion sets and various other things. A carload or so of corn crating material, from which we make up as we need them, crates for ear corn.

These buildings I have described above, as you will have seen, are all of concrete and brick. The roofs which you could have seen are of the Barrett specifications, pitch

and gravel.

We will

leave these buildings and you will see on the outside large corn-cribs—nearly 600 feet of them.

I have taken you through the buildings but have said nothing of the machinery for the cleaning, drying and handling of all the grains and seeds. I have told you of that in the Field Seed Section.

In this trip through the buildings I think you have now a fair idea of the downtown plant.

I am going to cross the street from Building A and take you to the plant of the Gurney Greenhouse Co., and have you meet Mr. Topp who will show you among the flowers.

We will just suppose that your trip is in the months of November or December. As you pass out from the office part you will be greeted by the Majestic Chrysanthemums. Thousands of them in bloom, varying in size from the little Pompons to the big Royal Fellows with the shaggy hair, measuring nearly a foot across. A little later you will find these same benches filled from one end to the other with Grand Rapids Lettuce for the winter trade. Passing from this house you will see thousands of Carnations of the various colors, red, pink, white and a few yellow. You will then go to the Rose house. You will notice in each of these houses a different temperature. That is part of Mr. Topp's business to know exactly the proper

An 8 Year Old Wealthy

We have written a whole lot about the Wealthy Apple trees, the last number of years, and we are growing and selling more than three times the number of Wealthy Apple trees each year than we did the year previous. People have commenced to realize that it is the real apple for the whole country, but more especially for the Northwest. We are showing a picture here of Mrs. Merchant of Ellendale, N. Dak., standing by an eight-year-old Wealthy tree from which she had just picked three bushels of dandy fine apples. The Wealthy is alright anywhere and more than right in most places.

Ash

(Continued on page 129)

Early Richmond Cherry

Cherries

Early Richmond — More extensively planted than all others. Fruit ripening in a shorter period than the other cherries, and on that account is not bothered so much by the birds.

English Morello — Late, large, black. Very hardy in fruit bud. Excellent for canning. Do not plant above cherries north of Huron, S. D.

One year strong. Each, 85c; per 5, \$4.30; per 10, \$8.00.

Compass Cherry

This tree produces the first year after planting.

When the **Compass Cherry** was first introduced, it was given a wide berth by most nurserymen, but in the last two years it has been taken up in all sections of the country and put into the best fruit lists. It bears invariably at two years old and bears large quantities of most excellent fruit. In size it is larger than the **Early Richmond Cherry**.

The quality is between the cherry and the plum. This perfectly hardy fruit was originated at Springfield, Minn., and is a cross between the native Sand Cherry and the American plum. The fruit brings the best prices of any on the market, and the demand has never been supplied. Anyone planting trees should not be without the **Compass**, and then you would never be without good fruit.

The **Compass Cherry** ripens at a time when none of the Prof. Hansen plums are ripening, and for that reason it will always be retained on the fruit list, though it is much smaller in size than any of the Hansen plums. Do not understand by this that the **Compass Cherry** is only valuable because it fills in a space. It has a different flavor, is one of the very best for canning purposes, and then it fills in a few days when you do not have the Hansen plum.

While we are not the introducer or the originator of the **Compass Cherry**, we claim to be one of the most, if not the most, active nurserymen to crowd it out among the planters. We were satisfied, after giving it a thorough trial, that it would take its place at the head of the list for home consumption and the home market; perfectly hardy, both in tree and the fruit bud. Fruit selling for the best price, and of good quality, either fresh from the tree or canned. No one should be without the **Compass**, and then no one would be without fruit, 3-4 ft., each, 65c; 10 for \$6.00; 4-6 ft., each, \$1.00; 10 for \$9.00.

Choke Cherry

This is one of the best of our ornamental fruit trees. Absolutely hardy anywhere. Always symmetrical, and when in full bloom, is a great bank of snow with the added beauty of its nutty woodland fragrance, and later its rich, highly colored, purplish-black fruit. Our western dwarf varieties exceed all others in quality of fruit. Especially fine for jelly and jam. 2 to 3 ft., 20c each; \$1.75 per 10; 3 to 4 ft., 25c each, \$2.25 per 10; 4 to 5 ft., 45c each, \$3.50 per 10.

A Journey Through Nurseryland

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temperature for the growing of the different varieties of plants and flowers. In the Rose house you will find the Long Stemmed, Fragrant Sunburst, Mrs. Ward, Meteor, Pink and White Killarneys, and numerous other varieties. In the next house you will find Sweet Peas of the Spencer kind, Snap-Dragon, the old fashioned kind that grew in the gardens; more Chrysanthemums; and a general assortment of all kinds of bedding plants that are just in the making, getting ready for the outdoor planting of the next spring. Later in the season you will find numerous benches of strong, thrifty cabbage, celery, cauliflower, egg plant and other vegetable and flowering plants. Literally hundreds of thousands of them; with a good bench of Sweet Potatoes.

We are going to imagine, just at the present time that we have our airship at the door and will show you all of the greenhouses before going to the nurseries. We will enter, and fly to Mitchell, about 100 miles away. We will introduce you to Mr. Helm in charge. You will see the same that you have at Yankton, only larger — twice as many houses, and a much larger assortment of everything. We have spent more than \$60,000 in building new strictly modern Greenhouses in Mitchell this year. It needs all of them to take care of your trade.

We are going to take you back from Mitchell to Yankton, and go out to the nurseries. We will take you first, this time in June, down to what we call the Walnut Nurseries. These grounds were owned by the South Dakota State Fair for nine years when its home was at Yankton. Probably the most interesting thing on this particular piece of land to you will be the 10 acres of Peonies which you will see long before you enter the gate, as there are hundreds and hundreds of thousands of bloom just out. We will just suppose that you have driven by this field on the main road on the west side rapidly in a car and watched the flowers as you went by. Have you ever, in your younger days looked into the instrument called the Kaleidoscope, and seen the various formations and the thousands of colors shown in the glass? You get that same impression as you drive by this field rapidly. We will enter at the north gate and look down the 80-rod rows with probably not less than 10,000 flowers in full bloom in each row, nearly every row a different variety, some rows as many as 50 varieties—small lots for trial. Every color that a Peony is entitled to. Not a weed in sight. And when you leave this field you will be smothered with the Peonies that you have picked, each one seemingly more beautiful than the last. It is hard to determine when to stop picking as you go through one of these large fields. The color is so varied that when you see one you think it more beautiful than any you have seen before. Of all the flowers in the nurseries, this, I believe, is the most satisfactory. The balance of this field is probably not as interesting to you. In 1920 it was Rainbow Flint Corn, a monstrous crop all cut and placed in shocks in the first part of September and saved for seed. The 100 per cent germinating kind.

We will leave this nursery and go to our Evergreen Nurseries, containing several hundred acres. We will suppose that the time is a little later, about the latter part of June or early in July, and we stop at our strawberry fields where they are picking the big, red, luscious strawberries. This date may be changed to almost any date between then and heavy frost, because we would only have to go a little farther and stop at the Everbearing fields where we have strawberries all the time; short-cake whenever we want it, and we are going to promise you short-cake if you are here in the strawberry season. We will wander promiscuously about this field and see the Peony, Dahlia, Gladiolus and Iris trial ground. Of course, you would have to extend your visit over a long season to see them all in bloom, but there is something blooming and fruiting all through the season. We will then step across to our Evergreens. You will see all sizes here, from the little fellows just coming out of the ground in the seed bed to the tall stately fellows. These will all look fine but the most beautiful of all is the Koster's Blue Spruce. You will see the big fields of shade and ornamental trees, composed principally of Hackberry and Elm, because we consider them the best; but smaller lots of everything. You will see long rows

Mat Keiffer and His Pet Mules

I was going out through the nursery one day with a little camera and Mat just came to the end of the row with his mule team and his cultivator. Mat is one of our experienced men at the nursery and can cultivate a row of trees just a little better than most any other fellow. The large trees showing in the picture are the wild black cherry, and when the picture was taken these trees were literally loaded with ripe fruit and the robins and a dozen other birds were chattering and eating their fill. But there was so much fruit, plenty for the birds and ourselves.

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Buffalo Berry

This is very useful as well as ornamental, and is planted as much for an ornament as for its fruit. The tree grows from 7 to 12 feet high, has silvery foliage. The fruit is much like that of the Red Currant, and is used for the same purposes. The Buffalo Berry makes an excellent hedge.

	Each	10	100
2 to 3 feet.....	\$0.20	\$1.75	\$15.00
3 to 4 feet.....	.25	2.00	19.00

Juneberry Dwarf Mountain

There are several species of this valuable tree. Some grow to the height of 20 feet. They are variously called "Shadberry," "Serviceberry," "Juneberry." The kind we offer grows but little over 4 feet in height, is enormously productive and hardy anywhere in the United States or Canada. This is the Jefferson strain and is best of all. Each, 30c; 10 for \$2.70.

Buffalo Berry

Mulberry

The Mulberry is useful as a shade tree, for hedge purposes, and for the immense quantity of fruit borne by it. We are listing the Russian Mulberry only, as it is the hardiest of any. The fruit varies in color from jet black to a pure white and is excellent for canning with tart fruits like gooseberries, currants and plums, and all children believe that it is delicious to eat direct from the trees.

Mulberry

	Each	10	100	1,000
12-18 in.	\$...	\$...	\$1.75	\$15.00
2-3 ft.	.15	1.00	3.00	20.00
4-5 ft.	.35	3.00	25.00	
6-8 ft.	.45	3.75

Pears

We are showing here a photograph of a Flemish Beauty Pear Tree at the home of Mr. Neilson of Yankton County, South Dakota. He has a number of trees, all equally as well loaded as the one shown in the photograph. Pears have been grown successfully in this part of the state for the last twenty years; we have trees in this county that are thirty years old and are producing immense crops of fruit almost every year. We would not advise pears even for trial north of Huron, S. D., but south of that point to Yankton there are varieties that will produce good fruit, but along the Missouri River and south of here pears can be grown successfully and profitably. The pears grown here are of much better quality than those grown in any other part of the world, as people who saw the quantities we had of them at the State Fair can testify. We did not have them in small plates, but had them by the bushel, all grown in Yankton County. The varieties offered are:

Flemish Beauty—Large, juicy, rich; one of the hardiest and most popular. September and October.

Keiffer—Its large size, handsome appearance and remarkable keeping and shipping qualities make it exceedingly profitable for market, October and November.

4 to 5 foot, each, 85c; per 10, \$8.00.

Dwarf Pears—We find the Dwarf Pear comparing within two years, generally after transplanting, and seems to be quite a bit harder than the standard pears. We would advise the planting of the dwarf in the extreme north; in fact, we would advise anyone planting pear trees to plant one or two of the dwarf varieties on account of the extreme hardness and their early bearing. We have the following varieties in Dwarf Pears: Flemish Beauty and Keiffer, 2 year. Each, 60c; per 5, \$2.75.

Wild or Native Fruits

In every section of the world there are certain native fruits native to that particular section. They are not all good, nor are they all bad. In this Northwest country we have the Juneberry, Buffalo Berry, Choke Cherry and Sand Cherry, all natives, and all producing a large quantity of delicious fruit, and they should be on every farm or in every garden. You cannot produce a fruit that will make better jelly than the above named fruits. Neither can you produce fruit that will bear larger quantities. They are absolutely hardy, stand grief of all kinds, but give better results with good cultivation. These develop into small trees or large bushes, and should be treated as far as planting and care are concerned as you would a currant or gooseberry. You should have at least five to ten plants of each of these native fruits.

A Journey Through Nurseryland

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$\frac{1}{4}$ to $\frac{1}{2}$ mile long of ornamental and flowering shrubs of every variety we have in the catalog. Fields of forest tree seedlings. **Russian Olive** with their white, silvery leaves predominate as the demand for these is heavier than for any other. You will see the bearing orchards, mostly **Wealthies** and **Duchess**, but plenty of other apples. A few rows of **Hansen's new Blight-proof Pears**. The big fields of **Hansen's Hybrid Plums**. And do not forget to inquire especially on this trip for a look at the **Waneta Plums**, whether in fruit or growing. If you happen there any time between July 15th and frost there will be some of the **Hansen Plums** ripe. First comes the **Opata** with its purple cheek and green flesh, followed by the **Sapa**, which is of the royal purple both skin and flesh, and this followed by numerous other varieties until we get to the **Hanska** tribe. These are a cross of the American and Japanese and California Plums, and are a larger, later kind. The **Waneta** belongs to this tribe. We might say the **Waneta** is the **Chief** of all the **Hansen Plums**. **Waneta**, you know, was the name of one of the good **Yankton Indian Chiefs**. We will show you rows of **Compass Cherry** and other varieties of cherries. Acres of apples, mostly grafted and budded on the *Pyrus Baccata* roots, because we have found this hardier and better than any other. We will show you acres of forest trees grown from cuttings, like the **Poplar**, **Willow**, etc. We are going to suppose now that your trip is in the cold, bleak, winter, and we are going to take you to a high place at the southeast corner of these 300 acres where you can look out over most of it. And by the way, you are in a densely populated city. In fact you are in our hogery containing a population of over 1,000. I shall show you a little more of them in a few minutes.

As we stand on this knoll we use our field glasses—a pair that father used for a good many years. We look to the north of town several miles, and we see the great **South Dakota State Hospital**. We just happened to be in time to see their wonderful herd of **Holstein** cows driven across the field. It is a beautiful herd, and if you desire, we will include a visit to that institution with your trip.

Looking to the west we follow the high range of bluffs and hills on either side of the **Missouri**. Rather a bleak prospect today, but in the summer beautiful and interesting.

To the east we see the large buildings, the campus and the **Garden Terrace Theatre** of **Yankton College**. Beyond that, the **Missouri River** for miles, the rich bottom lands spotted with farm houses, groves, and well cultivated fields.

To the south of us on **Mt. Marty**, overlooking the **Missouri River** is the new **Sacred Heart Hospital**.

We are gazing to the north and northwest over the nursery, all bare of leaves, in fact in their winter dress. The ground may be covered by snow. Each row will be distinctly outlined as they run from north to south. Every variety is distinguishable because of its

color and its beautiful form. The **Russian Olive** with its grayish white twigs and its ebony bark. The **Willows**, running from bright yellows to almost red. The **Red Dogwood**. The **Ash** with its light gray color. The **Soft Maple** with its reddish color. The **Elm** and the **Hackberry** in their distinctive colors and shapes. The **Apple**, **Plum**, and **Cherry** trees; ornamental trees and shrubs; all in their places, lined up showing themselves as distinctly as though labelled.

Hanska Plum

We are going to the nursery packing and storage house on these grounds. This building is 64x100 ft., basement and one story. It is used for sorting and packing carload orders, and is also used for the storage of immense amount of machinery necessary to operate all the land that we have for nursery and farm purposes.

There is joining that 300 acres of nursery ground, 160 acres that we had in **Minnesota** last year, and made a very fine crop. Then another field planted to **August 15th Corn** that was cut and shocked just as the **Rainbow Flint** was, only it was harvested in **August**.

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PROFESSOR HANSEN'S NEWEST SUCCESS

HANSEN HYBRID PEARS

For a hundred years people have tried to, and in some cases succeeded, in growing pears all over this Northwest. There has never been any trouble about the hardness of the pear tree, but it has lacked early bearing and has been very subject to blight. Blight has destroyed more pear trees than all other causes combined. This is not only true in the Northwest, where it is probably more prevalent than in the East and West. It has been our ambition, and undoubtedly yours, to have at some time a few nice pear trees that you can depend upon just as you can depend on the Wealthy apples.

Professor N. E. Hansen of Brookings, the originator of so many good fruits, has been experimenting for a great many years in the breeding of pears immune to blight. In the report of the South Dakota State Horticultural Society for 1916, Professor Hansen has a paper on the breeding of these pears from which I am going to quote. He says:

"The general experience is that the pears of western Europe are killed by two causes; first, by the winters; second, by blight. The pears of eastern Europe, known as Russian pears, are hardy against the cold of winter, but are killed by the blight. The cultivated pears, known to botanists as *Pyrus Communis*, are natives of central and southern Europe, a region where blight is not known. In the thousands of years of cultivation before its introduction to America, the cultivated pear has never had occasion to develop immunity to blight. But the first question in pear cultivation for us today is, can pears be developed immune to blight? Is a blight-proof pear a possibility, or only an iridescent dream?"

"The next step in the work was to determine whether immunity to blight exists in other members of the pear family; and if so, if it could be imparted by crossing with cultivated pears. A number of species have been under trial, but the most promising are the Chinese sand pear and the Birch-leaved pear.

"In the spring of 1899 this (South Dakota) station received trees marked '*Pyrus Simonii*.' (This is the Chinese sand pear.) These trees have proven perfectly hardy and have never spoiled from blight. (Seventeen years' trial.)

"As agricultural explorer for the United States for 1897, 1906 and 1908, the writer has had occasion to study the question in Siberia. In 1908, especially, the seed from many pear fruits was saved. The fruit, although very juicy and somewhat sweet, lacks in flavor. All the seedlings of this Siberian family of the Chinese sand pear are perfectly hardy at this station, even young seedlings are sufficiently resistant to blight to make this a promising field of work.

"The Birch-leaved pear is a native of northern China and is a choice ornamental tree. This has proven perfectly hardy and quite resistant to blight.

TAMING TWO WILD PEARS

"The sand pear and the Birch-leaved pear have been used freely in crossing with many of the best cultivated pears. With these two species a large number of combinations have been made. Some of the seedlings have proven subject to blight, and others have shown immunity so far. It was deemed impossible to determine their relative immunity except by distributing them for trial to people especially interested in this subject."

The crosses Professor Hansen sent out were of several varieties, but the basis for hardness and blight resistance is the Birch-leaved pear and the Chinese sand pear of Siberia. We have propagated these pears for 4 years, and they are absolutely hardy in the last 4 winters, winter before last being the most severe test winter we have had for twenty years.

We are offering you a few of the one-year-old pears with a strong belief that they will prove strictly hardy, blight-proof, and produce pears of fair size and quality, and in most cases will be excellent ornamental trees as well as fruit trees. There are something like 39 varieties of these, and as none of the seedlings have yet fruited, but all promise something at least good, we cannot say just what variety you will receive, and cannot determine beforehand what the fruit will be. But we are sending these out under our own personal guarantee that if they do not prove hardy and blight-proof we will refund the money you paid for the trees; or will later, as we find various numbers strictly hardy and blight-proof, give you other trees in the place of any that failed to do as guaranteed.

I want you to distinctly understand in purchasing these trees that we believe in them and shall plant a good orchard of them ourselves.

We have budded these on the hardy quince stock that has stood the last two winters, equally as well as the pear itself. This has a tendency to half-dwarf these trees, consequently they will bear very early, and it will only be a question of a short time when you can determine the full value of Hansen pears. Our supply of these pear trees is something less than 1,000 trees.

Price: Each, 90c; 10 for \$8.25.

A Journey Through Nurseryland

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We are going back now to the **Hogger**. We have always grown more or less hogs, and we have had all the ups and downs of the hog grower, and we were almost discouraged and said that we would discontinue the hog business until we found the right man who could devote his time and experience to the handling of them. And we have found that man. Dr. Adams in charge; he will first take you to his new brick house, made of the new white brick made here at Yankton. It is a very comfortable place and will soon be surrounded by beautiful flower beds and trees, and a fine lawn. We will pass from that to the scale, over which all grain and feed is weighed that goes to, and over which all hogs are weighed that go from. We will now pass the white brick garage. From there we will enter the big gate into the 15-acre yard. Joining this is sixty acres of alfalfa where the 1,000 hogs roam at will, or at least a portion of them, as we divide this into a number of different yards. At your right as you go in, is feeding yard, containing at the present time something over 300 head. The only furniture we allow them is the feeding racks, and sleeping quarters—a building 24x100 feet. The next building is a feeding shed. This is a rather long affair, 26 feet wide and 200 feet long, is paved and fitted out with four rows of troughs full length. Here is where they are fed the soaked feed, buttermilk, etc. In the driveway is located the concrete dipping tank, below the paving. You can drive through this building and dip more than 700 head of hogs in four hours. At the left are two brick farrowing houses, steam heated, each 20x50 feet, with their 30-foot yards running out from the buildings, for each of the occupants. The next building to the left is a small barn, 20x32 feet. Small, because on account of the conveniences we do not need many horses on this place. On the right of this you come to the sleeping quarters of the ordinary fellows. This is 16x100 feet. Next to that is another farrowing house, 8x100 feet, and one 8x200 feet with paved feeding yards. Additional buildings are scattered at various places, such as corncribs, granaries, soaking tanks, and the homes of the high-brows. If you were here today I would show you one young fellow 11 months old, weighing better than 425 lbs. His mother has brought into this world 37 fine pigs within the past twenty-four months. I have litters containing nine and one ten and eight of each litter are alive and strictly first-class in every way. She cost a bunch of money, but has paid for herself six or seven times over.

Milling Department

Since our 1920 catalog was issued, we purchased the Excelsior Milling properties in Yankton and are now equipped and have in operation one of the most complete mills in the Northwest. This milling property consists of four large buildings covering nearly a quarter of a block and allows us, in addition to the manufacture of flour, corn meal and pure buckwheat flour, such other lines as chicken feed and ground feeds of all kinds, which will be offered to you soon.

A 1-Year Waneta

We have gone now over the grounds owned by our company, or all of them except the small tracts around the city. We will drive out now on the country roads in all directions from the city of Yankton, and even cross the Missouri river into Nebraska, and we will show you the thousands of acres of contract crops that the people are growing for us, the seed for which was furnished by ourselves in all cases, and the entire crop will be delivered to us at the end of the season.

After this, if I am fortunate enough to secure your company, we will go to my home, and have something to eat. I will show you where the tribe meets; the Gurney tribe, I mean. There is something of a tribe of us. Seven sons and four daughters, if they were all here. Most of them, and likewise their families and the mother are still with us. At Christmas time or some other holiday, they all meet at my place and they count up about 50.

Your travels over the grounds of the Gurney Seed & Nursery Company are now ended. We will load you up with bundles of fruits and flowers you have gathered during the day and deliver you once more to the train that will take you to your destination. My greatest hope is that you have enjoyed this trip with me as much as we have enjoyed your taking it with us.

Remember! when you enter Yankton on any rail or wagon road that you pass through or by land and crops of ours. As you enter from the northwest over the Milwaukee you will go through one of our large fields of peonies. I hope they are in bloom when you come.

PROFESSOR HANSEN'S NEW HYBRID PLUMS—VERY HARDY BEAR DELICIOUS FRUIT IN 2 YEARS

Prof. Hansen once made the statement to me that I could place my order with an expert horticulturist, an originator, a man whose business it is to "know how," for almost any conceivable fruit, plant, flower, or tree, and this expert could produce that. It might take more than the one man's lifetime, but it could be worked out. I have never had the nerve to think up some of the impossible things, or the things that I could call impossible, and pass one of these orders to Prof. Hansen, because I believe he is just the kind of a fellow that might accept the order and prove the statement he made was absolutely true. I think I shall not pass him an order of that kind, because Prof. Hansen, in his horticultural inventive way, is producing almost every year something that is an improvement over anything we have had in the same line previously. He has, by his inventions of fruit, extended the profitable fruit-growing belt over the wide, barren prairies of the Northwest. He has made it possible for every man, woman and child, with a piece of land, to produce, cheaper than they can buy it, all of the fresh fruit they could use, during each season, and enough extra to can to last the entire twelve months. Are you producing this fruit—your share of it? If not, you are passing up some of the good things of this life. Prof. Hansen has, by exploring in foreign countries, and some points that are so far north that none of us would care even to visit those places, brought to this country and distributed alfalfa seed that will produce paying crops where alfalfa never could have been produced previously. He is working along lines now with fruit, trees and flowers, and within the next very few years, when his new creations are introduced, will astonish the fruit world. In his invention of the race of Hybrid Plums he not only surprised and astonished the fruit world, but I believe it was something like a "Jack in the box" to him, and I would bet 30 cents that he dodged some when he saw the results. Think of a plum tree, no larger around than a lead pencil, only four feet high, one single sprout one year old, coming two, maturing as high as 30 plums, each plum measuring more than one inch through. This is a common occurrence in the nursery rows, and lots of the trees two years old, coming three, will produce half to three-fourths of a bushel of fruit. Think of having ripe plums in the middle of July, instead of waiting until the middle of August. Think of having ripe plums in the middle of July until it freezes. Think of having plums of the most delicious taste, tender skinned and exquisite fragrance, and quantities enough so that you need bushel baskets to pick them in. Think of having plums that are hardy enough to stand any degree of winter temperature and any amount of extremely hot, dry summer weather. Leaves of tropical appearance, fruit colored from the light reds to the jet blacks. If you can think or imagine any or all of the above you will simply think or imagine what the Hansen Hybrid Plums actually are, and you can prove every word of it by giving them a fair trial in your garden or orchard.

In listing these Hansen Plums we have listed them in rotation as they ripen. For instance: Opata, the first one listed, ripens with us about the 15th of July; Sapa, the second one, follows in about five to seven days, so in making your selection you will be able to cover the entire fruiting period of the Hansen Plum.

We have budded and grafted this past year more than one-half million of the Hansen Hybrid Plums. These will be ready for market in the Springs of 1920 and 1921. The trees propagated budded or grafted in the years of 1919 and 1920, are wonderful trees. We have a great many acres of them standing in the nursery row, and some of the Waneta show a growth this season of over 9 feet.

They are wonderful keepers. We packed in a small wooden box holding about one quart a quantity of the **Hanska** and shipped them to **San Francisco, California**, with instructions to reship after sampling them, to New York City. We instructed New York in turn on receiving the package to sample the fruit, report its condition and reship to us. We are printing reports of the San Francisco and New York parties, and our report is that the fruit reached us in reasonably fair condition. It was sixteen days in the mail, opened, inspected and repacked twice, and still reached us in marketable shape.

The general practice has been, where new fruit, shrubs, flowers or vegetables have been introduced or originated, to give them a number instead of a name. Numbers are not easily remembered in connection with various kinds of trees or plants, and Prof. Hansen, realizing this, decided to give his new fruit names, and has selected for each of them a Sioux Indian word. The word or name in each case, with these new plums, was selected with reference to some peculiarity or characteristic of the plum to which it was given. For instance: **Hanska** means tall, and refers to the very tall, rapid growing **Hanska** tree.

Budding 250,000 Professor Hansen's New Plums at Our Walnut Grove Nursery, Yankton.
Price list plums, page 139.

Brother George with an Opata Plum Limb

It seems to please George to know that he has not lied to any of you fellows about the Opata Plum. You see George writes a good many letters every day about the Hansen plums and sometimes in writing he gets to orating so loudly that we can hear him all over the office, and when it gets plum time he gets out among them and has his picture taken to go into the next catalog. George isn't such a bad fellow and he does his best to tell you the truth. However, he gets enthusiastic and if he goes over the line and you catch him at it, he will renig gracefully. The limb which he is holding is from a one-year coming two-year Opata Plum. There were three other branches on this little tree loaded equally as much as this one.

Sapa and Opata Plums, and Others of the Sand Cherry Cross, and How to Grow Them

We have demonstrated by a number of years of practical experimenting that all of the plums of Sand Cherry blood should be grown in bush form instead of tree form. By doing this you get nearly twice the fruit, and the tree will last longer. This includes Compass Cherry as well. The trees in the picture are at Huntley, Mont., and were weighed down with their crop of good sized matured fruit. It is always easier to pick your plums up than to pick them down, and when you gain a number of years in the life of a tree, and get a greater quantity of fruit each season it is better to grow them this way.

Miss Zeller, one of our loyal stenographers, who wanted to find out whether or not all of the things George had been writing about the Hansen plums were true. This is a branch from one of the trees and it convinced her.

Elwood, S. Dakota, Feb. 1, 1920.

Here are a couple of pictures of a 4-year old Opata Plum tree, one where it is loaded with bloom and the other with ripe fruit. I picked $\frac{1}{2}$ bushel of ripe plums from this tree. The lower branches were just as full as the picture in your catalog. We also have the Sapa and Hanska which are the same age. Picked fruit from all of them last summer. The fruit is sure fine. Like the Hanska the best to eat fresh. They are deserving of all the praise you give them.

MRS. F. M. BRIGGS.

Gregory, S. Dakota, Jan. 4, 1920.

Enclosed find two pictures of your Hansen Plums. One is the earliest variety which sure was loaded with plums. It was a wonder for those who saw it. The other is a 3-year old Waneta, which is not as heavy a bearer, but such large size, and exceptionally good quality—equal to any commercial plum I have seen. It sure was a wonder to those who saw them grow.

JAMES MICANEK.

Professor Hansen's Wonderful Sapa and Opata Plums

Opata—Sioux Indian for "bouquet." First to ripen. At blooming time it is a gigantic bouquet of pure white flowers of most exquisite fragrance. Blooming just a little later than the ordinary or American plum, and in this way escaping frost dangers. Again when the fruit is ripe combine the large leathery foliage and the dark purplish red fruit, with blue bloom, it is indeed a bouquet at that time. The Opata is a cross from the Dakota Sand Cherry and the Gold Plum, originated by Luther Burbank, and for which \$3,000 was paid when first introduced. Tree is vigorous in growth, heading very low and of quite spreading habits, and we recommend that you allow it to grow rather in this form than in the regular high trunked, trimmed, tree form. It forms fruit buds freely at one year old and bears without exception the next year. Color of flashy green, flavor very pleasant, combining the spicy acid of the Sand Cherry with the rich sweetness of the Gold Plum. Ripens with us about July 15th, and will hang on the trees in good condition for about two weeks. Generally free from rot, and almost immune from the sting of the Curculio. The photograph we are showing

Opata

is taken almost at random from any of the hundreds of trees in the nursery and shows the fruit as it clusters about the limbs in almost a solid mass from the ground to the tip end. These are all propagated from the original five hundred trees purchased by us from the Brookings College at \$1.00 each.

Sapa—Sioux Indian for BLACK. "As dark as the shades of evening ranked in the western heavens." Turning the branches of this tree back and exposing the long ropes of glossy black fruit to the rays of the sun, the background of the brown smooth bark and glossy dark green foliage is certainly a pleasant sight and one to be remembered. This fruit is eatable and hangs on the tree for more than three weeks. When it first commences to mature the skin is dark green and the flesh of the royal purple. The color of the skin and flesh gradually changes until it is as black as the darkest midnight. The skin of this variety is especially tender and practically disappears with ordinary canning. This plum makes excellent preserves and jelly and of the finest quality for eating fresh from the tree.

Sapa—Two Years Coming Three

Professor Hansen's Long Keeping Hanska

A Young Hanska Tree Bearing in Nursery Row

Kaga

Of the same pedigree as the Hanska; ripens with us just a little earlier than the Hanska, seems to be a little larger and a little better quality than the Hanska. The fruit has occasionally cracked on the tree when we had extremely wet weather during the ripening period. We find this about one-quarter to one-half inch larger in diameter than the Hanska, and believe it will be one of the main market varieties as soon as well known. This is one of the very desirable shipping plums.

Kaga, Two-Thirds Natural Size. Notice Small Pit.

Ezaptan Plum—Same pedigree as the Sapa; remarkable for its early and ever-bearing quality. Color of fruit dark purple. Average about the same size as the Sapa. Quality delicious. Flesh purplish-red from skin to pit. Growth of tree similar to Sapa.

Prof. Hansen's Hanska Plum—(Sioux Indian for Tall), and refers to the extraordinary growth and symmetrical shape of the Hanska plum. The Hanska does not come into bearing as early as those varieties containing Sand Cherry blood, but three and four year old trees in the nursery were loaded with most excellent fruit. The Hanska was produced by crossing a wild Northwestern plum with the very large, firm-fleshed, fragrant apricot plum of China—*Prunus Simoni*—which is so very popular in all of the orchards of California. This variety has all of the good qualities a plum should have. The Hanska is a very large plum, a great many specimens measuring better than $1\frac{1}{2}$ inches in diameter. Is of the best quality for eating from the tree, for canning, preserving, or making jelly. None of the California or native American plums compare with it in any way. In color it is a bright red with heavy blue bloom. In shape it resembles its male parent, the Apricot plum. To see this tree in the nursery, its tropical foliage, its limbs laden with the luscious reddish-blue fruit, to get on the lee side of it and catch its fragrance, is a pleasure that can only be exceeded by the actual eating of the fruit, and we invite you to come to the nursery this summer and participate with us in this pleasure. As a shipper no other plum compares with it.

As we have told you in the general description of the Hansen plums, this is the variety we sent by mail from Yankton to San Jose, Cal., from San Jose to New York, and from New York back to Yankton, and reached here in fairly good condition.

Union, Me., March 2, 1920.

Please find enclosed order for stock. Last fall I sent you an order for 21 Oyata Plums, 3-4 feet, to be shipped this spring. Would like to have them shipped by April 15th. Will the enclosed order be packed with the trees? My Oyata grafts from scions which you sent me two years ago fruited last summer and I was more than pleased with their quality and behavior. They began to ripen the 8th of August. On the morning of Feb. 1st the mercury fell to 32 degrees below zero and killed all the Burbank blossom buds but did not injure the Oyata in the least.

C. A. MILLER.

WANETA

The Most Delicious of All Plums

This is unquestionably Prof. Hansen's masterpiece in Plums. It combines hardiness, immense size, delicious quality, long keeping, beautiful color, small pit, and early bearing, often producing a good crop in two years from planting.

Prices, Page 139. Waneta (Yankton Indian Chief)

"My belief is that in this variety I have combined the best points of the native and the Japanese plum. It is probably the largest of over 10,000 seedlings. The size here at Brookings in 1912 was two inches diameter; weight, two ounces. Good, red color; skin free from acerbity, flavor delicious. Pedigree the same as Kahinta I introduced last year. The female parent is the Apple plum, a large Japanese variety originated by Luther Burbank of California; the male parent is Terry, the largest native (*Prunus Americana*) plum, originated by the late H. A. Terry of Iowa. The Waneta plum was exhibited at the South Dakota State Fair at Huron in September, 1912, by the Horticultural Department of this Station. Waneta was a "Yanktonais boy from the wilds of the James river," who won fame in the war 1812, and became a great chief.

In the spring of 1913 the Brookings College offered a very small quantity of the wood of the Waneta plum for propagating purposes. We secured a small quantity of this wood and have made some very nice trees from it and are offering this valuable new variety for the third time. The Waneta plum is absolutely the largest and undoubtedly the best of all the Prof. Hansen introductions, and this means they are better than anything grown at the present time in any part of the country. The fruit of the Waneta has reached the size of two inches in diameter. Just take a ruler and place your two thumb nails on it two inches apart and you have the size of the Waneta. With reasonable cultivation it is as large as a small apple, as large as a good large peach, and is hardy anywhere in the northwest. An early and immense bearer.

In the spring of 1913 we paid 50 cents per foot for the scions of the Waneta to propagate from. From the lot received by us we have grown a few of these trees, running in size from about 3 to 7 feet. We are going to offer them as long as they last at **\$1.25 each**. The earliest orders will receive largest trees, **10 for \$11.00**.

Waneta Plum (Photographed by Prof. Hansen)

Prices on Hansen Plums

	Each	Per 10	Per 100
3-4 ft.	\$0.65	\$6.00	\$57.00
4-5 ft.	.85	8.00	77.00
5-6 ft.	1.00	9.50	92.00
Waneta	1.25	11.00	105.00

Wyant

fruits, in many cases equal and superior to the original tree. There are no two seedlings that will produce fruit alike. These are excellent for chicken yards or if you wish to grow a plum thicket purchase a number of these. These trees are strong and well rooted.

4-5 ft. 35c each; per 10, \$2.75; per 100, \$25.00
 5-6 ft. 40c each; per 10, \$3.75; per 100, \$35.00

Peaches

4-5 ft. Each, 70c; per 10, \$6.00

Peaches—These are successfully and even profitably grown in central Minnesota by laying down and covering for winter. Prof. Budd says an acre can be handled as easily as an acre of blackberries. My experience confirms it. We keep Bokara No. 3, Bailey, Crosby and Elberta, our hardiest and best. Will endure ordinary winters unprotected. Hardier than any of the seedlings.

Root Grafts—Apple, Plum and Pear

These are scions and roots grafted and tied together with waxed cord ready to plant. Apples should give from 75 to 95 per cent stand. Apple root grafts are put up in bunches of 50 each and bunches will not be broken. No order for root grafts will be booked after March 15th, and they will be shipped as early in April as possible without regard to other stock ordered. Small lots will go by parcel post, and they should be planted immediately on receipt of the grafts. They should be planted with a dibble as per instructions for cuttings. Price: Apples and Crabs, Baccata Crab Roots, 50, \$4.00; 100, \$6.50; 1,000, \$50.00.

Plum Root Graft—Our process of putting up plums has given us for a number of years practically as good stand as with the apples. These are all grafted on the American Plum root and we can furnish them in any variety. Per 50, \$3.50; per 100, \$5.00.

Prof. Hansen Plums—Any variety, 25 for \$3.50; 50 for \$6.50; 100 for \$11.00.

Pear Standard—25 for \$2.50; 50 for \$4.50; 100 for \$7.00. We pay transportation charges.

We do not replace root grafts that fail to grow.

American Plums

4-5 ft. Each, 90c; Per 10, \$8.75
Surprise—Fruit is very large, bright red. It may easily be mistaken at a few feet distance for a tree loaded with finely colored peaches.

De Sota—Bright yellow fruit, best in quality. Tree only moderate grower, inclined to overbear. Fruit should be thinned.

Wyant—Under good cultivation, one of the best. Prof. Budd says, 1897: "The best of all for profit." Tree a straggling grower. Has not been troubled with "plum spot."

Wolf—This is at least as good as any for all purposes. Large, round, dull red, perfect free stone and unexcelled for eating from the hand. It is only excelled in quality for culinary purposes by the De Sota and Surprise.

Plum Seedlings

The seedlings that we are offering are from the seeds of the common American plums such as we are listing and have listed in the past in our catalog. As a rule these will produce good

Compass Cherry, 2 Years After Planting

Springfield, Ill., Nov. 26, 1920.

My brother at Pana, Ill., has a plum tree, one of Prof. Hansen's Hybrids, that pleases very much. He obtained it from you. Please send me your catalog and tell me which tree it is if you know. He got a tree about three or four years ago. It is still very small but has borne heavily every year. Looks like a willow crossed with a wild cherry. Has purple plums of considerable size. Quality is good, and they do not rot or fall off.

S. S. SIMPSON.

NOTE: This is the Sapa Plum.

New Florence, Pa.

Just a few lines to commend what must be a most admirable system of packing trees. My order was shipped on the 6th of April and received on the 17th, the delay due, I presume, to railroad troubles. Despite the 11 days in transit I found the trees upon examination to be in prime condition seemingly; one plum, the Sapa, being in bloom. The trees were planted the day they were received, and they are growing as well as if the delay had not occurred. The general appearance of the entire order exceeded my expectations.

Medsgar will be in the market for fruit trees. I recommended your trees. Send him catalog. Specify those Plums and Apple trees. He will see my plums, and you should get an order. Everything I bought is doing well. The Beta Grape is 2 ft. high and the Plum trees have grown over 20 inches—a remarkable growth.

GEO. L. HAMILTON.

Currants by the Thousands

This shows a field of thousands of two-year old currant bushes in our Evergreen nurseries. We picked from this field of two-year old plants literally thousands of quarts of the best currants. This is a real field of currants, and S. S. said he grew them and wanted this picture with them, so here it is.

Currants can be grown successfully in any part of the country and will produce fruit quicker than any other small fruit, and is a sure annual crop. They grow and produce with almost no care, but just like any other tree or plant, will pay a hundred fold for additional care. Just give them a little cultivation, some manure worked into the soil, a little bit of trimming after the fruit is harvested, and you will have, not only fresh fruit, but quantities to can and make the best jelly. If you like a milder jelly, mix the currant juice with one-half apple juice, and it's delicious.

Instructions for planting and care.—These produce large bushes, and grow and produce paying crops of fruit for a great many years. But the size of that crop is going to depend a great deal on the care given it. Good cultivation, plenty of fertilizing, and a little trimming each year after the fruit has been harvested. This trimming should perhaps not be done until the plants have stood two years after you plant them. Then they will commence making a little shorter new growth, and in order to get a better new growth cut out a portion of the new wood. When you receive the plants, plant them about 2 inches deeper than they stood in the nursery. See that the dirt is well packed around them with a little fine dirt over the top to prevent the baking of the ground. Plant them 4 ft. apart in the row, and the rows about 4 ft. apart.

Crandall—Very large; black; fine quality, and keeping qualities after being picked. Bush a strong grower, vigorous and hardy; proof against currant worms. **Each, 30c; 10 for \$2.00.**

Lee—Medium large; black; fruit of fine quality, desirable for both kitchen and market. Bush a vigorous grower and very productive.

North Star—Medium size; fine flavored and prized in both kitchen and market. Bush very strong grower and should have plenty of room. Produces large quantities of fruit.

Red Dutch—A hardy, well-known standard variety; early, a prolific bearer and does well everywhere. It is, perhaps, planted more extensively than any other variety.

White Grape—Large; white; sweet or mild sub-acid; very good quality and popular for dessert and kitchen, and well known in market. Bush low and spreading. Very productive.

La Versailles—Very large; red; bunch long, of great beauty and excellent quality; one of the finest and best, and should be in every collection.

Victoria—Large; bright red; bunches extremely long; berries medium size, of excellent quality. Good erect grower, very productive. Ripens late, making it one of the most valuable sorts.

Above varieties, except Crandall: 2-year No. 1, 20c each; 10, \$1.60; \$15.00 per 100.

Perfection Currant—(See Colored Print, Back Cover)—You have all grown the old standard varieties of Currants, producing only a medium crop and those of small size. By the introduction of this new **Perfection Currant**, we are doubling the crop and the size. We picked currants of this variety in our nursery this past season nearly as large as the Early Richmond Cherry and in clusters of ten to twelve currants on each stem. When first introduced, won **Berry Gold Medal** at Pan-American Exposition and gold medal awarded at the Louisiana Purchase Exposition. It is certainly a wonderful fruit and should be in all your gardens. **No. 1, each 20c; per 10, \$1.80; per 100, \$16.00.**

Sand Cherry—It is absolutely hardy and produces immense quantities of slightly astringent berries, about the size and shape of the Early Richmond Cherry. Bears first year after planting. This is an extremely valuable fruit and should be largely planted. Prof. Hansen has been for some years breeding this fruit, growing and selecting from tens of thousands of seedlings. He has made great progress. (Sold commonly as "Rocky Mountain Hybrid Cherry.") **18 to 24 inch, each 15c; 10, \$1.25; 100, \$12.00.**

Blackberries

Instructions for planting and care: When you receive the Blackberries they will have a certain amount of the old cane on them. This is left more for the purpose of handling the plant than otherwise. The new canes come up from below the ground, and produce the fruit the next year after planting. Plant your Blackberries about 2 ft. apart in the row and the rows 5 ft. apart. Plant them about the same depth that they stood in the nursery.

We do not recommend Blackberries for any point north of Yankton in the prairie country, except in sheltered localities, but they can be grown successfully in almost any part of Minnesota in the timber country, or south of this point. We have seen large fields of Blackberries grown successfully and profitably by planting in cottonwood groves that have been thinned out either by nature or cutting out, leaving open spaces and planting the roots there and allowing them to grow wild. This method is worthy of trial in almost any section.

Snyder—Undoubtedly the hardest variety of the Blackberry; an abundant bearer, of good size, and good quality berries. 10, 60c; 100, \$4.75; 500, \$17.00.

Dewberries

Instructions for planting and care: Are propagated from tips. That is, the end of the vine roots in the ground. This will also be delivered to you with a portion of the old cane attached. This is of no value except for handling purposes, as the new cane that produces the fruit next year comes from the crown of the little plant you will receive. The Dewberry will have a quantity of fine roots. In planting, these must be spread out, the soil worked in carefully among them and the crown not covered over one and one-half inches. Plant 18 inches apart in the row, rows 4 to 5 ft. apart.

Lucretia—We do not advise planting this unless you have sandy soil, as it does better on that than on any other soil. This is a creeping plant and will often grow as much as fifteen feet in one season. The vines should be trimmed back to about three feet for best results. The fruit is about three times the size of the Blackberry, very sweet. Price: Each, 10c; 10, 60c; 100, \$3.00; 500, \$12.00.

Grapes

Instructions for planting and care: One of the most satisfactory fruits, and can be grown anywhere. For the extreme north use the hardest varieties, as the Beta. As you go farther south take standard varieties, as the Concord. A grape vine must be protected from air from the time it is dug until it is back in the ground. They kill easily if left unprotected while out of the ground. When you receive the grape, it will have very long roots. These should be cut back to about 6 inches in length. The hole should be dug a spade's depth, and the roots spread out on the bottom of this hole. If there are two or more clumps of roots on the vine, see that the earth is worked in well among the roots, packed well, cultivate and fertilize, and you will have best results. A trellis will be needed the second year after planting.

Beta Grape Good Producer

Also Makes Fine Shade for Porch, Shed or Hen Yard

(From Kansas City Star)

It is becoming common thought that luxury must give to necessity and that something useful must be tucked into every spot hitherto used to a maximum capacity. When this idea takes full growth, there should be a voluminous demand for the Beta grape. To show how this remarkable variety is doubly useful, I may simply state that my one vine provides my home with the most delightful, vine-embowered porch that one could wish, and yields one to two bushels of the fruit a year besides.

The Beta grape originated at Carver, Minn., with one Jacob Suelter. It is said to be a cross between the wild Northwestern Frost grape, *vitis vulpina*, and the Concord grape. The cross was made in 1870; seedling flowers first in 1881. That the Beta is really a hybrid I highly doubt. Certain it is, that of very many seedlings which have come up under the vine, none has yet shown any indications of reversion to the Concord type. But they have not been allowed to get above six inches tall. But that is no matter for our present purpose.

My stock came from the nurseryman in Yankton, S. D., and this attests the hardness of the variety. It is believed to be ironclad as its wilding parent. It is easily propagated in the usual way by cutting, and is a prodigious grower. The first year my plant grew a shoot eight feet tall. I cut it back to four feet, and

the next year three canes shot up to the top of the porch and began to interlace along the eaves. In its sixth year it covers three sides of a porch 10x12, and has spread along the east end of the house, and is starting around the corners on the north and south sides. Meanwhile, the grapes are more numerous every year, and the bunches are bigger and better. The bunches vary in size and density. Six inches long is almost the maximum, although some exceed that. Frequently the bunches are heavily shouldered. The fruit is of small or medium size, black with copious, waxy bloom. They begin to color in August earlier or later, according to the season. From this time onward they are excellent for cooking. The grapes become quite ripe by the first of September. But they stay in good condition until October and still show no sign of dropping. They are injured by severe frost. The flavor is very rich, strongly acid, but not biting or irritating to the lips. The juice prepared in bottles needs about three volumes of water to make it first rate for drinking. It "goes a long way" with the housekeeper. Those who know best prefer it to any other kind of grape juice.

If you want a vine to shade a back porch, a pergola, arbor, shed or a hen yard, why not use this vigorous, beautiful, hardy and productive Beta grape?

Grinnell, Ia.

Henry S. Conrad.

Beta Grapes and Compass Cherries Grown by Mattie T. Cramer, Malta, Mont.

Lucile, One-third Size

LUCILE—A beautiful large red grape, which yields as much as Concord; the very best quality, as hardy as any grape listed, except the Beta. A very strong, robust grower; ripens its fruit early. Vine is healthy and free from disease; never drops its berries. Each, 35c; 10 for \$3.20.

CLINTON—Only good grape for wine. Each, 18c; \$1.50 per 10; \$20.00 per 100.

CONCORD—Large, purplish-black grape; very hardy and productive, ripening about the middle of September. This is one of the most popular market grapes. Midseason. Each, 18c; 10, \$1.50; 100, \$14.00.

MOORE'S EARLY—Very hardy. Each, 25c; \$2.00 per 10; \$19.00 per 100.

NIAGARA—Large, slightly oval; pale yellow, with a white blossom; the quality is equal to the Concord and it is the standard white grape of the country. Bunches are large and compact. Vine vigorous, hardy and very productive. Each, 25c; \$2.00 per 10; \$20.00 per 100.

AGAWAM—An early ripener. Vine strong, bearing very large berries, with soft, sweet pulp and thick skin. Each, 20c; \$2.00 per 10; \$19.00 per 100.

ELVIRA GRAPE—White. Bunches medium size, very compact. Berries medium and sweet when fully ripe. A splendid wine grape. Hardy, vigorous grower and productive. Ripens in September. Each, 25c; per 5, \$1.00; per 10, \$1.90.

WORDEN—Larger than Concord and ten days earlier. Hardy, healthy, vigorous and productive. Large bunches, dark purplish-black. Especially good on account of its earliness. Each, 25c; per 10, \$2.25.

LUTIE GRAPE—An old standard variety. Out of twenty-five varieties of grapes that we are growing in our trial grounds the Lutie grape has led for two years. The Lutie is very vigorous and produces more fruit than any other variety in the trial grounds. It is a red grape, earlier than the Concord and probably more hardy. There is no reason why you cannot grow large quantities of these grapes, as there are but few fruits, if any, that will produce more fruit per square foot than grapes. Try ten of these. Each, 40c; per 5, \$1.85; per 10, \$3.50.

Grapes

There is hardly a yard so small or a farm so large that there is not room for a few to many hundred grape vines, and you can afford to give them a little attention, as nothing will respond more freely to care than will the grapes. Fruit is appreciated by all, and can be grown in practically every section of the United States. You can use them to cover unsightly buildings and fences; they will do this work and pay their way in fruit.

Beta Grape (see cut on the inside of back cover)—The people moving north regret the loss of their Grapes, which are wonderfully attractive and refreshing in the late summer. Many the heartache and sigh of disappointment when the housewife finds she cannot grow Grapes on her new homestead or northern home. The Beta

changes all this, as it will grow readily in North Dakota without covering; not only grow, but produce as much fruit per vine as the large varieties in the East, rapid growers often making a growth of 15 to 20 feet in a single season. Extremely valuable for covering summer houses, outbuildings or fences. We recognized the value of this new Grape when it was first introduced. Prof. Green, the greatest horticulturist and fruit growers' friend, of Minnesota, introduced this Grape in the North, and we have seconded his effort to the best of our ability and are certainly proud of our success in getting it out among the growers and more proud of the success attained by the growers. It has made their homes beautiful and produced immense quantities of fruit. Each, 25c; per 10, \$2.25; per 100, \$22.00.

Concord, the Old Standard, One-third Size

Gooseberry

Plant in good rich soil and give liberal dressing of manure each season. Regular pruning every year is necessary for the production of good fruit. The Gooseberry will do better if partially shaded. Plant them on the north of buildings, fence, or other trees. We advise mulching the gooseberries heavily, using old rotted straw for the purpose.

Oregon Champion Gooseberry. Berries very large, brownish-red color, very sweet and fine for table use and pies. Bush a strong grower, healthy and not very thorny and a very prolific bearer. One of the best berries for the market.

Prices:

1 year old, No. 1 plants. Each..\$0.25

1 year old, No. 1 plants. Per 10. 2.25

1 year old, No. 1 plants. Per 10020.00

Houghton

Houghton—Medium size, pale green, sweet when thoroughly ripe; very spreading grower, and excellent bearer; the standard gooseberry. Each, 25c; 10, \$2.40; 100, \$21.00.

Carrie Gooseberry

Prof. Hansen's report on this Gooseberry at the State Horticultural meeting in 1910: "We have fruited the Carrie the past season or two and are well pleased with it. It is a great improvement in some respects over the old Houghton. I saw a large plantation near Excelsior, Minn., in 1907, in heavy bearing,

and certainly it was a sight to behold."

At the meeting of 1911 he further reports: "The Carrie is intermediate in size between the Houghton and Downing, and it is a heavy bearer at Brookings. It is a welcome addition to our present short list of Gooseberries. The Carrie will supersede the Houghton, I am confident of that."

Here at Yankton it has proven much the best of all. For size, quality and productiveness we call it best. Each, 35c; 10 for \$3.50.

Sunbeam Raspberry Prof. N. E. Hansen's New Hardy Raspberry

This new perfectly hardy Raspberry, introduced by us after another year's trial, we can say positively that it is the only Red Raspberry of value from the south line of South Dakota to just as far north as you are a mind to go. We grow in the nursery a large number of varieties of Red Raspberries. The **Sunbeam** was the only one that comes through the winters without winter killing. It produced a full crop of fruit, other varieties not any. A better raspberry than the **Sunbeam** may be produced later, but we doubt it. In hardiness it is perfect, quality the best, and the quantity not to be complained of. Each, 10c; per 10, \$1.00; per 100, \$4.50.

King—Pronounced the very best early Red Raspberry by many of the leading horticulturists in Minnesota; it is the great market berry of that country; probably more acreage of the King planted for market purposes than all others combined. 10, 60c; 100, \$3.90; 500, \$15.00.

St. Regis Everbearing—Red; commences to ripen with earliest and continues on young canes until October. Berries bright crimson, large and sugary. Flesh firm; a good shipper; the most prolific of any red variety known. Plant a very strong grower. 10 for 80c; 100, \$4.65.

Columbian—Purple. This is an exceptionally large, purple berry resembling Shaffer's Colossal; it is very hardy and produces immense crops. 10, 80c; 50, \$3.00; 100, \$5.00.

Gregg—Black; for many years the leading standard, best known market sort; very productive; large size. 10 for 70c; 100, \$3.00; 500, \$14.25.

Cumberland—Black; a healthy, vigorous grower; fruit very large, quality good. Keep and ship as well as any of the blacks. The most profitable market berry. 10, 85c; 50, \$2.50; 100, \$4.00.

Red Raspberries—Instructions for planting and care: Such as the Sunbeam and Ohta are to be handled just as the Blackberry. They make new growth, produced from the cross section of the root, or below the ground on the stalk that you receive.

Black Raspberries—Instructions for planting and care: They should be planted and cared for just as you would the dewberry.

St. Joseph, Mo., March 6, 1919.

Three years ago I ordered a Waneta plum tree from you. It was loaded with plums last fall. The plums are of very large size, and I gathered one-half bushel basket, all free from diseases. You can't say too much for the Waneta.

H. P. RATTICH.

Professor Neils E. Hansen's Ohta Raspberry

See Colored Plate Inside Back Cover

We have left the description of the "Sunbeam" raspberry just as we gave it one year ago. We made the statement in that description that the Sunbeam was absolutely the best hardy red raspberry; we also made the statement that possibly a better one would be produced. We made that statement for the reason we did not feel that Professor Hansen was going to stop the raspberry improvement until he had one that was almost, if not perfection. We are showing here a photograph of a bowl of the new **Ohta**. These berries are shown in the photograph about one-half size, as the photograph was reduced that much. We have picked **Ohta** berries this year from the times the first ones ripened, early in July, until the ground froze. The **Ohta** berry is absolutely an everbearing the first year you plant it, and if you want continuous berries each season, transplant a few of the **Ohta** from your patch each fall or spring, cutting the old stock down to about eight or ten inches high, and they will then bear immensely all summer.

Professor Hansen has made a world-wide reputation on his new fruit inventions, and the **Ohta** will only add to his good name as an inventor of new fruit. The **Ohta** outbears the Sunbeam. It is a larger and better flavored berry and is equal to the Sunbeam in every other way. Each, 20c; 10, \$1.30; 50, \$3.25; 100, \$6.00.

Minnesota No. 3 Strawberry

A rugged plant from a rugged state, a state that has produced great men, that have done wonderful things for their country, this does not apply to fruits and trees and grains alone but to all lines as well, **Minnesota** has no reason to feel ashamed of its important place in the fruit world; it has had its **Peter M. Gideon** and his **Wealthy** apple that will be known long after most other varieties are forgotten. Its men and women have produced its trees and flowers, its small and large fruits, and now its new strawberry **Minnesota No. 3** with its large luscious red berries, borne in large clusters, maintaining its size through the season, fighting successfully the cold winters and coming out in the spring's sunshine more vigorous than ever, ready to deliver to us in the shape of crate upon crate, its delicious fruit, which we take willingly, never stopping to think of the wonderfulness back of all nature. Here's to the strawberry **Minnesota No. 3**. Welcome in all your rugged hardiness as the Norsemen of old were welcomed.

Welcome in all the beauty of the flowering plant and the rich bed of blood red fruit, and honor to **Minnesota**. Postage paid.

Price: 25 for 75c, 50 for \$1.00, 100 for \$1.75, 500 for \$6.50, 1,000 for \$10.50.

Gurney's Everbearing Strawberries

"Put on your overcoats and pick strawberries enough for a shortcake."

This was an actual request made by Mrs. S. S. Gurney on October 15, 1920, to her group of girls shown in the picture on this page. Lots of Everbearing Strawberries in the field at that time and there had been a good picking of strawberries right along almost since June, the only skips being at dry time when the berries were too small to pay to pick.

Page, N. D.
Nov. 5, 1920.

Yes, I received the strawberry plants, Minn. No. 3, and how they did grow. I took extra good care of them and the runners, and I think that is the best variety for this country. I bought nearly all my garden and flower seed from you and I believe every seed grew and we had the best garden. I was so proud of it. Will always buy my seed from you.

Viola E. Radcliffe.

Arapahoe, Wyo., June 12, 1920.
The strawberry plants were received in splendid condition. Thanking you very much for your prompt attention to my order.
E. A. Reed.

Strawberries

Instructions for planting and care.

We sell millions of Strawberries each year, and they go to all sections of the United States. We often ship them across the continent and have them reach destination in perfect condition. Other times they go only a short distance and are dead on arrival. We dig, pack and ship fresh every day, so that they leave us in the best possible condition. When you receive your strawberries they should be fresh and green, and not rotted in the crown. If they are received black and the crowns rotted this is caused by becoming heated either by natural or artificial causes, and very few of them will grow after that. It is very unusual to have them reach you in anything but the

best condition. When they are received in anything but good condition, notify us at once. More strawberries are killed after they are received by the planter than any other way. They appear to be a trifle dry, and they are immediately soaked up. The crown of a strawberry plant should never be wet before planting. It will rot in a few hours. Each plant has a number of fine roots, and the best way to plant them is to have your ground in excellent condition, force the flat hand into this mellow ground, withdraw the hand, leaving a hole an inch wide by about 4 inches, and about 4 or 5 inches deep. Take the other hand spread the roots of the plant out fan-shaped, the crown to be just even with the top of the ground when the dirt is packed firmly back against the plant. Plant them from 1 foot to 18 inches apart in the row, and the rows 4 feet apart. During the growing season they will throw out a number of runners that set new plants. Train these to stay close to the original plant, not allowing it to become more than a foot wide. This allows room for cultivation and makes the bed most convenient for picking the fruit. In the fall, when the ground freezes, cover the plant to a depth of about one or two inches with straw or hay. Straw is best, as you can rake it in among the plants in the spring and allow it to remain there. This keeps the fruit off the ground and clean always.

Strawberries are always sent separate from the balance of your order, either by parcels post or express, charges paid by us. We do this that the plants may reach you in best possible condition.

Chassell, Mich., April 8, 1920.
I received my strawberry plants in good condition and I thank you very much for your kindness.
Harnes Carlson.

Renville, Minn., April 22, 1920.
I received my strawberry plants today and want to thank you very much for keeping them that much longer than the currants. I received those on the 9th. Both plants and bushes were in fine shape.
J. O. Koldom.

Everbearing Strawberries The Famous Progressive Variety

Again we are going to talk to you about two varieties of Everbearing Strawberries, the Progressive and the Superb. The Progressive still holds first place among all the everbearing strawberries, and on that account we will give it the most space. We consider it at least 90 per cent better than the other varieties. The Superb produces a larger berry, but does not produce as many plants or as many berries, and will not stand the grief that the Progressive will. They will produce fruit from early July until heavy freezing. In our large acreage of strawberries there was no time during the season that we did not have plenty of strawberries for everybody. No matter how small or large the piece of ground you have, you can have everbearing strawberries for the better part of four months each year. One hundred plants, properly cared for, and, if possible, placed near the house, where you can give them a little water from the well or some of the wash water about once a week during the hot, dry spells, will supply an ordinary family with all the strawberries they can use during the summer. We are receiving letters from all parts of the country, from our customers, telling us how well they like the everbearing strawberries. They produce the same year they are planted. We are publishing a few of these short letters regarding the strawberries on different pages in the catalog. The strawberries are the easiest cared for of almost any of the small fruits, and you will get quicker results from the strawberry than from any other small fruit offered by us.

You will notice on the order sheet a number of pamphlets or little booklets which we issue free of charge, giving you instructions for the planting of all kinds of fruit, flowers, etc. In this list we give you full information regarding strawberries. Just check on your order sheet the ones you want and they will be packed with your order. All of these are free.

We are offering the Everbearing strawberry at less than half the price charged by traveling tree agents, and we make shipment of them as soon as they are dug. Last year our sales increased wonderfully over those of the year before. We expect to sell many more this season of 1921. We ship strawberry plants in just two ways, one by parcel post, the other by express. We are quoting these strawberries to you parcel post or express charges paid. If the order is small, say, not to exceed 200 or 300 plants, or you are a long distance from the railroad, they will go in all such cases by parcel post. If the item is from 500 plants up, they will be sent by express, and we will send you notice as soon as shipment is made.

I have forgotten to say much of anything about the varieties, but the Progressive is the one that produces large quantities of nice large berries; the Superb produce not so many berries, but larger ones. You will be satisfied with either, but we recommend the Progressives. Place your order with us early and they will be sent at the proper time.

Express or parcel post charges paid in all cases by us. Always shipped separate from your other orders.

Per 10, 50c; 25, \$1.00; 50, \$1.50; 100, \$2.25; 500, \$9.00; 1,000, \$17.00.

Strawberries—Standard Varieties

Even with the introduction of the Everbearing Strawberry there is still a place for the old standard one crop per year strawberry. The Dunlap is absolutely the best. It is a self-fertilizer, fine quality berry, and yields abundantly, and is a good shipper.

We grow a great many varieties of the old standard strawberries, but we consider the Dunlap the best of any for all purposes. We can furnish you with the Bederwood, Sample, Warfield, the Big Four. The Dunlap and Bederwood are the self-fertilizers or perfect flowers. The other varieties are not perfect flowers, but Pistillate and require either the Dunlap or Bederwood planted in alternate rows to fertilize them. **Price, 25, 50c; 50, 85c; 100, \$1.25; 500, \$4.00; 1,000, \$7.50.** Parcel post or express charges paid in all cases by us.

500,000 Black Walnut at our Evergreen Nursery. Large trees in the distance produce annually large crop of nuts

Nut Bearing Trees

Almost every farm and garden contains some land that should be planted to nut trees adapted to the soil; probably no branch of tree cultivation pays larger profits or is as well assured of a profitable market for all products, the nuts in many cases paying better than farm crops or fruits, while most kinds are making a growth of valuable timber that will of itself pay a large per cent on the investment. The nuts that we list can be grown in almost any section of the country. I will say, with the exception of the chestnut, which should not be planted north of Yankton.

Butternut or White Walnut—A fine native tree producing a large, longish nut, which is prized for its sweet, oily, nutritious kernel. **2 to 3 ft., each, 25c; 10, \$1.75; 100, \$14.00.**

Chestnut, American Sweet—A valuable tree, both useful and ornamental. **3 to 4 ft., each, 35c; 10, \$2.75.**

Hazel Nut—This forms a small growing bush and produces large quantities of nuts; it is perfectly hardy in any territory; does best if planted alongside of or in thin groves, or along creek banks in the natural timber. **Each, 20c; 10, \$1.50.**

Horse Chestnuts—The nuts that these trees were grown from were gathered from two trees that are at least eighteen inches through and perfect in form, growing in the City of Yankton. These are probably the oldest Horse Chestnut trees in South Dakota and have proven perfectly hardy. The fruit of this is not edible. The tree is very beautiful and ornamental, making an almost perfectly globular top. It bears large quantities of flowers followed by burrs containing two to four nuts. **3-4 ft., each, 80c; 4-5 ft., each, \$1.00.**

Walnut, Black—This is the black walnut of commerce; produces probably the most valuable of any wood grown in the United States today; also produces large quantities of nuts which are marketable always at a good price. We grow these in immense quantities, having probably over one-half million of them for market this season. All of our walnuts are grown from the nuts produced here, so they are the hardest that you can get. **8-10 ft. trans., each, \$1.10; 10, \$10.00; 6-8 ft. trans., each, 80c; 10, \$7.50; 5-6 ft. trans., each, 65c; 10, \$5.50; 12-18 in., 10, 50c; 100, \$2.00; 1,000, \$16.00.**

Norbert, Mont.,
Feb. 1, 1920.

I have had excellent success with your Bugless Potatoes and they are all you claim them to be. They had bugs on them but they didn't hurt them a bit, and we sure like the Bugless Potato for table use. I am enclosing the photos I had intended sending quite a while ago. One is my youngest child and not the tallest but the third tallest of the Poplar trees which I received from you. The other is my oldest and youngest child beside one of the fifty Ash trees I raised from seed which I purchased from you. Are you sending catalogs this year?. I am waiting with patience for mine.

CHAS. M. VOSS.

Cottonwood and Poplars

Grow to immense size in the Dakotas and the tree which we are showing you is a very old tree which was more than six feet through at the base. This was a Yankton County product, and on account of its being hollow was permeated by the bees and it was cut down to get the store of honey which amounted to several hundred pounds. Cottonwoods are not usually hollow, but this one was hollow for more than 70 feet in the trunk and made an ideal bees' nest. The children shown in the hollow portion of the tree are those of P. S. Gurney. The Cottonwood and Poplar are the most rapid growing of any of the soft wooded varieties, and should be planted on every farm. They make rather excellent firewood, mighty good thick shelter, and are always pleasing to the eye. Cottonwood and Poplar are the coming tree for the manufacture of paper pulp. We are selling hundreds of thousands of cuttings and trees to paper manufacturers each season. A paper mill in Dakota working on cottonwood cut here could reduce the cost of paper.

Down on the Old Farm

This farm is down on the Jim River just a few miles from Yankton. It is not owned by the company, but by brothers, S. S., P. S., C. A. and Donald. I used to own it but they wanted it worse than I did and I sold it to them. This past year they planted 120 acres of corn on this farm, farmed it mostly nights and produced a crop. We do not recommend this particular method of farming but help was short and they were anxious to make all they could, so put in the overtime.

The big tree in the picture is a monstrous elm tree within about a hundred yards of the Jim River bank. It has a total spread of 87 feet, and two feet from the ground it has a circumference of more than fifteen feet. It has undoubtedly stood there for more than two hundred years and is in perfect condition and may be there two hundred years from now. The folks under the tree are just a bunch of the Gurneys having a little fourth of July celebration of their own. In the picture is the mother of the Gurneys bunch, 74 years old; her brother, 81; a sister, 77, and a sister, 83 years of age, all of them strong, active and younger than lots of the younger ones. There are also grandchildren and great grandchildren, and when the picture was taken there was a lot more of the tribe down in the river swimming.

This picture of the grand old elm tree demonstrates to you what a tree will do when given an opportunity. Most shade and street trees are planted so closely that they seldom develop into anything more than a pyramidal, crowded, ill-shaped tree, and when its close neighbor has to come out it leaves the tree that you want to save deformed beyond recovery. Plant your shade trees and your street trees far enough apart so that they will not interfere one with the other. It will cost you less money and give you better results. We want to sell you shade trees but we do not want to and will not sell you more than you need if we know it.

Forest or Shade Trees

There are some things that you can get along without, sometimes to your advantage, other times to your disadvantage; and the person who tries to get along without a shade or forest tree is trying to get along without something that works to his disadvantage more than almost anything you could think of. If your home consists of a house and a single city lot, yourself and family are entitled to at least a few trees that will produce shade, beauty and protection from the winds. If your home is on the farm you have a greater advantage, and a greater disadvantage if you fail to avail yourself of the opportunity of planting trees. You not only are unfair to your family, but to your buildings and live stock, and to your whole community because a treeless farm is a bad advertisement and reflects on your whole community. If you are part of a municipal organization, and every resident of a town or city is, you are almost criminally negligent if you do not have one or more public parks, depending of course on the size of your town. The greatest mistake ever made by a small town is not to purchase cheap ground for the parking of the future larger city. All cities without regard to their size were once small towns and you cannot tell what your town will develop into later. By being up to date with sidewalks, paving, public parks, etc., you will bring it forward ahead of the less progressive community.

There are certain natural rules that should be followed in planting street, forest or shade trees to get the best results. First, in planting trees outside of the sidewalk, the trees on every block should be of the same variety and to be just right the trees of that street on both sides should be of the same variety. So often you see in a single block an assortment of trees like Elm, Poplar, Hackberry and Ash, the particular kind that the owner of one lot may like best, and the beauty of the entire block or street was spoiled by this conglomeration. In forming a new park in a town or city, the Park Superintendent should have charge of all planting outside of the sidewalk. If he is a good Park Superintendent, he will know just what to do and will make the city beautiful. Trees planted outside of the sidewalk should be given a good distance one from the other so that they can mature to a perfect beautiful form. In a forty-four or fifty foot lot there should not be to exceed two trees. You often plant as high as six or eight and within a very few years they are out of shape and you never do have a beautiful tree. Forest and shade trees should always have ample room to develop in. This applies to trees planted inside of the lot and to city parks. The only place it does not apply is where you want a quick shelter, where certain varieties can be planted together and form a perfect dense windbreak.

Melford, Nebr., June 7, 1920.

I want to let you know I received the cinnamon vine all o. k. Thank you very much for it. The things I sent for are surely growing fine, every one of them. The Willow tree has limbs on it over a foot long now. My! it is nice. They all came in good shape, and I shall send there for my garden seeds for next year and some other stuff. There is a nursery at _____ and one in _____ but if you send for a crab tree there you may get a plum or a cherry. I will send my order in early and you will know the proper time to send them. Thanking you again for my things. I am well pleased with them all.

MRS. M. L. ADAMS.

Russian Olive—Instructions for planting and care: Is desirable for a border hedge, windbreak, or large specimen tree. Is generally used for hedges or windbreak purposes, and is more desirable for those purposes. When for hedge purposes, these trees should be planted about 1 ft. apart in the row, and after planting cut down to $\frac{1}{2}$ their size. This will make them branch out close to the ground and make a close, perfect hedge. Trim each season during the best growing period in June to the shape you want your hedge. For windbreak purposes plant them about 3 ft. apart in the row, and after several years cut the tops back sufficiently to make them thicken close to the ground.

St. Paul, Nebr., Mar. 6, 1920.

F. J. Ambroz sent you an order for some trees so please do send these in one bunch. The trees I ordered last spring grew fine and some of the Hansen's plums bore fruit the same summer and good sized at that. The ones I planted the year before last were covered with plums. It was a surprise to me to see such small trees covered with fruit. Will send you a picture if I have good luck this summer.

EDW. AMBROSE.

Ash (Fraxinus Americana)

This is a slower growing tree but the most valuable of all for northern and north-western South Dakota and North Dakota. We grow hundreds of thousands of them for that section of the country and they go out in from a single tree to carload lots. In planting in that section of the country, you should make your planting largely of the Ash tree. It is an upright grower, with beautiful foliage, perfectly hardy and absolutely the best for the high and dry places, or where what is known as hard pan is close to the top of the ground. It will grow with less rainfall than any other forest tree and will grow in that part of the country where ninety per cent of the population will say that trees cannot be produced. Every farm in that section can and will produce Ash trees eventually. Just give the Ash tree a trial in that section and after planting give it good care with cultivation and heavy mulch. Your home, whether it is in the city or on the farm, will be just as beautiful as the tree-covered portion of southeastern South

Dakota. This is a great tree for Montana and Colorado, and should be used in all sections of the country in parks to make up a variety.

I cannot believe that any of you care to live in a home, whether in the city or on the farm, unless it has some trees and flowers and you want to plant that which will do best in your locality. The Ash tree is one of the easiest to transplant, it seldom fails to grow, but requires care after planting just as your cornfield does. I advise against the planting of any tree or any plant unless you give it care, because if you fail to care for it it will die, you will be disappointed and be a knocker. The Ash tree is the last of the forest trees to leaf out in the spring. Consequently, it can be planted much later than the other varieties. Orders from the North and Northwest are received by us later than from other sections, and the Ash fits in well on that account also.

The caliper referred to on trees means the measurement thru the tree six inches above the ground.

	100	1,000	Each	10	100	
6-12 in.	\$0.75	\$4.50	5-6 ft. trans.	\$0.35	\$2.50	\$16.00
12-18 in.	1.00	7.50				
18-24 in.	2.00	10.00	6-8 ft. trans.	.40	3.50	25.00
2-3 ft.	2.60	13.00	8-10 ft trans.	.65	5.50	40.00
			1½ to 2 in. cal.	1.25	11.00	90.00
			2 to 2½ in. cal.	1.75	17.00	150.00

Box Elder (Acer Negundo)

This is a rapid growing tree, producing firewood of good quality about as quickly as any tree will. Very hardy and long-lived; is not a beautiful tree but is desirable in your windbreak or groves on the farm. We do not advise the planting of these for street trees or in city parks, but intersperse a row of Box Elder in your grove on the farm for quick protection. When it has served its purpose, cut it down for firewood, and the other hardwood trees like the Ash, Hackberry and Elm will make use of the room previously used by the Box Elder and make better trees. This photo shows a Box Elder as a shade tree. Note its size and shape. Grown with plenty of room.

Each	10	100	1000	Each	10	100	
6-12 in.				6-8 ft.	\$0.50	\$3.50	\$27.00
.....	...	\$0.75	\$5.00	8-10 ft.	.55	5.00	40.00
2-18 in.				1½-2 in. cal.			
.....	...	1.00	9.00		.85	8.00	...
3-4 ft. trans.				2-3 in. cal.	1.00	9.00	...
.....	...	\$0.20	\$1.70				
5-6 ft. trans.							
.....	...	.35	3.00				
		24.00	...

Box Elder

Basswood (Linden)

One of the most beautiful deciduous trees grown. Trunk always straight, the top almost a perfect globe; green leaves during the summer changing to bright yellow with the autumn; holds its leaves well beyond most other trees; very hardy.

	Each	10
5-6 ft. trans.	\$0.80	\$7.50

White Birch

A graceful tree with white bark; a very desirable lawn tree. Will stand severe winters if not too dry.

	Each	10
4-5 ft. trans.	\$0.55	\$5.00
5-6 ft. trans.	.75	6.50

Main Building, State Hospital, Yankton, South Dakota, Surrounded by Elms

Catalpa Speciosa

This is the hardy Catalpa of the north and one that is sold by tree agents over the country as high as \$20 per 1,000 for the little fellows. In Yankton County there are some very large growers of the genuine Catalpa Speciosa, and in the city of Yankton there are large trees, some of them two feet through. We procure all of our seed from the trees here in Yankton County. They are fine for ornamental or street purposes; grows very straight, rapidly, and its leaves measuring 10 in. across and its immense quantity of beautiful white flowers give it its very tropical appearance. Our large sizes for ornamental purposes are transplanted and are very easily made to grow.

	100	1,000		Each	10	100
12 to 18 in.	\$1.00	\$6.50	5 to 6 ft., hvy.	\$0.35	\$ 3.00	\$22.00
18 to 24 in.	1.25	10.00	6 to 8 ft., hvy.	.40	3.50	26.00
			8 to 10 ft.	.50	5.00	....
			2 to 2½ in., cal.	2.00	17.00	....
			2½ to 3 in., cal.	2.25	20.00	....

Catalpa Bungei—Umbrella Catalpa, grafted on the catalpa speciosa up about six to eight feet from the ground, makes a perfect umbrella-shaped head without pruning; hardy and flourishes in any section south of Sioux Falls, S. Dak. 6 to 8 ft., each, \$1.25.

Siberian Pea Tree (Caragana Arborescons)

A very hardy, low-growing tree from Siberia; excellent for hedge purposes, for snow breaks, or ornamental specimens. The trees in the spring are covered with racemes of yellow flowers, later forming pods like peas. The bark is light green in color, the foliage light green with silvery back-ground. Planted extensively in Canada, North Dakota and other northern states where the conditions are severe. Height, 10 feet. Exceptionally good for dry, cold climates. If you have had difficulty in starting windbreaks, plant an outside row of these trees. You will succeed.

Each				10	100	Each				10	100			
6	to	12	in.		\$ 0.30	\$ 2.00	18	to	24	in.		\$0.80	\$ 7.00	
12	to	18	in.		.70	3.50	3	to	4	ft.		\$0.20	1.30	12.00

Cottonwood and Poplar

Are of the same family but not identical. The Poplars come in a great many varieties, the Carolina, Norway, Canadian, Northwest and others. They are all very valuable in their particular part of the country. They grow rapidly, producing shade and firewood and paper pulp quicker than any other tree that can be grown. They, like the Boxelder, can be interspersed in your groves and removed for their various uses before the hardwood varieties need all of the space. A grove in the north is not complete without a quantity of the Cottonwood or Poplar because you want something that will grow quicker. The Cottonwood or Poplar tree at five or six years will give you lots of shade and lots of firewood and they are always hardy.

Cottonwood

These well-known trees are found growing on more farms than any other variety of the shade trees offered. They are especially valuable as they produce shade, windbreaks and wood faster than the other trees. They do especially well on the low ground and are long lived when planted where there is plenty of moisture. They are harder than the Poplars.

	Each	10	100	1,000		Each	10	100	1,000
12 to 18 in.	..	..	\$0.60	\$4.00	3 to 4 ft.	..	\$0.50	\$3.50	....
18 to 24 in.	..	..	.75	5.00	4 to 5 ft.	\$0.15	1.00	8.00	....
2 to 3 ft.	..	..	1.75	6.00	5 to 6 ft.	.20	1.50	10.00	....

Surrounded by Elm and Hackberry—Residence of D. B. Gurney, Yankton

ELM, AMERICAN WHITE (*Ulmus Americana*)

Is a very desirable tree for a great many reasons. The Elm from Northern seed, such as we grow here, is always hardy. It grows into a beautiful spreading tree that will live longer than several generations of we people and increase in beauty each year. It is free from bugs and insects and wind seldom if ever breaks or damages it, and from the time you plant it you can say, "This is a beautiful tree but it will be better next year." And it continues to get better. I want you to notice again the picture of the monstrous Elm which we show "Down on the Farm." Here is an Elm tree that has stood more than two hundred Dakota winters. It is large enough for all of the children of a town of five hundred people to play under and all be in the shade. A hundred of them could climb up in its branches without being crowded and everyone of them would enjoy doing it. A dozen swings could be attached to its branches and a banquet for two hundred people could be spread under its broad arms.

is planted over a wider range of country for ornamental and shade purposes than any other tree. It is the tree for the city and the town. It is the tree to produce the shade and stand the grief that the shade tree always receives on the farm as well as in the city.

This is the most popular of all street trees. It is the tree for the city and the town. It is the tree to produce the shade and stand the grief that the shade tree always receives on the farm as well as in the city.

			Each	10	100	1,000
6	to 12	in. sd. ....	..	....	\$1.00	\$5.50
12	to 18	in. sd. ....	..	....	1.50	10.50
18	to 24	in. sd. ....	..	....	1.80	14.00
2	to 3	ft. sd. ....	..	....	2.25	18.00
3	to 4	ft. sd. ....	..	....	3.50	32.00
4	to 5	ft. tran.	\$0.25	1.50	14.00	....
5	to 6	ft. tran.	.35	2.70	22.00	....
6	to 8	ft. tran.	.50	3.50	32.00	....
8	to 10	ft. tran.	.60	5.50	45.00	....
1 1/2	to 2	in. cal., tran..	1.70	15.00	100.00	....
2	to 2 1/2	in. cal., tran..	2.25	22.00	....	....
2 1/2	to 3	in. cal., tran..	2.75	25.00	....	....
3	to 4	in. cal., tran..	3.50	32.00	....	....

HACKBERRY (*Celtis Occidentalis*)

The Hackberry is a native well into the Dakotas, and there are wonderful specimens of these growing along the rivers, creeks and ravines. It is a perfectly hardy, rapid growing, beautifully shaped tree. When planted alone, allowing it to have plenty of room for spread, it forms into the best-shaped of any of the hardwood trees, and it is well to give it considerable room in planting.

I am showing here the picture of a hackberry tree in front of the telephone office at Yankton, South Dakota. This tree spreads more than 40 feet, is a perfect globe, and is noticed and commented on by practically every visitor to this city.

I have in my own yard hackberry trees 40 years old. These are wonderful trees, nearly two feet through, giving me a dense and perfect shade all summer. The hackberry is very free from disease and insects, a clean, strong, desirable tree for all purposes. They are hardy as far north as you care to plant. In beautifying the school grounds, the home or the farm; for park or street trees in the town or city, or for a good rugged, centuries-long monument to the boy who lies in France, the hackberry would be most desirable.

		Each	10	100			Each	10	100		
4	to 5	ft.....	\$0.25	\$2.00	\$18.00	8	to 10	ft.....	\$0.70	\$6.50	\$60.00
5	to 6	ft.....	.35	3.50	27.00	1 1/2	to 2	in. cal.....	1.25	12.00	100.00
6	to 8	ft.....	.55	4.50	40.00	2	to 2 1/2	in. cal.....	1.75	15.00	145.00

LOCUST, BLACK (Robinia Pseudacacia)

A rapid growing tree, bears fragrant white flowers, wood very hard, valuable for fence posts, hardy in sheltered locations, or where planted with other trees throughout the east half of the state.

	Each	10	100	1,000
18 to 24 in.....			\$1.00	\$9.00
5 to 6 ft.....	\$0.30	\$2.50		

LOCUST, HONEY (Gleditsia Triacanthos)

A very fine tree, delicate foliage, very fragrant flowers followed with bean-like pods, thorny.

	Each	10	100	1,000
12 to 18 in.....				\$1.25
5 to 6 ft.....	\$0.45	\$4.00		
6 to 8 ft.....	.65	5.50		

MAPLE, SILVER OR SOFT (Acer Dasycarpum)

This is one of the rapid growing street trees. In towns it is one of the good shade trees and good street trees. If planted in groves in the country it does remarkably well and should be on every farm.

	Each	10	100	1,000
12-18 in. sd.....			\$ 1.50	\$10.50
18-24 in. sd.....			1.75	15.50
2-3 ft. sd.....		.50	3.00	
3-4 ft. trans.....	.20	1.75	15.00	
5-6 ft. trans.....	.35	2.55	22.00	
6-8 ft. trans.....	.45	3.75	30.00	
8-10 ft. trans.....	.60	5.75	45.00	
1½-2 in. cal. tr..	1.00	8.50	75.00	
2-2½ in. cal. tr..	1.50	14.00	125.00	

Sugar or Rock Maple—This tree is chieftain of its clan; straight, spreading, symmetrical, of grand proportions, often 120 feet in height. It grows well and roots deeply. Its bold leaves

have very rich autumn tints of clear yellow and scarlet. Hardy here when planted among other trees.

18-24 in.....	10 for \$1.00; \$5.00 per 100
5-6 ft.....	Each, 65c; per 10, \$6.00

GINNALA MAPLE

This is a hardy Maple from Siberia. A semi-dwarf tree, fourteen to twenty feet tall. Hardier than the Soft Maple. The bright colored prettily cut leaves and the immense quantities of seed that they produce make them very attractive trees. 5-6 ft., 70c each; \$6.00 per 10.

THORN APPLE

This is a native tree, extremely hardy. Attains a height of twelve to fourteen feet. Very rounding top, light gray bark. Covered with white blossoms in the spring, followed by small red edible apples that hang on late in the fall. Very ornamental. 4-5 ft., each, 80c; per 5, \$3.50.

MOUNTAIN ASH

A fine hardy tree, obtains a height of twenty feet. Head dense and upright in growth. Covered from July until winter with clusters of bright red berries. An excellent tree for the lawn where a larger shade tree cannot be used.

3-4 ft., each,	40c; per 10, \$3.75
4-5 ft., each,	50c; per 10, 4.75
5-6 ft., each,	60c; per 10, 5.75

RED OAK

An American Variety, rapid in growth. Has large foliage which assumes in the fall a purplish scarlet hue. Makes a fine specimen tree and cannot be too highly recommended for general planting. 3-5 ft., 80c each; per 10, \$7.00.

RUSSIAN OLIVE

I was traveling up through central South Dakota the other day, up in the treeless region (when I say "treeless region" I mean that three out of the four farms were bare of trees, and the fourth one generally had excellent groves of a number of varieties of trees, proving that every farmer could have the same if he would), and I noticed in a great many places rows, single specimens and groves of the Russian Olive. This was a considerable time after heavy breezes, when all of the other trees were bare of foliage, and it was one of those windy, chilly days, and the wind was

moaning through the branches of the bare trees. The leaves of the Russian Olive seemed to be equally as fresh as in summertime, and on the south side of the trees around the buildings and along the feeding yards it was quite warm and comfortable.

The Russian Olive is one of the hardiest, grows on any kind of soil and under most conditions. It has won its way on its own merits, and I think stands today absolutely first in a hard, dry-weather tree for the Northwest in beauty. When grown for a windbreak it will limb close to the ground, limbs set close together, making a perfect hedge and windbreak, grows as rapidly as most of the willows, and for windbreak purposes it is second only to the evergreen. Its beautiful silvery foliage and ebony colored bark make it one of the best for single specimen trees for ornamental purposes. When grown isolated for ornamental purposes it makes a very symmetrical, well-shaped tree. In planting your grove plant a row or two of Russian Olives on the north to catch the snows.

In the early spring they are covered with the most fragrant flowers that last a good many days; these are followed by quantities of olive shaped seed, silvery white, hanging in clusters like the currant through the fall and winter. It is a wonderful tree.

	100	1,000	Each	10	100	1,000
6-12 in.....	\$2.25	\$18.00	18-24 in.....		\$3.25	\$30.00
12-18 in.....	2.70	22.00	2-3 ft.....	\$0.20	\$1.75	8.00

Russian Olive Screen, or Windbreak, Around Athletic Park at Yankton College. Excellent for the Purpose.

Lombardy Poplar—A native of Europe. Remarkable for its erect growth and tall, spire-like form. Valuable in collection. 5 to 6 ft., 40c each; \$3.50 per 10.

Bolleana Poplar—A very compact, upright grower, with glossy leaves, green above and silver underneath. One of the most desirable poplars. 5 to 6 ft., 50c each; \$4.50 per 10.

Northwest Poplar—This is the hardiest of the Poplars. A very close relative to the Cottonwood but somewhat slower in growth and much harder and is a very valuable addition to the list of forest and shade trees offered by us. If you have been unable to grow the Elm, Poplar and Cottonwood trees try the Northwest Poplar and you will be successful. 3 to 4 ft., each 25; \$2.00 per 10; \$19.00 per 100.

Carrington, N. D., May 12, 1920.

Some time ago you wrote asking that I write something which you could use in your catalog referring to the Northwest Poplar. I submit the following: In our great Northwest, nature has been very generous to us in providing a land, great in expanse, rich in soil, ready for the plow and home, but treeless. She saw the coming of man and performed a miracle, giving him the opportunity and responsibility of planting trees about his buildings just as he might wish them to be located, giving comfort and cheer to all and a real home to his family. Near Carrington, N. Dak., nature crossed two native trees, taking the better parts and omitting the objectionable features of both, and created a new tree, bigger, better and more handsome than

either parent, especially suited to our climatic needs—the Northwest Poplar. Blossom but do not seed, grow fast into a beautiful symmetrical tree of dense shade and smooth bark. In a test, covering many years, of 15 varieties of poplar, the Northwest has proven its great superiority over all in growth and hardiness. Trees of 25 years show an average growth of an inch in diameter and two feet in height each year, and are just in their prime.

W. F. MOORE.

Carolina and Norway Poplar—We grow thousands of these each year, and they are known as the "Sudden Saw Log." A one-year-old tree, grown from a cutting, has been known to grow 8 to 12 ft. high in one season. No other tree will produce this growth. They are very hardy, and, unlike the cottonwood, never bear seed and scatter their cottony seed pods around.

	Each	10	100	1,000
2 to 3 ft.....	..	\$ 3.50	\$25.00	
3 to 4 ft.....	\$0.15	\$0.50	4.00	\$5.00
4 to 5 ft.....	.20	1.00	6.00	45.00
5 to 6 ft.....	.25	1.50	10.00	....
	Each	10	100	
6 to 8 ft.....	\$0.30	\$ 2.00	\$18.00	
8 to 10 ft.....	.50	4.00	28.00	
1½ to 2 in. cal.....	1.00	8.00	....	
2 to 2½ in. cal.....	1.25	12.00	....	

Silver-Leaved Poplar—This is another of the native poplars that should be more generally planted. It will make cordwood faster than a cottonwood.

4 to 5 ft.....	each 35c; \$3.00 per 10
5 to 6 ft.....	each 45c; 4.00 per 10

THE BEAUTY AND VALUE OF THE ORDINARY WILLOWS

It was a cold, blustery morning that Mrs. Gurney and I drove out to the hoggerly just after the sun came up. The hoggerly is located on the highest point of all our land, and the nursery stretches away to the north and west from it. As we passed over the point Mrs. Gurney called my attention to the beautiful colorings of the bare trees in their various places in the nursery, and we could pick out the rows of willows and the varieties even from that distance—the Diamond Willow by the grayish line running across the long fields; the white or fence willow by its darker colors; the Laurel Leaved by its dark green, upright growing, sturdy limbs; the Russian Golden by its long, waving lines of red and gold; the American Golden by its strictly yellow color; and the little Ural by its grizzly gray.

We were then tempted to go down among them and tramped more than three-quarters of a mile through the willows and other trees, and realized more of their value than at other times. As soon as we were down among the trees the bright sunshine seemed to have raised the temperature, and the trees had broken the cold wind.

Have you a windbreak, one that will protect your buildings, your family and your stock, and at the same time beautify your place?

Diamond Willow—Very valuable for fence posts, growing rapidly, produces posts that will keep in the ground for years. You should plant a good grove of them. The richer the ground the more rapidly they will produce the posts, but they do well even on high and dry ground.

White or Fence Willow—This is the large tree that has been used so many years for hedges around farms; it does best on low places.

Laurel Leaf Willow—This is a beautiful medium tree with glossy, leathery foliage; an exceptionally good ornamental tree as well as useful for windbreaks, firewood, etc.

Russian Golden Willow—A very beautiful rapid grower, does as well on high ground as any of the willows. In habit it is much like the White or Fence Willow, but grows faster. A half-acre of these trees cut to the ground every few years will keep a large family in fuel.

A 3-Year-Old Golden Willow Hedge

American Golden Willow—Much the same as the Russian. I can see but little difference in their relative values. The twigs of the Russian variety turn red in winter, while the American remains yellow.

Ural Willow—A very hardy willow from the Ural Mountains of Russia. An excellent snow catcher, also used as a hedge. Height 8 to 10 feet. Stands drouth exceptionally well.

	10	100	1,000
Diamond, 12 to 18 in.....	\$0.70	\$ 5.00	
Diamond, 18 to 24 in.....	1.00	6.00	
Laurel Leaf Willow, 18 to 24 in.....	3.25	24.00	
Laurel Leaf Willow, 2 to 3 ft.....	3.80	27.00	
Laurel Leaf Willow, 4 to 5 ft.....	5.00	40.00	
American Golden Willows, 18 to 24 in.....	2.50	21.00	
American Golden Willows, 2 to 3 ft.....	3.00	25.00	
White Willow, 18 to 24 in.....	2.50	21.00	
White Willow, 2 to 3 ft.....	3.00	25.00	
Russian Golden Willow, 18 to 24 in.....	2.50	21.00	
Russian Golden Willow, 2 to 3 ft.....	3.00	25.00	
Russian Golden Willow, 4 to 5 ft.....	90c	5.00	40.00

Weeping Trees

The most ornamental of any of the trees. Can be used in places where it is impossible to use the larger, erect growing kind, and for effective landscape work you must always use something in this line.

Weeping Mulberry—Will stand where not exposed to heavy winds; is a most beautiful tree with its long, lithe pendants sweeping the ground. This is especially valuable to plant on lawns where you do not wish to obstruct the view from the windows to the streets or roads. It produces an umbrella-shaped head, never growing above eight or ten feet high, and spreading out in beautiful, glossy, dark green leaves and purple fruit, makes one of the most sought-after of all the weeping trees. **Each, \$2.00; headed, about 6 ft. high.**

Cutleaf Weeping Birch—One of the most elegant of all the weeping or pendulous trees; its tall, slender, yet vigorous growth, graceful, drooping habit, silvery white bark and delicately cut foliage present a combination of attractive characteristics rarely met with in a single tree. This is absolutely hardy. 5 to 6 ft., \$1.25; 6 to 8 ft., \$1.50 each.

Niobe Weeping Willow

This is the grandest and one of the hardest and best of all the weeping trees. It is a very rapid grower and will grow on almost any quality of ground. We are showing here photograph of a tree in the William Edmunds grounds at Yankton. This tree has been planted about five years and with the lightest breeze the whole tree is in motion. The bark of the tree is golden yellow, the underside of the leaves silvery, and the top of the leaves a glossy dark green. The new shoots often grow to a length of six or eight feet and would not be half as large around as an ordinary lead pencil. This is a specially valuable tree for hedges, single specimen and cemeteries. The price is so low you can afford to buy lots of them. 3 to 4 ft., 25c each; \$2.25 per 10; 5 to 6 ft., 40c each; \$3.50 per 10. 2 to 2½ in. cal. **Each \$2.00; Per 10 \$18.00.**

Niobe Weeping Willow

Cuttings

A great many varieties of trees and plants can be propagated from cuttings more readily than any other way and for a less expense. Cuttings of all kinds should be planted as soon as received, and we do not advise the shoving of them into the ground as is ordinarily practiced; they will be more or less calloused when you receive them and the shoving of them into the ground

destroys this callous and kills the cutting. If you have a quantity of them the best way is to plow a deep furrow, put them against the overturned furrow where the horses will not step on them as you come with the next, and throw a furrow against them, tramping them carefully after planting. The way practiced in the nurseries and where you want to do it just right is with the dibble, making a hole in the ground the length of the cutting, dropping the cutting into it and pressing the dirt firmly around it. If these directions are followed you will have almost perfect success. Leave one-half inch of the cutting above the ground.

A beautiful drive in Bon Homme County, South Dakota, arched with shade trees.

	100	1,000
Cottonwood	\$0.45	\$3.00
Carolina Poplar	.50	3.00
Norway Poplar	.50	3.00
L. L. Willow	.50	3.25
Am. Golden Willow. .	.45	2.75
Rus. Golden Willow. .	.45	2.75
White Willow	.50	3.00
Diamond Willow	.50	3.50
Ural Willow	1.00	7.00

Hedge Plants—Instructions for Planting and Care

For a perfect hedge of Buckthorn, Russian Mulberry, or Russian Olive, they should be planted 1 ft. apart in the row. After planting, cut the top down one-half, to insure you of plenty of branches close to the ground, to make a good perfect hedge. Trim each year in the month of June to the shape you want your hedge. Be sure that you give the hedge good cultivation or a heavy mulching for the first few years, to insure good results. Pack the plants well after planting. Hedges of Barberry, Lilas and Spirea require exactly the same treatment except that they should be 18 to 24 inches apart in the row.

Hedge Plants

The demand for hedge plants increases rapidly in all communities, especially in the older communities where they have disposed of the various kinds of fences surrounding and dividing one party's buildings from another. Hedges in the rear of town lots, along the alley, are being

planted more and more as their beauty and utility become known. There are a number of plants valuable for this purpose and we list for this purpose specially and for low-growing hedges in town and around home places in the country where they do not wish the hedge to grow too high, the **Buckthorn**, the **Barberry**, and the **Tree Honeysuckle**. These are all hardy, and stand trimming better than any other hedge plant, and all of them produce flowers and berries which are very ornamental. The **Buckthorn** with its ebony black berries in the fall, the **Barberry** with its bright red clusters of berries, and the **Tree Honeysuckle** with its thousands of pink and white blossoms in the summer, followed with its bright berries, make it worth while to live.

The **Russian Mulberry** is used as an ornamental hedge in central Nebraska and localities south of there. They make an excellent and low priced hedge and stand severe trimming.

The **Spirea Van Houttei** is perfectly hardy, stands severe trimming. Height, 5 to 6 feet.

The **Lilacs** in the purple and white are also easily cared for, and as a screen there is nothing better that grows the same height. It is used a great deal for hedge purposes. The

Lilac is too well known and its value too well known to need description here.

A Hedge

either as a division between two properties, as a cover for objectionable spots, along the alley, or in front of the home, adds the finished appearance to landscape work. A place properly landscaped is a joy to its owner and the public in general.

Buckthorn Hedge

Perfectly hardy and very ornamental makes fine ornamental hedges. Can be trimmed to any desired shape. Plant 9 inches apart.

Buckthorn Prices:

6-12 in., \$3.50 per 50;
\$6.75 per 100.

12-18 in., \$1.00 per 10;
\$5.00 per 50; \$9.50 per 100.

3-4 ft., \$1.80 per 10;
\$8.00 per 50; \$15.00 per 100.

A three-year-old Buckthorn hedge planted by us at Garden Terrace Theatre, Yankton College. Notice the beautiful lawn made from our Capitol Lawn Mixture.

Barberry Thunbergia—Perfectly hardy. Will make a dense hedge from 3 to 4 feet high, which will always remain symmetrical without any pruning. Bears large, nearly round, crimson berries, which remain on plants all winter. Foliage colors beautifully in autumn.

Do not confuse the Thunberg's Barberry with the common purple and green barberry. It is perfectly safe to plant this barberry as it has no connection with the rust that destroys small grain. We are not offering the common barberry on that account.

Each 10 50

12 to 18 in.
heavy20 \$ 1.85 \$ 8.50

18 to 24 in.
heavy25 2.00 9.50

2 to 3 ft.
heavy35 3.00 12.00

Honeysuckle tree, 3 to 4 ft.
Each 30c; per 10, \$2.50; per 50, \$12.00.

Lilac Purple, 2 to 3 ft., 25c each; \$2.00 per 10; 3 to 4 ft., 35c each; \$2.50 per 10.

Russian Mulberry—See Fruit.
Caragana—See Forest and Shade Trees.
Spirea Van Houttei—Flowering Shrubs.

Dwarf Barberry, Thunbergia

Colorado Blue Spruce

Note the beauty of having the branches begin at the bottom. Never remove the lower branches.

Evergreens for the Dakotas

In traveling over the Dakotas we occasionally see an Oasis in the shape of Evergreens clustered around a farm house, or a few in the door yards in the cities and villages, in every case doing well, and a "joy forever," and a protection from the winds. In Turner County, South Dakota, are some grand old Pine Trees that have stood for the last thirty years, growing better each year. On adjoining farms owners tell us evergreens will not grow in Dakota; they will not even believe what they have seen for thirty years. The facts are an evergreen is at home in the Dakotas, and is as easily transplanted as any forest tree, and is worth much more than any other forest tree when growing on your place.

Here, in Yankton, we realized the great future for evergreens in the Northwest, and have planted many thousands of them at our nurseries. We know the varieties that will do best in all parts of the country and are prepared to give you the information, and furnish you with the trees, fresh dug and properly packed. In buying evergreens do not buy one or half a dozen unless you have room for no more; buy them by the hundreds and thousands; they are the cheapest and best windbreak, shutting out the winter winds as no other trees will. They are cheap; will cost you but a few dollars for enough to enclose your feeding yards and buildings.

Two rows of evergreens properly arranged will shut out the wind better than six rows of other trees. This is especially true in winter when the windbreak is needed most.

The Evergreens we are listing are handled properly and as carefully as Evergreens can be handled. Many of the smaller companies, are offering the same trees at much higher prices. We are growing and selling more evergreens than all the nurseries in the Dakotas and we are able to make much lower prices than those who only sell a few each season. With the new buildings we have added we are able to dig and pack immediately, which insures fresh trees in all cases.

This is the third year I have planted trees. The years before I had to pay as much as \$5.00 for some evergreens. This year I ordered two from you at 65c apiece, and you should see them grow. What is the use of paying \$5.00 for trees if yours grow, and a fellow can be proud of it, and the cost only 65c. All the rest of the fruit trees are coming fine. I planted them, and with all my experience I know and can say, that I would not buy trees from any other nursery. You certainly gave me a square deal for the money I spent with you. There are lots of my friends here in Casselton and I want you to send me your catalog soon as it is ready and I will send you a big order in the early spring. I always want to deal with a house which sends out good stuff, and I am sure you will treat me the same way in the coming spring. There is nothing else than thanks to you for the nice trees you sent this spring. Hope to get the catalog from you early.

Casselton, N. Dak., June 10, 1920.

JULIUS HEGER.

A Spot in the Park at the Evergreen Nursery—All Planted by Col. C. W. Gurney

Arbor Vitae, a well known evergreen, excellent for screens when planted in a partially protected spot, grows very compact, easily transplanted, (This is a flat leaved or branched evergreen)

Colorado Blue Spruce at Our Evergreen Nursery

Colorado Blue Spruce

Out in the high places in Colorado, where the soil is not as good as it might be, where the summers are very hot and the winters very cold, grows a sturdy evergreen known as the Colorado Blue Spruce. This is undoubtedly the most beautiful of any or all of the evergreens and has come into use surprisingly rapid in the last few years for ornamental purposes. It has adapted itself to all conditions and the better the conditions the more rapid the growth. The trees vary in color from light green to beautiful blues, the price varying with the color—the light green ones the cheapest, and the brightest blue the highest price. We are showing a photograph here of thousands of them in our Evergreen Nursery. Perfectly hardy.

Blue Select Specimens

About 5 to 7 per cent of the Pungens will be blue, more or less. Their value depends on their color, and it is practically impossible to list them correctly. A 2 to 3-foot tree is worth from \$1.00 plain to \$5.00 for a fancy tree. I have seen a fancy 5-foot tree sell for \$25.00. Send me the amount you want to invest in a blue tree and give size, and we will make the selection and give you full value for your money.

Koster's Blue Spruce

(*Picea Pungens Kosteriana*)—A variety of grafted Blue Spruce that is widely known and admired for its beautiful symmetrical form and bright, steely blue color, which changes to a dazzling silver when exposed to sunlight.

The Koster's are all reproduced from one original Blue Spruce bluer than any other,

one that holds its color on the old needles as well as its most wonderful steely, glistening, dewey blue of the fresh new growth in the spring. The price of the Koster is necessarily higher than other evergreens as they are grafted and evergreens are very hard to graft, but the Koster well repays the small extra cost with its elegant beauty. These are specially valuable as single specimen plants or used in groups in landscape work.

Black Hills Spruce (*Picea Canadensis*)

Dark green, perfectly hardy, very compact, the best for general planting. It is superior to any as a windbreak. Easily transplanted. A native of western South Dakota.

The Black Hills Spruce on account of its natural environments is the only spruce hardy enough for the wind-swept bare prairie country of the northwest. It grows hardily on all soils and on account of its close growing branches and heavy close set foliage it is one of the best for ornamental purposes, stands trimming well, medium rapid growth. This makes the closest and consequently best windbreak, holding its dark green color all winter, gives you the touch of spring to come.

The Iowa farmer has discovered their value both for windbreak, ornamental and boosting the price of their farms, they come to us year after year, take them away in car-load lots. The average loss in transplanting where care is taken seldom reaches 2 per cent.

Black Hills Spruce at Coleridge, Neb., Cemetery

Austrian Pine

Stout branched tree of rapid growth. Dark green, long needles. The drifting of snow does not break down the branches. Probably as hardy as Scotch Pine.

Bull Pine (Pinus Ponderosa)

This is the genuine Black Hills Pine. It requires little moisture. Will thrive in high, dry places. Hardy way up to Canada, where it is extensively planted.

Bull Pine is placed on many lists as the best on account of its hardiness, rapid growth, and its heavy, long, silver gray needles. Whether or not it is best, we know it is mighty good and we are proud of this tree and the many shelter belts we have made with it on thousands of Northwest farms. Get the habit of planting evergreens. They grow rapidly and easily. Drifting snow will not break the branches.

Jack Pine (Pinus Banksiana)

A very rapid grower and very hardy. Will thrive in poor or sandy soil. Very desirable as a wind break.

Jack Pine grows nearly as fast as the cottonwood, and gives you better service. This, in my opinion, is the most desirable of all evergreens for quick windbreak; easily transplanted, growing in any kind of soil; holds its color and foliage all winter, making an excellent wind break or shelter belt almost from the first year. Buy them not only in hundred lots but buy and plant thousands of them. They will increase the value and usefulness of your land many times their cost.

All the money you spend for evergreens is a good investment.

Scotch Pine

(Pinus Sylvestris)

For all practical purposes for 50 years the Scotch Pine is very satisfactory for groves and windbreaks. We are listing good sizes to plant in large quantities. Remember, all these evergreens are transplanted.

In about 1883, father planted a quantity of Scotch Pine on our grounds at Concord, Neb. These trees are now large enough for saw-logs, and would make mighty good lumber. You see big fellows of the Scotch Pine all over the country and it shows what they are worth to you. Plant some this year and then again next. You will not regret it.

Dwarf Mountain or Mugho Pine

Dwarf, leaves short and stiff, thickly distributed over the branches. Does not grow tall but spreads over the ground, assuming a globular form. Very dense. Used for slopes, hedges and at the corners of entrances.

This Pinus Mughus is one of the extremely hardy, easily transplanted, lower growing evergreen shrubs desirable in your grounds. It spreads out on the ground rather than up in the air, is of a beautiful green color, very compact and also a very slow grower, insuring compactness of form always. Pinus Mughus is hardy anywhere that you can grow any tree and is a desirable ornamental plant in hundreds of places on any well-kept grounds.

Burlapped in Earth

WARRANTED EVERGREENS

Balled and Burlapped

We grow and sell more evergreens twice over than all other growers and salesmen in the Dakotas. It is our business to know how to grow, handle and ship, and we are advising you to spend a little additional money and buy your trees balled and burlapped. The method of balling and burlapping is to take a ball of earth large enough so that all of the fine roots are saved and in the dirt in which they grew. This tree, with the ball of earth, is taken up very carefully to avoid breaking or disturbing the soil. Immediately on taking it from the soil the ball of earth is covered tightly with burlap and then the trees are packed and shipped to you. Do not disturb this ball of earth; leave the burlap on, and plant it that way. We have often shipped a carload containing 600 to 1,000 trees and the purchaser reported a total loss of less than 2 per cent.

Special Notice to Evergreen Purchasers

Below we are listing evergreens without ball of earth on roots and those that are balled and burlapped not guaranteed, and those balled and burlapped guaranteed. All of these evergreens will be dug, packed and shipped immediately, which will insure fresh trees in all cases. The balled and burlapped guaranteed trees and those not guaranteed are handled in the same manner and packed from the same lot. The roots of evergreens not balled and burlapped are muddled as soon as dug from the ground and will reach you in good condition. In all cases the balled and burlapped evergreens are dug with the original dirt on them; the roots are not disturbed, which practically insures growth.

Our Guarantee on Evergreens

We warrant them to grow, and if one fails to grow and we are notified at any time after July first and before August fifteenth, 1921, we will refund the purchase price, or furnish another tree without charge for same.

	Size	Trans- planted	Each			Balled-Burlapped not Guaranteed			Balled-Burlapped Guaranteed		
			Each	10	100	Each	10	100	Each	10	100
Black Hills Spruce.....	8-12 in.	2	\$0.40	\$3.50	\$32.00	\$0.60	\$4.50	\$40.00	\$...	\$7.00	\$65.00
	12-18 in.	3	.55	4.75	40.00	.75	7.00	65.00	1.25	10.00	90.00
	18-24 in.	3	.85	7.00	65.00	1.25	9.00	80.00	1.40	13.00	120.00
	2-3 ft.	4	1.30	12.00	100.00	2.50	20.00	...	3.60	27.00	250.00
Colo. Blue Spruce.....	8-12 in.	3	.45	3.50	30.00	.75	5.00	45.00	...	7.00	65.00
	12-18 in.	4	.60	5.50	47.00	.85	7.50	70.00	1.60	15.00	135.00
	18-24 in.	5	1.00	9.00	85.00	1.30	12.50	110.00	1.90	18.00	165.00
	2-3 ft.	8	1.35	12.00	100.00	2.25	20.00	140.00	3.00	25.00	245.00
Colo. Blue Spruce, Select..	8-12 in.	3	.70	6.50	60.00	...	8.50	75.00	...	10.50	...
	12-18 in.	4	1.00	9.00	85.00	1.35	12.50	...	2.35	22.50	...
	18-24 in.	5	1.75	16.00	150.00	2.20	21.00	...	3.00	29.00	...
	2-3 ft.	8	2.25	20.00	...	3.00	28.00	...	4.00	37.00	...
Douglas Spruce	2-3 ft.	3	.60	5.50	50.00	.90	8.50	75.00	1.50	14.00	...
	3-4 ft.	5	.75	6.50	60.00	1.25	10.10	95.00	2.00	19.00	...
Austrian Pine	18-24 in.	2	.45	4.00	38.00	.80	7.50	...	1.10	10.00	...
	2-3 ft.	2	.50	4.50	40.00	.90	8.00	76.00	1.20	11.00	100.00
	3-4 ft.	5	.75	6.50	60.00	1.25	10.10	95.00	2.00	19.00	...
Bull Pine	8-12 in.	1	.25	2.25	22.00	.60	...	...	...	...	...
	12-18 in.	2	.35	3.00	28.00	.60	5.00	43.00	1.00	9.00	86.00
	18-24 in.	3	.45	4.00	36.00	.75	7.00	68.00	1.25	11.00	100.00
	2-3 ft.	3	.60	5.50	50.00	.90	8.50	75.00	1.50	14.00	...
	3-4 ft.	5	.75	6.50	60.00	1.25	10.10	95.00	2.00	19.00	...
Jack Pine	12-18 in.	2	.35	2.75	25.00	.65	5.50	50.00	.90	8.50	80.00
	18-24 in.	2	.45	3.70	35.00	.75	6.50	55.00	1.10	10.00	95.00
	2-3 ft.	3	.50	4.25	40.00	.85	7.50	70.00	1.30	12.00	115.00
	3-4 ft.	3	.60	5.50	...	1.00	8.50	80.00	1.50	14.00	130.00
Scotch Pine	8-12 in.	1	.25	1.90	18.00	...	...	...	...	...	...
	12-18 in.	2	.35	2.75	26.00	.65	5.50	50.00	.90	8.50	80.00
	18-24 in.	2	.45	3.70	35.00	.75	6.50	55.00	1.10	10.00	95.00
	2-3 ft.	3	.55	4.25	40.00	.85	7.50	70.00	1.30	12.00	115.00
	3-4 ft.	3	.65	5.00	46.00	1.00	8.50	80.00	1.50	14.00	130.00
Dwarf Mt. Pine.....	12-18 in.	2	.65	5.50	50.00	1.00	7.50	...	1.50	13.00	...
	18-24 in.	3	.70	6.50	60.00	1.25	8.00	...	...	...	...
American Arborvitae	18-24 in.	2	.50	4.00	35.00	.75	7.00	...	1.25	11.00	...
	2-3 ft.	2	.60	5.50	45.00	.85	8.00	...	1.60	15.00	...
Koster Blue Spruce.....	12-18 in.	4	...	...	...	2.00	19.00	...	3.00	27.00	...
	2-3 ft.	4	...	...	...	3.00	29.00	...	4.00	37.00	...

Directions for Planting Evergreens

In planting balled and burlapped evergreens do not remove the burlap, but plant as received. Dig a hole much larger than the ball, place the tree in the hole, see that the ball is well watered, fill in around it with top dirt and tamp thoroughly. Plant the tree so that about two inches of dirt is over the top of the ball. Where the ball of dirt is tied on with heavy twine the twine should be cut as soon as the ball is placed in the hole.

Ornamental and Flowering Shrubs

FLOWERING ALMOND (*Amygdalus*)—Two to four feet high, of branching habit, blossoms in very early spring with double rose pink and white flowers in great profusion. Pink and white same price. Each 50c; 5 for \$2.25.

BECHTEL'S DBL. FL. CRAB (*Pyrus Augustifolia*)—A sport of the wild crab of Iowa and is a young and free bloomer of double apple fragrant flowers like small roses. Two much cannot be said in its praise. 2-3 ft. 80c each.

THE EVERBLOOMING BUTTERFLY BUSH (*Buddleia Variabilis Magnifica*)—This shrub from a young plant set out either in the spring or fall will mature to full size the first summer, producing a handsome bush, which the first year often attains a height of four feet. It produces long, graceful stems, which terminate in tapering panicles of beautiful lilac-colored flowers that are of miniature size and borne by the hundreds on a flower head which is frequently 10 inches long. A single plant the first season will throw out as many as 50 flower spikes, which increase greatly in number during the succeeding years. The foliage and blooms are exceedingly fine. Price, 40c Each; 10 for \$3.50.

Barberry—Berberis

Do not confuse the Thunberg's barberry with the common purple and green barberry. It is perfectly safe to plant this barberry, as it has no connection with the rust that destroys small grain. We are not offering the common barberry on that account. See picture in hedge plants.

THUNBERG'S BARBERRY (*Berberis Thunbergii*)—This might well be called the most valuable of the low-growing shrubs. It will stand pruning in any form; masses well in any situation; is very attractive and showy during the whole season, and is particularly beautiful in the fall and one of its best qualities is that it is effective during the entire winter, as it has beautiful red berries, which combine well with winter landscapes or with the dark foliage of evergreens.

	Each	Per 10	Per 50
12-18 In. Heavy	\$2.20	\$1.85	\$ 8.50
18-24 In. Heavy	.25	2.00	9.50
2-3 Ft. Heavy	.35	3.00	13.00

CRANDALL CURRANTS—This is a large graceful ornamental shrub which produces fragrant yellow flowers and large quantities of large black currants. This is both ornamental and useful. Each, 35c; per 5, \$1.50.

MT. CURRANT (*Ribes Alpinum*)—Valuable for its dwarf habit. Small greenish white branches, red berries. Especially valuable for grouping on outer edges of the tall growing shrubs. 2 yr. heavy, Each 30c; Per 10 \$2.50.

RED OSIER DOGWOOD (*Cornus Stolonifera*)—Growing 6 to 10 feet tall, forms a small, handsome tree; its clusters of small, white flowers in early summer are very dainty, and its bark of dark red in winter; bears in early fall a profusion of purplish berries. Same price as Siberian. 2-3 Ft. 35c Each; Per 10, \$3.00.

VARIEGATED DOGWOOD—A dwarf variety with leaves spotted with silver or yellow. Very attractive and hardy. 2-3 ft. 40c Each; Per 5, \$1.75.

SIBERIAN DOGWOOD (*Cornus Siberica Alba*)—An upright shrub having bright red branches. Its rather long leaves are pale underneath. Flowers are creamy white in flat-topped clusters; fruit a light blue or white. 18 to 24 in., 20c Each, \$1.80 per 10; 3 to 4 ft., 30c each; \$2.80 per 10; 2 to 3 ft., 25c Each, \$2.00 Per 10.

Deutzia

Valuable shrubs of different heights, but having the same habit of bloom; a dainty bell or tassel-shaped flower borne thickly in wreaths along their branches in May. Useful in landscape work for massing.

GRACILIS—Dwarf growing, dense bushy, its drooping branches wreathed in pure white flowers in May. Also valuable for winter blooming in pots. 12-18 in. 25c Each; Per 10, \$2.00.

DEUTZIA, PRIDE OF ROCHESTER—Has very large panicles of double white flowers. White when fully opened but a striking pink when in bud. A very upright grower. Vigorous and healthy. Blooms late in June. A splendid variety. These do especially well when planted on the east side of a house or partly protected by trees or other shrubs. Each, 40c; Ten for \$3.50.

Elders—(Sambucus)

These beautiful shrubs are not half appreciated. The cut leaved ones bear large clusters of fragrant white flowers, turning to clusters of red; the bluish-black edible berries, these are borne in immense quantities, bending the plant until they resemble weeping trees. The leaves are large and resemble fern fronds. Plant them liberally. These are very valuable and useful as well as ornamental shrubs. They are excellent for grouping or specimen plants.

ELDER BERRY, COMMON—Makes a bush six feet high, foliage bright green, blossoms in June and July with delicate white fragrant flowers in dense masses, followed by black edible berries much prized for wine and pastry. An ornamental plant throughout the season. These may be used as a hedge or division line dividing the garden from the yard or may be grouped with other shrubbery or planted as specimens. Should be planted two to three feet apart. 2-3 ft. Each 30c; Per 10, \$2.75; Per 50, \$12.00.

CUTLEAF ELDER (*Sambucus Laciniata*)—Grows 6 to 8 feet high with foliage that is almost fern-like. Drooping habit. They make a beautiful screen, are very ornamental at all seasons of the year. You should include at least a few of these in your order.

	Each	Per 10	Per 50
3-4 Ft.	\$2.25	\$2.00	\$ 9.50
4-5 Ft.	.30	2.50	11.00

GOLDEN ELDER (*Sambucus Aurea*)—A very striking shrub, 8 to 10 feet high; similar to the American Elder, only that the foliage is a very bright yellow. Can be trimmed to a small, compact shrub. 18-24 in. 25c Each; Per 10, \$2.00.

Forsythia

These splendid old shrubs, growing 8 to 10 feet tall eventually, light up the garden with glinting masses of yellow, very early in the spring before the leaves appear. Their bright golden flowers, often appearing before the snow is gone, vie with the Crocus as harbingers of spring.

SUSPENS-A—Very long, curving branches, superbly adapted to covering arches and trellises. 3-4 ft. 30c Each; \$2.75 Per 10.

Honeysuckle

Albert's Honeysuckle (*Lonicera Alberti*)—A new dwarf, half-weeping shrub from Siberia, pinkish blue blossoms, very fragrant; fall berries, 18 to 24 in., each, 20c; \$1.80 per 10; 2 to 3 ft., 25c each, \$2.25 per 10.

Morrow's Honeysuckle (*Lonicera Morrowi*)—A medium sized honeysuckle, having wide-spread branches; leaves a downy gray underneath; flowers white, changing to yellow; berries bright red. 3 to 4 ft., 30c each, \$2.75 per 10.

Tartarian or Upright Honeysuckle

Of all the hedge and specimen plants offered in the catalog I like the Tartarian or Upright Honeysuckle as well as or better than others. I like it for a great many reasons: Its hardiness, its rapid growth, its immense number of beautiful star shaped pink and white flowers coming early in May and lasting for some little time. These flowers are followed by an immense crop of beautiful red berries that last nearly all summer. These berries are not edible. Its glossy, leathery foliage coming very early in the spring ahead of other hedge plants and lasting well into the fall. Its grayish-white wood that is beautiful at all seasons of the year, winter and summer. Its ability to stand heavy trimming and cutting back, making it one of the most desirable for hedge purposes. Its upright pyramidal growth that makes it one of the most beautiful specimen plants. Its fragrance that fills the air for long distances when in bloom. Its adaptability to all conditions, and its quick recovery of growth after transplanting. It is hardy in any portion of the United States and well into Canada. In planting Tartarian Honeysuckles for hedge purposes, they should be planted 18 inches apart in a row, and will stand trimming equally as well as the other hedge plants. For hedge purposes we have a very beautiful lot of plants, 3-4 ft., each 30c; per 10, \$2.50; per 50, \$12.00.

Can be trimmed to a small, compact shrub.

The Beautiful Hydrangea. Used Largely in Landscape Work.

Hydrangea

Hydrangea (*Paniculata Grandiflora*)—This familiar old shrub is one of the most prominent factors during August and September in brightening up the lawn and shrubbery groups. Single specimens, if planted in rich soil and severely pruned every spring before the leaf buds open, will get to be very dense, stocky clumps of compact form, and are wonderfully attractive when laden with their massive white plumes. Large beds kept at a uniform development are extremely showy: first snowy white, then

pink, then reddish bronze and green. Hardy. 2 to 3 ft., 45c each, \$3.90 per 10.

Hydrangea Arborescens (*Snowball Hydrangea*)—This magnificent, perfectly hardy American shrub has snow-white blossoms of largest size. One of its most valuable characteristics is its coming into bloom just after the passing of all early spring-blooming shrubs, flowering from early June until late July. This does better planted in partially shady places. 3 ft., 40c each; \$3.25 per 10.

Hedge Marie Lemoine

diately attach themselves to it and secure moisture and life. Do not be afraid of packing the soil too hard. It must be firm. Always leave a little of the loose soil on top to prevent the ground from baking. Next in importance is moisture. During the dry season moisture increases the growth and beauty of any plant. You can often supply all the moisture necessary by cultivation. Let the plant have all of the moisture in its vicinity. Do not divide the natural moisture with grass and weeds. After the shrubs have been planted two or three years they take care of themselves, but the first year or two will well repay you by any assistance you may give them. Ornamental shrubs are used for a great many purposes—as specimen plants on the lawn, bank around the house, or landscaping to complete the grounds where you have corners. Be especially careful of the soil around the house. It usually comes from the bottom of the cellar. If that is the case with you, see that some good soil is brought in. Nature will often take care of plants, but cultivate where possible. For banking or clumps do not try to save a few shrubs by long distance planting, but use plenty, so that you will get results at least the second year. Most of the clumps and banking shrubs should be 2 to 3 ft. apart each way.

ORNAMENTAL AND FLOWERING SHRUBS

Instructions for Planting and Care

Are used for many purposes. General instructions for planting and care will cover the entire list. Shrubs generally have a considerable number of fine roots, though some varieties have only the coarser large ones, but any plant or tree having considerable fine roots must have dirt worked well among them, always using the top soil in the bottom of the hole. Always plant the tree or shrub deeper than it was in the nursery—most of these about 2 inches deeper. The packing of the soil at planting time is one of the most necessary things. It firms the soil against the roots so that they can im-

LILACS

All Lilacs listed are perfectly hardy, very ornamental both when in bloom and throughout the entire season. By purchasing a number of the named varieties, as well as the old-fashioned Lilacs, you will extend the period of blooming at least one month.

Common Purple—Is perfectly hardy, makes a dense growth from 6 to 10 feet high, flowers fragrant; is often used for hedge purposes. 2 to 3 ft., 25c each; \$2.00 per 10; 3 to 4 ft., 35c each; \$2.50 per 10.

Common White—Same as Purple, except that it has pure white blossoms. Same price as Purple.

Persian Purple Lilac—6 to 8 feet high, with slender upright branches, foliage rich green; blossoms in late spring with pale lilac colored flowers. Very fragrant. 2-3 ft., 35c each; \$3.00 per 10.

Persian White Lilac—Same as above, with white flowers. Same price as Persian Purple.

Ludwig Spaeth. Violet purple dark. Single flowers, large, long, slender panicles. This is one of the grafted varieties and will not sprout from the roots. The foliage is equal if not superior to the other Lilacs. This is superior to the common purple varieties. 3-4 ft., each, 50c; per 5, \$2.25.

Marie Lemoine. Blossoms nearly lavender, very double with pointed petals. Panicles compact. Distinct from other varieties in every way. Very showy and will not sprout. 2-3 ft., 40c each; per 5, \$1.75; 3-4 ft., 50c each; per 5, \$2.25.

Marie LeGraye. One of the very best of the named white varieties, far superior to the common white. 2-3 ft., each, 45c; \$4.00 per 10.

Congo. Bright red, very attractive. Especially fine. If you like the common purple and white Lilacs you will not make a mistake by adding this to your collection. 18-24 in., 40c each; \$3.90 per 10.

Snowball. The Old-Fashioned Kind, Growing in Montana

SNOWBALL—(Viburnum)

Viburnum Sterilis (Common Snowball) — Hardy; attains a height of 3 to 10 feet. Is filled with white balls of bloom in the last part of May. 2 to 3 feet, 40c each; \$3.50 per 10.

Viburnum Opulus (High Bush Cranberry)—8 to 10 feet. Handsome, dense, brilliant, green foliage, a rich setting for large bunches of crimson berries which enliven the late summer and

persists on bare branches into the winter. 2 to 3 ft., 30c each; \$2.50 per 10.

Viburnum Lantana—10 to 15 feet. Beautiful wrinkled, Lantana-like leaves; white flowered in May and June. Fruits color unequally from crimson to black, causing a most charming combination of colors throughout the summer. 3 ft., 35c each; \$3.00 per 10.

Syringa

Syringa or Mock Orange (P. Coronarius). See picture—Hardy, free flowering shrub, with showy, fragrant white flowers; grows 8 to 10 feet high. One of the most popular shrubs. 18 to 24 in., 25c each; \$2.25 per 10; 2 to 3 feet, 30c each; \$2.70 per 10.

Golden Mock Orange (Philadelphus Coronarius Aurea)—Valuable for landscape effects on account of its yellow foliage and dwarf habit. Very free flowering. 2 to 3 ft., each, 35c; 10 for \$2.00.

Syringa P. Mt. Blanc—We consider this variety superior to all other varieties of the Syringa. The flowers are very large, pure white and very fragrant, almost covering the bush. This variety is harder than other varieties and has never winter killed with us. This makes a very fine graceful shrub and can be used as an ornamental hedge. 2 to 3 ft., 35c each; per 10, \$3.00; \$25.00 per 100.

Spireas

Anthony Waterer—Makes a bush 18 to 24 inches high, covered from spring till late in the fall with large heads of crimson flowers. 12 to 18 in., 30c each; \$2.50 per 10; 18 to 24 in., 35c each; \$3.00 per 10.

Billardi—5 to 7 feet high, upright with spikes of rich pink flowers from July on. 3 to 4 ft., 30c each; \$2.50 per 10.

Spirea Collosa Alba—Height 24 inches. Covered with white blossoms from spring until fall; very vigorous and attractive. Excellent for grouping with other shrubs or for foundation plantings. They can safely be planted under windows, etc., on account of their height. This plant may be cut to within two inches of the ground in the fall and will come up and blossom each season. 18 to 24 inch, each, 35c; per 10, \$3.00.

Collosa Rubra—Similar to the above, covered with red flowers. The leaves have a slightly purple cast when young. 18 to 24 inch, each, 35c; per 10, \$3.00.

Golden Spirea—A rapid growing variety, 8 to 10 feet high, with masses of snowy white flowers drooping the branches with their weight; young foliage bright yellow, changing to golden bronze in fall. 2 to 3 ft. 25c each; \$2.00 per 10.

Prunifolia—4 to 5 ft. high; flowers white and very double; foliage rich brown in autumn; partly hardy. 2 to 3 ft., 45c each; \$3.90 per 10.

Spirea Vanhouttei—One of most popular shrubs especially in the cold Northwest. Few shrubs retain their attractive foliage throughout the year as well as this sort. In spring, or about Memorial Day, the hedge is a perfect fountain of pure white bloom. Perfectly hardy. 2 to 3 ft., 25c each; \$2.00 per 10. 3 to 4 ft., 35c each; \$3.00 per 10.

Thunbergii—Forms a dense feathery bush 3 to 5 feet. Foliage changes to bright scarlet shades in autumn. 2 to 3 ft., 40c each; \$3.50 per 10.

Spirea Van Houttei—This picture shows the Spirea hedge plants together with a couple of young ladies. Charles was considerably interested in this picture, but it shows the wonderful growth produced by this Spirea, commonly known as Bridal Wreath. I have these in several places around my house, and this hedge 150 feet long north of the house—a regular snowbank at blooming time.

Sumac

Fern-Leaved—A beautiful low variety, with leaves of very large size, deeply cut and drooping gracefully from the branches. 3-4 ft., each 35c; per 5, \$1.00.

Sumac (*Rhus Trilobata*)—A low or medium-sized shrub. It is perfectly hardy and its clusters of small red fruit, with its bright foliage in autumn make it quite desirable. 2 to 3 ft., 25c each; \$1.00 per 5.

Snowberry

Snowberry (*Symphoricarpos Racemosus*)—A valuable medium-sized shrub, branching near the ground. Has small pinkish flowers, with large, waxy white berries in the fall. Very odd and attractive. Should be used in all groupings. 2 to 3 ft., 25c each; \$1.00 per 5.

Coral Berry or Indian Berry (*Symphoricarpos Vulgaris*)—Same as above, except that it has purplish red berries, which hang on during the winter. Fine in groups with Snowberry or for wild groups. 2 to 3 ft., 25c each; \$1.00 per 5.

Wahoo or Fire Bush (*Euonymus Americana*)

This is a native shrub of South Dakota. Hardy in any part of the State and should be extensively planted.

A very ornamental and showy small tree, its chief beauty consists in its brilliant berries, which hang in clusters from the branches till midwinter; berries rose color. 2 to 3 ft., 25c each; \$1.00 per 5; 3 to 4 ft., 30c each; \$1.25 per 5.

Weigela (*Rosea*)

Hardy south of central Nebraska without winter protection. North of that point it should be protected thru the winter.

Beautiful shrubs that bloom in May, June and July. The flowers are produced in such great profusion as to almost entirely hide the foliage. They are very desirable for the border or for grouping, and as specimen plants for the lawn. 2 to 3 ft., 30c each; \$1.25 per 5.

Hybrid Perpetual Roses

All roses offered by us are 2-year, extra heavy 75c each; \$4.00 per 6; \$1.50 per dozen.

Paul Neyron

General Jacqueminot

Instructions for Planting and Care

Of any of the flowering shrubs, this is the most in demand and there is more unnecessary grief than other shrubs because the purchaser will not follow instructions. I want you to get down to brass tacks with me, and listen to, and follow these instructions. Then you will have the real results, and you will throw us a bouquet of "words" which we appreciate. Perpetual roses produce all their flowers on new wood. Consequently there is no advantage in saving old wood, and it is left on as a handle. When you receive the Perpetual Rose, dig a hole in good soil, amply deep to receive the roots in their natural position deep enough so that the plant will be 1½ inches deeper than it was in the nursery. Put the top soil back and pack well in among the roots, and see that it is thoroughly packed. Firm it good with your feet. Then cut the top back to within 5 in. of the top of the ground. Then with the hands draw the earth up around this top, leaving only the tips of the branches sticking out. After a week or ten days, rake this mound of earth down level and you will find a new growth coming out nicely, and the old wood plump and green.

These instructions apply to all roses, climbing, etc., except that in climbing roses produce flowers on old wood. Consequently after the first year you want to save as much of the old wood as possible. But on Perpetual roses cut back each spring to within a few inches of the ground and you will be surprised at the beauty and quantity of flowers produced.

All roses should be protected either by straw or some form of mulching in the winter. Climbing roses are not all hardy enough to be left on the trellis, but should be taken down and laid flat on the ground and covered with either hay, straw or earth, and placed back on the trellis early in the spring.

Hybrid Perpetual Roses

Clio—Flowers large, flesh color, shaded in center with rosy pink. Very beautiful.

Anna de Diesbach—Brilliant rose color; very large and broad flowers.

Frau Karl Druschki—Flowers are very large, beautiful, pure, silvery white, with very deep bud. This is the best white Hybrid Perpetual yet introduced. Blooms until frost.

Paul Neyron—One of the finest hardy roses ever grown. It blooms unceasingly from June to November, on uniformly long, stiff, thornless stems, with immense cup-shaped flowers 4 to 6 inches across. Color is bright ruddy pink.

Alfred Colomb—Bright carmine-crimson; one of the very best dark colored sorts.

Madame Gabrielle Luizet—Light silvery pink; grand flowers; best early, beautiful recurved petals.

Magna Charta—A general favorite, prized on account of its strong, upright growth and bright healthy foliage, as well as for its magnificent bloom. The color is beautiful bright pink, suffused with carmine.

Prince Camille de Rohan—One of the darkest colored roses; very dark, velvety crimson, changing to intense maroon; a very prolific bloomer; the flowers are of excellent form and size. The best dark red.

Ulrich Brunner—Cherry red, a truly magnificent rose. The color is bright and beautiful. The stems are long, raising the large perfectly formed flowers well above the foliage. Thrives to perfection under our conditions and certainly should be included in every collection.

Hybrid Tea or Ever-Blooming Roses

Augusta Victoria

American Beauty—Probably the widest known and most prized cut flower among all American roses. Deep pink, approaching crimson of exquisite form and fragrance and large size.

George Dixon—A magnificent new Irish rose, in many ways the best of its type. Flowers of charming contour, extreme size and rich perfume, velvety crimson with scarlet reflex tips.

Gruss an Teplitz—Intense depth and richness of color; velvety, crimson-red.

Madame Caroline Testout—An old favorite, cherry-red edged with silvery rose.

Augusta Victoria—White shading to prim-rose, a fine rose for outside, as well as under glass; very vigorous.

Soleil d'Or or Golden Sun—Varies from orange-yellow to reddish-gold, shaded with nasturtium red; large, full, perfectly double flowers; a strong grower and a beauty.

La France—Pink, tinted silvery blush. Flowers large and borne freely. Delightfully fragrant, excelling nearly all others in this respect. Each, 75c; per 6, \$4.00; per doz., \$7.50.

Crimson Rambler

Baby Rambler Roses

The wonderful persistency of their bloom makes them one of the choicest plants in cultivation for summer bedding; and as an edging to borders of shrubs, roses or perennials they have no equal. They are a solid mass of blossoms from June until freezing.

Erna Teschendorf—The most vivid crimson of any Polyantha Rose, easily the best all-red Baby Rambler yet produced. One extra valuable quality in which it excels is that it never loses color, under the hot sun; flowers large, fully double, and borne profusely the entire season.

Katherine Zeimet—Pure snow-white, double blooms in profuse clusters, making a sheet of white color. A compact, bushy grower of dwarf habit; foliage dark, glossy and finely cut.

Mrs. Wm. H. Catbush—Blooms summer and winter; beautiful shell pink flowers. Is a fine outdoor plant.

Baby Rambler roses will be potted roses, many of them in bud or bloom. We will not ship them in the pots, but will ship them with dirt on the roots. Each 25c; \$1.00 per 5; \$1.90 per 10.

Baby Rambler in Pot.

Rugosa-Hybrid Perpetual Roses

Hardest of all roses; will stand the winter in any point in South Dakota or North Dakota without winter protection. Blooms continuously from early in the summer until the ground freezes in the fall; will freeze up each season with an immense number of buds and blossoms. To get best results and the most flowers, cut flowers from them liberally as soon as in bloom. Plant these in quantities for borders in beds, and for specimen plants.

Hansa Rugosa—The description of the Conrad Ferdinand Meyer may well apply to this with the exception of the color. The flowers are crimson and especially fine. **Each 80c; \$3.50 per 5.**

Conrad Ferdinand Meyer—An early flowering Hybrid combining the ornamental qualities of its Rugosa foliage with the blossom beauty and perfume of the Hybrid Perpetuals. Flowers large cup-shaped and double, of a delicate silvery pink. Two-year heavy. **Each, 80c; per 5, \$5.00.**

Rosa Rugosa Red—This rose is perfectly hardy, is not only grown for the beautiful single red flowers that it produces in abundance, but for the beautiful foliage which the bush retains until early winter, and the large red rose apples in evidence throughout the latter part of the summer and early winter, which make a striking contrast showing above the green leaves. Plants grow three to five feet tall.

3 year extra heavy plants 65c each; per 5, \$3.00; per 10, \$5.50.

Double Rugosa

Miscellaneous Roses

Manda's Triumph—Pure white, many double will produce in clusters of from 10 to 12 on small side shoots, literally covering the plant and standing well above the foliage. **Each, 35c; per 5, \$1.25.**

Madame Plantier (Hybrid China)—One of the most satisfactory roses for cemetery or yard planting. Blooms in the middle of June, when its large clusters of purest white flowers form a perfect mound of white. **Each, 35c; per 5, \$1.50.**

Climbing Roses

Two-year heavy, unless noted. **40c each; \$1.80 per 5.**

Crimson Rambler—The famous crimson-cluster climber, so extremely effective when grown on pillars and trellises. Makes shoots 8 to 10 feet long in a season. Flowers are produced, from ground to tip, in large pyramidal clusters of thirty to forty. **Each 50c; per 5, \$1.85.**

Dorothy Perkins—Clear shell-pink with flowers borne in clusters; full and double. This is without question one of the very finest of all climbing roses.

Queen of the Prairie—Bright rosy red; large, compact and globular flowers; bloom in clusters. Fine and a rapid grower.

Yellow Rambler—Light canary shade; clusters smaller, individual flowers larger than Crimson.

White Dorothy Perkins—Same as Dorothy Perkins, but pure white; best white climber.

Excelsia—Known as the Red Dorothy Perkins, a very valuable addition to our list of roses. Has intense crimson scarlet double flowers in brilliant clusters set in glossy shining foliage. Very free from mildew. Extremely vigorous and one of the handsomest of the red climbers. **Each 50c; per 5, \$2.00.**

Harrison's Yellow—Semi-double, bright yellow; showy, hardy and fine; blooms very early; one of the best of its color. **Each 70c; per 5, \$3.00.**

Persian Yellow—Deep golden-yellow, semi-double; very fine, hardy. Two-year heavy, each, **70c; per 5, \$3.00.**

Flower of Fairfield—A few years ago when the Crimson Rambler, the hardy beautiful red climbing rose, was introduced it went over the country like wildfire. Nearly everyone bought a crimson Rambler and planted it about the house. Millions of them are growing in the United States today and producing thousands of flowers each. During their blooming period, which lasts two or three weeks, they are a mass of crimson flame. The Flower of Fairfield is equally as beautiful, is just as good climber as the crimson Rambler, but is a perpetual rose, blooming all summer. **50c each; \$2.00 per 5.**

Flower of Fairfield

CLIMBING VINES

Instructions for planting and care

Are always purchased for the purpose of covering an unsightly object like a fence, outbuildings, or for the purpose of beautifying either the porch, summer house or other place. Consequently you want hardy vines, with a rapid top growth, something that you do not need to take down in the winter. The hardiest and best of those that will stand the north are the various varieties of Ampelopsis, Bitter Sweet, and Beta Grape. Those next in hardness would be the Honeysuckle, Cinnamon Vine and Clematis. In the north these can be planted on the south or east side of houses, and come through the winter generally in good condition. When you receive these plants there may be a considerable length of vine. Do not try to save much of this because you will gain by cutting it back severely. There will also be considerable fine roots. See that these are spread out well in the hole, plenty large to accommodate them; that the soil is well packed, and the tops cut back to within a few inches of the ground. You will then secure a very good growth of new wood that insures you that your plants are in good condition. When you figure on planting for porches where you

Virginia Creeper covering a well tower at Mandan, N. D., the best and hardest rapid climbers.

are healthy and will come through the winter to cover an unsightly object put your plants 2 to 3 ft. apart in the row. For porches where you want quick results you can plant them closer if you wish.

Cinnamon Vine—A rapid growing climber, taking its name from the peculiar fragrance of the delicate white flowers. **Each, 15c; 3, \$1.00.**

Clematis—All Clematis require a deep rich soil, plenty of water and good drainage. Should be planted with the crowns three inches beneath the surface of the soil. Does best where not exposed to the full sun during the hottest part of the day.

Clematis Paniculata—Handsomed hardy climber. Is one of the choicest and most satisfactory climbing flowering plants. Of strong, rapid growth. Dense, small bright green foliage. Pure white fragrant flowers in August and September, followed by silvery feathery seed pods which make an attractive appearance until mid-winter. Good for any position where a graceful vine or trailer is desired. **Each, 60c.**

Jackmanni Clematis—Well known, large-flowering blue Clematis, flowers almost violet with a rich velvety appearance, distinctly veined. Blooms from July until frost. Plant is hardy, abundant and successful. **Each, 60c.**

Ville De Lyon Clematis—Beautiful free flowering vine, excellent for porches and balconies. Flowers bright red, long blooming season. The only really bright Clematis. Does best in rich loam. **Each 45c.**

Coccinea Clematis—A scarlet bell-flower Clematis. Very beautiful and graceful climbing vine. Scarlet flowers. Blooms freely in June and throughout the summer. Healthy plants, and will stand a reasonable amount of drought. **Each 35c.**

Wistaria, Purple—This variety bears in great profusion large clusters of pea-shaped flowers, blooms in May and June. Hardy in sheltered locations. **Each, 40c; per 5, \$1.00.**

Wistaria, White—This variety is pure white, sometimes tinted light blue. **Each, 50c; per 5, \$1.50.**

Beta Grape—A rapid grower, is very popular for covering walls, summer houses and porches; hardy. **Each, 25c; 10, \$2.25.**

Ampelopsis Engelmanni (Engelmann's Ivy)—A type of the Virginia Creeper, but different in growth as well as foliage. It has much shorter joints, and very much smaller and thicker foliage. This is the only ampelopsis that is hardy and that will cling to brick, stone or plaster. It is a fast grower. **Each, 35c; 5, \$1.50.**

Ampelopsis Veitchii—This is one of the finest climbers we have for covering walls, as it clings firmly to the smoothest surface, covering it closely with overlapped foliage, giving it the appearance of being shingled with green leaves. The color is deep green in summer, changing to the brightest shades of crimson and yellow in autumn. **Each, 45c; 5, \$1.50.**

Ampelopsis Quinquefolia (Virginia Creeper)—Deeply cut leaves which turn to a beautiful crimson in fall; fine for covering trees, rocky slopes, walls, etc. Very hardy. **Each, 30c; 5 for \$1.25.**

Trumpet Vine (Radicans)—A robust, woody vine, twining with numerous roots along its stems; its orange-scarlet, trumpet-shaped flowers cluster at the tips of the branches. **Each, 30c; 10, \$2.50.**

Bittersweet (Calustrus Scandens)—Handsomed, glossy foliage in large clusters of beautiful orange-crimson fruit retained all winter; its graceful sprays of berries making winter house decorations; perfectly hardy. **Each, 30c; 5 for \$1.25.**

Honeysuckle (Scarlet and Yellow Climbing)—These are very hardy, producing large quantities of long, trumpet-shaped flowers; heavy, glossy leaves make them one of the most valuable of the hardy climber. **Each, 25c; 5, \$1.25.**

Honeysuckle (Halleana)—Color, an intermingling of white and yellow, extremely fragrant and most satisfactory. This is the variety most often found growing on porch trellises, or used as a covering. **Each, 25c; 5, \$1.25.**

Kudzu Vine (Pueraria Thumbergiana)—Large foliage and dense shade, growing 50 feet in one season. Flowers plentiful in August; rosy-purple, pea-shaped. **Each, 30c; 5, \$1.25.**

Lyceum Chinese (Chinese Matrimony Vine)—A general utility, hardy, climbing vine that will overcome any obstacle in growth and flourish everywhere. Each new shoot produces handsome purple flowers, and later a prodigious crop of scarlet berries. **Each, 25c; 5, \$1.00.**

Clematis Paniculata

Hardy Perennials

These plants are perennial, which means that they live for a number of years, but the tops die down each year after blooming, and they bloom on the new wood that comes up the next year. When you receive them there will be more or less fine roots, and should be taken care of as you would a strawberry. The crown should not be covered more than 1 or 2 inches, depending on the plant. If for specimens, plant them 2 ft. apart. If you want to make a hedge or border, plant them closer—from a few inches to 18 inches apart. Give them good cultivation, some mulching, and they will repay you in the spring. The perennial plants are the most popular of all flowering plants, when planted once they are always there, living through the winter with little or no protection. In most cases the flowers increase as the plants grow older. Well adapted to all kind of soils. The plants are all strong field grown.

The Early Achillea—Height, 2 feet, very best white flowered border plants, resembling Pompon Chrysanthemums. **20c each; \$2.00 per doz.**

Aquilegia Canadensis (Columbine)—Blooms from June to August. Height, 2 feet. Flowers red and yellow, held gracefully on long stems. A strong grower and free bloomer. Does well in almost any location. **20c each; per 12, \$2.00.**

A. Coerulea (Rocky Mountain Columbine)—Blooms from May to July. Height 12 to 18 inches. Flowers are larger and composed of five petals of bright violet-blue, with a pure white corolla. Borne on slender stems, and sway and nod in the gentle breeze. Used for cut-flowers. **20c each; per 12, \$2.00.**

Bleeding Heart—Blooms May to June. Height 2 feet. Flowers pink and white; heart shaped. A well-known hardy perennial, producing its flowers freely in spring and early summer in graceful, drooping racemes, sometimes a foot in length. **50c each; 5 for \$2.25.**

Delphinium (Perennial Larkspur)—Indispensable to the herbaceous garden. Their long, showy spikes of flowers persist from June till frost and furnish the most satisfactory colors to any color scheme. **Each, 20c; 90 cents per 5.**

Gaillardia Grandiflora Superba (Blanket Flower)—Makes one of the most gorgeous and prodigal displays of all the perennials. Flowers often measure 3 inches in diameter on clean, 2-foot stems. A hard center of deep maroon is thickly bordered by petals of orange and yellow, strikingly ringed by circles of crimson, red and maroon. Poor soil will do, and a constant show is assured from June till frost. **Each, 20c; per dozen, \$1.70.**

Golden Glow Rudbeckia—Grows 5 to 7 feet, and blooms from early summer until frost. Flowers resemble golden yellow cactus dahlias. **Each, 15c; per 10, \$1.00.**

Hollyhocks—Bloom from June until September; height, 4 to 5 feet. They are among the most handsome and ornamental of all garden flowers. They should have slight covering in winter. **Each, 20c; per 10, \$1.60.**

Hardy Phlox

No class of hardy plants is more desirable than the Perennial Phloxes. They will thrive in any position and be used to advantage in the hardy border, in large groups on the lawn, or planted in front of belts of shrubbery, where, by judicious pinching back and removing faded flowers, a constant succession of bloom may be had until frost. We offer a select list of strong field grown roots.

Coquelicot—Glowing orange red with violet eye.

Bridesmaid—White, crimson eye; fine truss.

Caran d'Arche—Geranium red with old rose shadings and white eye.

Eclairer—Purple-crimson, light aureole.

Champs Elysee—Purple; dwarf growing.

Mrs. Jenkins—An early and free bloomer, one of the best; tall. Flowers very large, pure white, the best white.

Pantheon—The peerless pink. Extra large, always flat flowers of salmon rose.

Each, 20c; 95c per 5.

Phlox Subulata (Hardy Mountain Pink)

An early spring-flowering type, with pretty moss-like evergreen foliage, which, during the flowering season, is hidden under the masses of bloom. An excellent plant for the rockery, the border, and invaluable for carpeting the ground for covering graves. **Each, 15c; per 12, \$1.50.**

Shasta Daisy—A rigorously selected mixture of Burbank's new sorts, giving us different forms and much larger flowers ranging in shape from fully double to single, and in color from pure white to pale lemon yellow. Plants are extremely productive of bloom, making as spectacular a field show and as profitable a cut flower supply as any Hardy Perennial grown. **Each, 20c; per 10, \$1.75.**

Yucca Filamentosa (Adam's Needle)—This is a hardy evergreen plant producing long leaves; a tall stock producing sometimes as high as 200 flowers of pure white; blooming period about June and July. The leaves remain green the entire year. A fine plant for sunny, exposed places and for the lawn. **Each, 25c; per 5, \$1.00.**

Hardy Fern

From the Black Hills of South Dakota we gather each year large quantities of hardy ferns in a number of varieties. These are specially valuable for the north and northeast sides of the house, along the north sides of fences, or where they are protected from the direct southern rays of the sun. They do well in shady, moist situation. We consider this one of the most satisfactory plants for the shady, cool places. **Large clumps, each, 35c; 5, \$1.50; 10, \$1.90.**

Bulbs and Tubers

These will come to you as the names indicate—either as bulbs or as tubers. Some of them are hardy, which means that they can be left in the ground continuously. Others, not hardy, that must be taken up each fall and stored in a cellar where they will not freeze. Of the hardy varieties, the Day Lily, Iris, Peony, Phlox, Lily of the Valley and Japanese Lilies are to be left in the ground the year around. The Caladium, Tuberose, Dahlia, Gladiolus and Cannas are to be taken up after frost in the fall and the dirt removed from them and placed in a cellar that would be suitable for keeping vegetables. They are to be taken out in the spring at planting time and planted out just as you did the year before. All of the bulbs and tubers, both hardy and tender, will be received by you ready for planting, and will all produce flowers or luxuriant foliage the first year. The Japanese and Day Lily bulbs should be planted about 18 inches apart. These will gradually thicken. Lily of the Valley, about 6 or 8 inches apart. Caladium, about 3 feet apart, as you grow it for the foliage only. Iris 1 foot apart in the row. Dahlia, 2 to 3 feet apart in the row. Peonies, about 3 feet apart. Gladiolus, 8 to 10 inches apart. Cannas, if in beds, about 18 inches apart, for best results. Hardy Phlox about 18 inches apart.

Aquilegia

Lily of the Valley

The Japanese Iris are truly wonderful, some standing 5 to 5½ feet high, producing flowers as much as one foot across. Every shade of the rainbow is represented in the different flowers. Blooming in June and July after the German Iris are through.

Gekka-no-nami (Waves under Moonlight)—Earliest to bloom, and the choicest white; very free. Glistening white with creamy white stigmas.

Gold-Bound—A fine double pure white, with gold banded center.

Mei-ran—Mottled pink and white, a beauty.

Oyodo—Single, blackish-purple.

Uchiu (Universe)—Beautiful, six-petaled flowers of largest size, on the longest stem. Color,

Day Lily (*Hemerocallis*)—Popular, hardy. Plants belonging to the lily family. They succeed everywhere, and should be more extensively planted in our Northern States. They require little care.

Flava—Yellow, the best known variety.

Kwanso—Orange with darker shadings.

Each, 15c; per 12, \$1.50.

Lily of the Valley—The Lily of the Valley will thrive and throw up its beautiful, modest, fragrant white bells in any kind of soil. Will also adapt itself to pot culture in winter; its delicate, permeating fragrance making it especially desirable. Per doz., 80c; 50 for \$3.80; 100 for \$7.50.

Iris

None of you will forget the hardy blue Iris that was used for borders from the door to the gate on each of the walks; a bed of it planted up close to the house and blooming the earliest of any of the flowers in the spring. There has been a wonderful change and improvement in the Iris; hundreds of colors and combinations of colors; hardly a color can be imagined today that you do not find in the Iris. The size of the flower and the plant has increased wonderfully, and this past season we had them in the nursery blooming at six inches high and some of the latest varieties standing fully five feet, and covered with immense blooms measuring 10 and 12 inches across. They are all perfectly hardy.

Japanese Iris

cerulean blue with gold center and white halo, from which radiate many clear white lines. Standards white, tipped blue.

Iso-no-Nami. (Shallow Waves.) A magnificent broad-petaled variety; one of the largest flowered, and the latest to bloom. Color a nebulated suffusion of rose and cerulean blue over white; deepening towards the gold flushed center of rosy lilac.

Kumo-no-obi. (Band of Cloud.) The lower and upper petals being nearly equal in size, make a very full flower and a solid blotch of color. Bright, clear purple, with distinct rays and halo of white surrounding the golden throat, the pure white standards tipped purple. 35c each; \$3.50 per doz.; set of 7 for \$2.00.

French Iris

12c each; \$1.20 per doz., unless otherwise noted.

The true Fleur de Lis or National Flower of France, perfectly hardy, grows anywhere.

Her Majesty—Rosy pink, very fine. This is considered one of the best French Iris by many. Each, 15c; 12 for \$1.50.

Honorabilis—Fine, yellow uppers, with lower petals of maroon.

Queen of May—Standards lilac pink, falls blended with white.

Mad. Chereau—Very delicate and distinct; white, edged blue.

Black Prince—Standards purple lilac. Falls velvet black. A very striking dark flower. This should be in every collection of Iris.

Florentina Alba—A large pure white fragrant flower. Each, 15c; \$1.40 per 10.

Siberian Iris

Hardest of all Iris, very strong, free grower, adapting themselves to any soil; producing large quantities of blue and white flowers under the most adverse conditions from June to August. The foliage stands more erect and is finer than other Iris. Is a rich dark green throughout the season. On that account they are very valuable in landscaping.

Sibirica—Purplish-blue flowers, 3 feet high; useful for cutting. 15c each; \$1.50 per doz.; \$10.00 per 100.

Orientalis—Rich violet-blue, very free and one of the best; June; 3½ feet. 15c each; \$1.50 per doz.; \$10.00 per 100.

Snow Queen—This new variety possesses all the merits of the type, differing only in color, which is an ivory-white. 15c each; \$1.50 per doz.; \$10.00 per 100.

The Iris Trial Ground Mixture

This includes all of the Iris except Japanese, 10, 90c; 25, \$1.95; 50, \$3.50.

The Beautiful French Iris

Dahlias

No garden is complete without a show of these brilliant and stately flowers, and nothing gives greater return for so little money and care. We have a fine large stock of the best varieties and are offering them at very low prices.

New Rare Dahlias

FRANK A. WALKER—Decorative Dahlia—A charming shade of deep lavender-pink. For garden decoration or for cut flowers this variety is exceptionally good, having long stems and producing flowers in great abundance. This Dahlia should be in every garden. **50c each.**

KALIF—A truly majestic flower, frequently measuring over nine inches in diameter. The flower is of perfect Hybrid Cactus form, and in color a beautiful pure glowing scarlet. The habit of the plant is all that can be desired, growing, with us, about four and one-half feet in height. The gigantic flowers, which are produced freely, are held erect on strong stems of wiry stiffness, making it a most effective and useful variety for cutting, as well as for garden decoration. "Kalif" is the first variety that has had the distinction of receiving the National German Dahlia Societies' highest award. This variety bears my highest recommendation. **75c each.**

MRS. C. H. BRECK—A new Cactus Dahlia of exceptional merit. Color, creamy yellow passing to various shades of rose pink. **75c each.**

QUEEN WILHELMINA—Giant Holland Peony-flowered Dahlia. (See illustration.) Largest and finest of the pure white sorts; excellent for decorative work and unsurpassed as a cut flower. Blossoms produced upon long, graceful stems, well above the foliage. An immense, fluffy flower of pure glistening white, showing its beautiful golden yellow center very prominently, which lends an additional charm to this most beautiful flower. **25c each.**

Decorative Dahlias

25c Each, \$2.50 Per Doz., Except Where Noted.

DOLLY OR SYLVIA—Decorative—White edged pink.

ELSIE DAVIDSON—A beautiful deep, golden yellow, very large, and fine for cutting.

JACK ROSE—Decorative—The identical shade of the rose with the same name. This variety is exceedingly free, carrying its fairly large flowers on very erect stems in greatest abundance; flowers early.

JEANNE CHARMET—Decorative—The flowers measure from 1 to 10 inches in diameter and are borne on stiff wiry stems frequently 18 to 24 inches long. The color is a most exquisite shade of lilac-pink, daintily shading to pure white towards the center, with a tinge of light yellow at the margins. **35c each.**

Dahlia—Queen Wilhelmina

The color of the superb variety is pure white artistically striped, splashed and blotched deep violet-purple. The plants occasionally bear a solid purple-colored flower. The effect of these phenomenal flowers is most pleasing, giving this variety a supreme place in this class. **35c each.**

MADONNA — Magnificent

New Peony-flowered Dahlia—A perfect wonder; its remarkable qualities being beautiful shape, excellent cut-flower variety, and one of the most satisfactory in the garden. The flowers are borne in a miraculous profusion, upon long graceful stems of wiry stiffness, making it one of the most desirable. In color a very beautiful white, very slightly tinted with a most delicate shade of lavender-pink. **50c each.**

REGGIE—A Decorative Dahlia, of beautiful cherry-red color. A variety that will give the very best of satisfaction, producing flowers upon long stems, well above the foliage.

SOUVENIR DE GUSTAVE DOAZON—It is the largest Dahlia in existence. The color is a pleasing shade of orange-red. Flowers are full to the center and often measure 9 inches and over in diameter; they can be forced to measure over 12 inches. A remarkable constitution. Very long stems of pleasing, stiff, upright type. Should be in every garden.

MINA BURGLE—This new introduction is one of the finest varieties to date—a champion variety, producing flowers of gigantic size and remarkable beauty; the best in introduction of perfect Decorative type and attracts universal attention. **50c each.**

Le Grand Manitou—Decorative Dahlia, 35c Each

existence. Color, a glowing and most brilliant scarlet. The flowers are of perfect Decorative type and are borne upon long wiry stems well above the foliage. **50c each.**

Cactus Dahlia

Mme. Henri Cayeux

- MRS. H. L. BROUSON**—A clear, delicate salmon or pale orange-yellow, with long petals. Fine.
MRS. HENRY WIRTH—One of the first Cactus Dahlias to bloom and exceptionally free-flowering. The perfect flowers are a bright fiery scarlet. 35c each.
REINE CAYEUX—Rich, glowing blood red. This Dahlia should be seen to be appreciated. The plants grow about 3½ feet high, and have very little foliage. The flowers are produced in great abundance well above the foliage, on good stems, making almost a solid bunch of dazzling red flowers. Price, 50c.
STERN—Bright primrose-yellow. The flowers are large; petals long and pointed. One of the most satisfactory varieties.
W. B. CHILDS (Hybrid). A very reliable variety. Color a beautiful dark maroon. Flowers extra large. 35c each.

Quilled Show and Fancy Dahlias

25c Each, \$2.50 Per Doz., Except Where Noted

A. D. LIVONI—Beautiful soft pink. Well formed flowers with long stems. Perfectly round, ball-shaped flowers, each petal being very tightly quilled and arranged in exact regularity. Free flowering.

ARTHUR LEFAVOUR—Gigantic New Fancy Dahlia—Color a beautiful sulphur-yellow, lined, striped and speckled deep, gorgeous crimson. 50c each.

GLADIATEUR—Clear violet, shaded blue. A splendid new exhibition variety. 35c each.

GOLDEN AGE—Sulphur-yellow. Free-flowering.

IMPERIAL—Deep purplish maroon. 35c each.

LUCY FAUCETT—Pale yellow, striped deep pink or light magenta. One of the best of this set. Very large and free flowering. 35c each.

ROBERT BROOMFIELD—Pure white. Tall grower.

STRADELLA—Show—Beautiful deep purple-crimson. Exceptionally free-flowering. Stems long and wiry. One of the finest to date.

VIVIAN—A great favorite which received the admiration of everyone who saw its wonderful flowers, the color being white, effectively edged rose-violet. An extremely wonderful blending of color possessed only by the rare novelties. One of our champions of this season's introductions and a variety worthy of the highest words of praise.

Miniature Pompon Dahlias

25c Each, \$2.50 Per Doz.

AMBER QUEEN—Rich, clear amber, shaded apricot. Miniature flowers; very beautiful.

JESSICA—Yellow, edged red; a very effective combination.

SAN TOY—White, very heavily tipped carmine.

The Dahlia Trial Ground Mixture

Good, strong South Dakota grown bulbs producing immense flowers in every shade produced by the Dahlias. You will find in this mixture the best of the Cactus Show Peony Flowered, and all of the Dahlia family. Each, 15c; 1 doz., \$1.00; 25, \$2.25; 50, \$4.00.

COLLECTION—One each of the above four Cactus Dahlias for \$1.00 prepaid.

25c Each, \$2.50 Per Doz., Except Where Noted

AMBASSADOR—Pure white cactus. A flower of the finest quality. Long, stiff stems.

COLUMBIA—Vermilion, tipped and striped with white. Long, narrow petals. The plants make very little foliage and the flowers are carried well above it. It blossoms profusely, with its variety of coloring it presents a most striking appearance. Price, 30c.

ELLA KRAMER—CACTUS—Rose-pink with much brighter center. Fine form.

GOLDEN GEM—One of the finest golden yellow Cactus Dahlias we have had the pleasure of offering. It is first-class in every way and attracted most attention this past season. 50c each.

J. H. JACKSON—This is one of the best black Cactus Dahlias. Its velvety black maroon shade is very striking. The flowers are very large with long stems and stand out well from the foliage. Every lover of Dahlias should plant a J. H. Jackson.

KREIMHILDE (Hybrid). The queen of the Cactus Dahlias. Color, flesh (delicate pink), shading to white in the center; very late flowering.

LIBELLE—Clear, deep rose-purple.

MME. HENRI CAYEUX—A reliable exhibition variety. The flowers are of the largest size with long, narrow florets, forming a bloom of magnificent form. The color is a beautiful rich pink, daintily tipped white. I highly recommend this grand variety as one of the best in existence. 50c each.

MRS. DE LUCA—Golden yellow, tipped with orange. A most effective blending of colors, seen only in the very rare types. 35c each.

CACTUS DAHLIAS

Mme. Henri Cayeux
J. H. Jackson

Mrs. H. L. Brouson
Stern

PEONY

At the first sight of the newly opened flower you have that feeling of awe and reverence that a young mother has at sight of her first born.

IN GETTING up this descriptive list and peony guide, we feel that we are only doing what is expected of us by those of our customers who have already fallen willing victims to the lures of this most seductive and fascinating of hardy perennials. To our mind, there is no flower so well suited to our western country as this peony which, standing the severest cold of winter and almost unlimited neglect, produces such gorgeous blooms, and when given a little care and attention responding with blossoms of such perfect loveliness and fragrance as to thrill the soul of the true flower lover.

No matter in what direction your tastes lie, if you appreciate any form of beauty you will find something to satisfy you somewhere among the infinite variety of colors and color combinations, the diversity of flower types, and the varying heights of the peony. Do you want large, voluptuous blooms eight to ten inches across, of a sensuous tropical appearance, and possessing an unsurpassed exotic fragrance? Turn to the peony. Or do you wish for a delicate, airy flower, like a rosy pink cloud in the early dawn, fading away to a pearly gray edge? Again turn to the peony. Is it to be wondered at that we have so varied an assortment of blooms, each perfect in its own particular way, when we realize that for close upon a thousand and a half years the Tree Peony has been the recipient of the attention of the Imperial House of China, with all the care for artistic and dainty details that the Oriental can give?

In Europe the early history of the peony is lost in the maze of antiquity, with its bypaths of superstitions, fables and myths. One story runs that a certain ancient Grecian physician named Paeon, a pupil of Aesculapius, a famous doctor, miraculously cured the wounds of Pluto which he had received from Hercules. This cure caused the jealousy of Aesculapius and resulted in his secretly murdering Paeon. Pluto, however, was not forgetful of benefits received, and following the prevailing fashion among Greek Deities, showed his gratitude to Paeon by turning him into the flower which we now know as the Peony. Since then, various magical properties have been attributed to it, and even down to modern times we hear of people wearing portions of the root as charms against sickness.

Still, in spite of its antiquity, it is only within the last century and a half that the peony has been brought to its present state of perfection, the first definite steps in this direction being taken by M. Jacques, the gardener of King Louis Phillip of France. Other French florists followed, and then the English became enthused, and at the present day some of the finest specimens are being produced by American hybridizers, and an American Peony Society has been formed for the purpose of testing and experimenting with new varieties. This in itself ought to be sufficient to prove what we have tried to convey, regarding the merits of the Peony and yet we do not wish you to take our or any one's word for it. We want you to see them yourselves, watch them and care for them, and we know that once you have beheld the sheer loveliness of such a bloom as La Tulip, like Oliver Twist, you will wish for more.

In going through or stopping at Yankton, South Dakota, this coming summer, and future summers, you will, just before you enter town from the northwest on the Milwaukee Road, go through the center of one of our peony fields. This field will consist of 20 acres of the real fancy varieties and it is going to be one of the show places of the whole country. We want you to watch for it from the right-hand side of the train as you come in. Just to the west of the peony field and adjoining it are more than 200 acres of our nursery ground. You will be able to see this from the train also.

The peony is, in my estimation, the best, the most satisfactory, and the easiest to care for of all of the hardy outdoor flowers. Plant the peony once and it is good for ten years without moving, and will improve in size and number of flowers for a good many years, and by the production of new varieties the season now spreads from about the 15th of May to the 20th of June, starting first with the Tenuifolias, or fern leaf peonies, followed by the Officialis, and then by the standards in an endless number of varieties and colors. It is not unusual to cut from our fields as high as 50,000 flowers in 24 hours, and you can hardly tell that they have been removed. These flowers vary in size from two inches in diameter to those monstrous flowers more than ten inches across.

A Ten-acre Peony Field

This shows just a corner of a ten-acre field of peonies, which produced in June, 1920, literally millions of blooms. The rows are 80 rods long, and the main road runs along where you see the telephone poles. We advertised in the local papers that we would give these cut flowers away after six o'clock in the evening during the blooming period. The main road was blocked every night with automobiles and we had as high as 20 people from our force cutting the flowers and passing them out, and never got away until it was too dark to cut more. At the end of the week it was almost impossible to tell where we had cut from. There were so many flowers.

The field of peonies by the railroad track is only one of our many fields; we believe we have the greatest assortment and the greatest acreage of peonies of any one, and we have all of the varieties that are worth while.

Peonies may be planted either in September and October, or in the springtime, as you prefer, and should be planted liberally by everyone. Plant them in beds, rows or single specimen plants, and you will be surprised and gratified with the results. I cannot speak too highly or urge too hard that you plant peonies in quantities. Get an assortment of varieties, something that will cover the entire season with its wealth of colors.

As your train rushes through this peony field, and the eye passes from one variety and color to the next, you get that kaleidoscopic effect that is so pleasing, and you only wish the train would stop long enough so that you could gather arms full of these monstrous, beautiful, fragrant flowers, and we want to assure you that you would be welcome to them.

The peony is one of the hardiest of the flowers, and will stand more grief and come out smiling, than almost any other plant or shrub you could plant. Their requirements are simple—the rich soil, the sunlight for best results, but will do wonderfully well in partial shade, and when planted in the shade they should be staked, as they are apt to grow too tall, and when the immense flower opens it bends the stalk to the ground and you lose the beauty of it. Once planted, they increase in beauty each year. Plant them so that the crowns or buds are covered with $2\frac{1}{2}$ inches of soil, press the soil firmly about them, keep the weeds and grass away from the growing plants, and you will have a wealth of flowers equal to or more beautiful than the finest roses, fragrant, and for cut flower purposes will keep from a few to 15 days in water.

We send out only the strongest of the field grown plants, 3 to 5 eyes. We are not asking the real fancy prices that some do for peonies, but are offering them at the right prices, so that everyone should be able to have and enjoy this, the most beautiful of the flowers.

Ismay, Mont., February 4, 1920.

Today I have spent a pleasant half-hour perusing the Peony department of your nice new seed catalog. I note what you say of the new Peony catalog. I shall want it, of course. But my object in writing is to tell you a little story that perhaps you may care to use in your little book.

Seven years ago I came to Montana from Wisconsin and settled on a homestead in Custer County. Always a home lover, I brought with me as many of the home makings as I could—not the least of these were three varieties of peonies which my husband and myself religiously planted. Our neighbors scoffed. "They will not bloom" they said, and "Peonies on these barren prairies, etc., etc.!" I split my roots up into small clusters, planted seven to a row, two rows along beside the road. I waited, and was rewarded with one flower. How I loved it! The next year came a drought, but the peonies did not know it and I had a dozen blooms. The next two years, also dry, brought more, but 1919 brought the climax; the driest year of all, and eighty-six blooms—such wonderful blooms, such hardy, glossy foliage. And now comes the story: It is June. Along the road that passes our house came a jaded team and wagon. In a single spring seat exposed to a merciless sun sat a man, woman and child. They were strangers and seemed to have traveled far. Their attitude of extreme weariness drew my attention as they passed my window. A grove of vivid green Norway Poplar and White Ash partly screened me from their view. It also hid my peony bed until they were directly upon it. I was startled at first and then, oh! so glad, when, with a sob of joy the woman cried, "Oh! Look, look! Roses!" Of course, she soon saw they were not roses, but that one moment of pleasure to that weary woman was worth more to me than words can tell. It paid me for all the years of labor spent in making a real home on a Montana prairie.

If this appeals to you, Mr. Gurney, use it and welcome. Only do not use my name as I do not pose as a philanthropist.

Mrs. E.

ALICE—Rose type. Deep rich red, yields great quantities of fine flowers in big clusters. The opening buds are of a grand red, reminding one of a hothouse rose. Midseason, one of the finest dark reds. \$1.00 each.

AMBROSE VERSCHAFFELT—Crown type with fine pink outer petals and lighter center. Crown high, flowers of medium size. Later it turns a fine delicate pink over all. Good, rich green foliage. 40c each.

AUBREY—Crown type, large flowers, guards fine pink, inner petals lighter. A good pink. 35c each.

BONNIE—Semi-rose type. A large, fine, open-hearted, fluffy flower of a pure ideal rich pink over all. Petals edged with gray silvery sheen. Golden stamens disclosed here and there. Flowers large and in big clusters. Very profuse bloomer. 60c each.

BUNKER HILL—Full rose type, heavy immense compact flowers of fine rose shape. A deep rich showy red, really a beauty. A bouquet of these flowers looks very much like our true American Beauty rose. Extra good. \$1.00 each.

CREAM VAREGATIS—Semi-rose type. A fine delicate pink over all, with a few dark red blotches in center. Flowers borne on long stems. 60c each.

CROWN OF GOLD—Beautiful rose shape. Fine lily white petals opening like a wonderful rose, the rich golden stamens appearing among the petals towards the center. Extra good for cut flowers. Flowers in big clusters on long stems. 75c each.

DELICATISSIMA—Bomb type, flowers large, profuse bloomer. Deep pink or light red over all. This is a very fine desirable early peony. It is noted for its hardness and profusion of bloom under all conditions. 50c each.

DELIGHT—Semi-rose. Beautiful shade of shell pink. Large flowers borne in clusters. Long-lasting blooms. 40c each.

DOLLE—Anemone type. White guards, inner petals of light yellow and shaped like a cactus dahlia. Center petals cerise tipped. A profuse bloomer and a fine flower. 35c each.

DUCHESSE DE NEMOURS—The Calot variety, crown type, early. Superb cup-shaped sulphur-white flowers with greenish reflex that lights up the entire flower, gradually changing to pure white. Among peonies there is nothing more exquisitely beautiful than this variety in the half open bud state. A most charming flower. Fragrant. Each, 55c; \$2.50 per 5.

EMILY HASTI—Crown type. Guards a pale pink, inner petals a fluffy creamy white. The center forms a crown of large petals. 50c each.

EUGENIE VERDIER—Semi-rose type. Large flowers. A fine pure shell pink over all. Golden stamens in center mingling with the center petals. Large clusters. A grand peony. 60c each.

EUNICE ROSS—Crown type. Light purplish pink guards and lighter inner petals. Medium size flowers but very pretty and delicate. 35c each.

EUPHEMIA—Semi-double type. Flowers very large, borne in clusters. A beautiful pink over all. The yellow stamens are interspersed among the large, wavy petals. 45c each.

NEPTUNE—Crown type, midseason. Tall and erect. Lilac white crown. Colors milk white with creamy white stamens. Fragrant. Free bloomer. 50c each.

EVANGELINE—Fine crown type. White guards with a faint blush at opening. Color, creamy white, crown large, of faint blush white petals, some of which are edged with carmine. 50c each.

FESTIVA MAXIMA—Rose type, early. Undoubtedly the finest white peony in existence. Mr. Harrison says: "This flower has reached the ultimate beyond which we cannot go. Here at the door stands Festiva Maxima, white as the soul of the Madonna, with now and then a blood drop, as though the iron had sometimes entered her heart. What a marvelous flower!" It is not only a flower of wondrous beauty with clear carmine spots on edge of center petals, but of enormous size as well, often measuring 7 or 8 inches in diameter. It has held first place in the peony world for over 60 years. Unsurpassed for cut flowers. Each, 50c; 5 for \$2.25. See inside back cover.

FRAGRANS—Compact full flowers. Red with slight silvery reflex. A favorite. 40c each.

GEN. HOOKER—Rose type. Deep, rich red, large flowers, profuse bloomer. Huge, full and heavy. Extra fine. 85c each.

GEORGIA—Crown type. Guards a fine pink, inner petals cream color turning white. Crown pink. Flowers large and fine and borne in great profusion. Tall grower, early blooming. 40c each.

GOLDEN HARVEST—Crown type. An immensely large and fluffy flower, wide and deep. One of the largest. Borne on good, strong stems. 75c each.

GURNEY'S PINK—Crown type. A fine pink color, rich and lasting. Full and fluffy and delightful. A very profuse bloomer producing an elegant effect. Fragrant. 60c each.

HELO CENTRAL—Anemone type. A rich pink. As the flower opens up completely the pistils become visible, exposing their bright red tips. 35c each.

HOLLAND PINK—Crown type. Very large fine deep pink flowers with lighter collar. A profuse bloomer and flowers in cluster. 40c each.

ICEBERG—Crown type. Creamy white over all. A fine early white peony. Flowers come in big clusters. 45c each.

IRENE—Anemone type, flowers with faint pink guards and fine white tufted inners. The dark red stamens in center appear as the flower opens up completely. 40c each.

JUNE BRIDE—Crown type. Shell pink. Clusters immense, three to five flowers each bending down with their weight. 60c each.

L'ESPERANCE—Bomb type. Light rose color and flowers large. Fairly early. Hardy and profuse. Should be in every garden. An old favorite. 35c each.

LOUIS VANHOUTE—Semi-rose type. Deep rich red or claret color throughout. Stamens peeping through. 60c each.

MAD. CROUSSE—Crown type. Opening as a faint blush white with slightly darker center. A large flower of exquisite color and form. 60c each.

MEISSONIER—Bomb type, mid-season. Full double flowers on stiff, wiry stems; deep, velvety cardinal, violet tipped; wonderfully rich and brilliant. Sometimes referred to as the "American Beauty," because of its close resemblance in color to the rose of that name. Very popular as a cut flower. See colored picture inside back cover. Each, 55c; 5 for \$2.00.

MARECHAL VALLIANT—Immense globes of light red with shades of mauve. At the Chicago show in 1905 it won first prize for the best red. Each, 50c.

MARK TWAIN—Crown type. Dark pink guards, inner petals are of Salmon color suffused with pink and gold. 40c each.

MRS. DOUGLAS—Crown type. Flowers large. Shell pink, the inner petals a fine cream color. Center or crown, pure white blotched here and there with a deep claret or wine color. 65c each.

PLENTIFUL—Anemone type. Pink petals, profuse bloomer. Early and fine. A great show when the plants are in bloom. It truly suggests its name, "Plentiful." 40c each.

POMPEY—Semi-rose type. A dark, rich pink. Exquisite flowers in clusters on long stems. Stamens interspersed with the petals. 40c each.

REINE VICTORIA—Bomb to crown type. Fine pink over all with darker blotches in center and also some lighter tufts. 35c each.

SUNSET—Large semi-double to semi-rose type. A beautiful pink with golden stamens evident among the large, wavy petals. A profuse bloomer. 65c each.

TERRY No. 1—Anemone to mild crown type. A fine pure pink over all. Early and hardy. Gives that water-lily effect. 45c each.

TERRY No. 3—Large anemone to crown type. Large pink guards. Collar lighter, crown darker again. A darker pink than Terry No. 1. 35c each.

THE BRIDE—Crown type. White with slight pink tinge. Not very large. 75c each.

VICTORY—Anemone type. Pink guards with salmon colored inner petals which are tufted, giving a dahlia-like appearance. Very profuse and flowers large. 50c each.

VENUS—Delicate shell pink. Extra good for cut flowers. 40c each.

YOUTH AND BEAUTY—Crown type. A large and magnificent flower of a delightful pure delicate pink. 65c each.

SINGLE VARIETIES PEONIES

WHITE—Shell pink at opening, later turning white; early and profuse, 35c.

RED—Large and beautiful; showy; early; long stems, 35c.

Our Trial Ground Mixtures

IN our trial grounds we try our thousands of different varieties of bulbs, plants and trees, just a few of each of all the varieties that we grow and are really the choicest of anything in the nursery. At the end of each season these are dug and placed in our trial ground mixture and this season we are keeping them out of the mixture and are going to offer them to our customers at low prices, so you may have a lot of flowers specially, at a reasonable price and get the very best.

The Peony Trial Ground Mixture

We are going to show you on this page a kodak picture of our trial ground of peonies, consisting of something over 300 varieties, and there certainly was a fine bunch of peony bloom. We had just as beautiful fields of Gladioli, Dahlias, and Iris of the several kinds and everyone visiting the nursery during the blooming period was literally loaded down with beautiful flowers. We have had visitors come more than 150 miles in their autos to see these flowers and they went back auto loaded. The grounds are open to the public every day during the blooming period, and on Sundays especially hundreds of people start to drive by, but always stop in to see the flowers. We are glad to have them do so.

This past fall, in the peony department, we dug and transplanted more than ten acres of peonies. With the planting of these new fields, we believe we are the largest growers of peonies in the Northwest, if not in the United States. We have hundreds and hundreds of varieties, and two years ago we started to get out a special peony catalog. We have been adding so many varieties each season, and this season a good many hundred more, that we are still working on the peony catalog. When we get it out, it will be a book of reference and larger than the catalog that you are reading now. We are in hopes to offer this to you this coming fall. It will be free and peony lovers should have it.

A Little More About Varieties

You are going to realize more of the beauty and immensity of our "Trial Grounds" for Peonies as you see them blooming by the track as you drive or ride along. It does not seem possible there could be so many varieties, but when you know that all new varieties are produced from seed and no two seed produce a flower just like another, but always different, seldom good enough to keep, and a good many "Peony Fiends" planting all the time, hoping to produce the "ne plus ultra" of all peonies, you can then see how there may be thousands and thousands of them all different. We try all the promising ones, and all the new ones and all that the originators think are promising and these all go into our "Trial Ground" mixture, some worth their weight in gold, all good. There are so many of them that we are this year putting them up in the following sized collections, all good large roots, that will bloom next year after planting, some of them this year:

Collection No. 1— 5 plants, no two alike	\$1.25
Collection No. 2—10 plants, no two alike	2.25
Collection No. 3—25 plants, no two alike	5.50
Collection No. 4—50 plants, no two alike	9.50

"Peonies"

(Written after a visit to the big Peony field.)

In the Gurney fields the peonies grow,
Thousands of blossoms row on row;
Their heads held high to God's blue sky,
Silently saying to passers by,
"This world is such a beautiful place,
Live life well! show a smiling face."

In homes of hundreds—rich and poor,
We find there peonies by the score.
Up at the hospital on the hill,
Sick people enjoy their fragrance still.
Dear little folks on children's day,
Smilingly hold white peonies and say,
"God gave us life: 'tis Children's Day."

June 13, 1920.

Emma Elizabeth Daniels.

Gladiolus

Most satisfactory summer flowering bulb needing so little attention and thriving as well in almost any soil. The bulbs should be set from three to six inches apart in rows, or, for massing, six inches apart and about four inches deep. Our list is a selection of the cream of hundreds of varieties which are grown on our own farm under our own supervision.

America—Beautiful, soft flesh-pink, faintly tinged with lavender. Spikes develop very evenly and to unusual length, sometimes with two or three branches. A magnificent cut flower. It took the flower-loving world by storm when first introduced and holds undisputed first place among all Gladioli with unabated popularity. 8c each; 50c per doz.; \$4.00 per 100.

Chicago White—A fine white variety with lavender stripes on lower petals. From seven to eight flowers open at one time. 8c each; 50c per doz.; \$4.00 per 100.

Cracker Jack—Dark red, throat spotted with maroon. 8c each; 50c per doz.; \$4.00 per 100.

Halley—Delicate salmon-pink, slightly roseate, the lower petals showing a creamy blotch bisected by a red stripe. One of the earliest to bloom. 8c each; 65c per doz.; \$3.75 per 100.

Minnesota—Strong long spike of well opened flowers of pale cream with very small maroon spot. Early bloomer. 8c each; 65c per doz.; \$3.75 per 100.

Mrs. Watt—Glowing American Beauty shade of wine red; self-color; well opened flower, nearly all flowers open at one time, spike very erect and not too stiff. Very distinct variety. Created a lot of comment at recent exhibitions. Each 10c; \$1.00 per dozen.

Mrs. Francis King—A fine strong growing variety with large spikes of showy flowers. Color a bright shade of pure scarlet. 8c each; 50c per doz.; \$3.50 per 100.

Panama—A new derivation from America, which is more deeply pink and a trifle larger than its parent. Without a doubt the one finest pink Gladiolus. 10c each; \$1.00 per doz.; \$7.00 per 100.

Pink Beauty—Rosy-pink, dark blotch; ten days earlier than any other Gladiolus; invaluable for this reason as a cut flower. Each 8c; 60c per doz.; \$4.00 per 100.

Pink Perfection—Daintily formed, very large flowers of apple blossom pink. Each, 10c; per doz., 90c; \$7.00 per 100.

President Taft—Delicate pink, red blotch, light line through each petal. Bulb, flower and spike large. Each, 8c; 60c per doz.; \$4.00 per 100.

Schwaben—Extremely showy both as a cut flower and a bedder. The color is pure canary yellow shaded sulphur, the golden yellow throat slightly blotched with dull carmine, but so deep as not to interfere with the all-yellow general effect. Flower spikes are tall and strong, numerous and well set with perfect flowers. Its characteristic branching habit keeps this variety in bloom unusually long. 10c each; \$1.00 per doz.; \$6.00 per 100.

Blue Hybrids—These will run 95 per cent or better blue shades. They are very attractive and a collection of gladioli are not complete without some of these. Per 5, 20c; per 25, 85c; per 50, \$1.50.

War—Deep blood red, shaded crimson-black. Very tall and conspicuous. The best Gladiolus of this beautiful shade of red. Try it. Each, 15c; \$1.50 per doz.

Willie Wigman—Large wide open flower, bloom blush tint with long bright red tulip blotch on lower petal; spike of graceful habit, and the effect of the crimson on the cream petal is most pleasing. 10c each; \$1.00 per dozen.

The Gladiolus Trial Ground Mixture

This is composed of practically every Gladiolus that grows. They were in lots of from just a few bulbs up to hundreds of some varieties, all grown into beautiful bulbs and placed in the trial ground mixture. These will run through all the colors of the Gladioli: Blue, purple, lavender, pink, white, red, cream, in fact, any color that Gladioli produces. We are going to make you a price on these that will make you want to plant 100 and you surely should do it. If you do not, you are certainly missing an opportunity. Per 10, 35c; 25 for 85c; 50 for \$1.50; 100 for \$2.90; 500, \$12.00; 1,000, \$22.00.

Pierpont, S. Dak., Nov. 15, 1920.

Received the bulbs you sent a few days ago. To say that it was a very pleasant surprise is to put it mildly, for there are few homes into which they will go where they will be so thoroughly enjoyed and cared for. Let me sincerely thank you for these, as flowers always bring me joy.

Mrs. J. G. Ewald.

Yankton, S. Dak., Nov. 19, 1920.

Please accept sincere thanks for the box of tulip bulbs which you sent me; they have been duly planted and I hope for results next summer.

W. N. Cooley.

America Gladiolus

Mrs. Francis King

Hardy Lilies

Auratum (Gold Banded Lily)—Flowers very large, made up of broad white petals, thickly studded crimson and maroon with a bright golden band through the center of each petal. **50c each.**

Speciosum Album—Large white flowers with greenish band running through the center of each petal. **Each, 40c.**

Speciosum Rubrum—White, beautifully spotted with red; flowers in August. **45c each.**

Tiger Lily—This well known old-fashioned flower is becoming very popular the last several years and is now planted extensively in all gardens. On account of its extreme hardness it is one of the most valuable of all lilies. Grows three feet tall with several flowers on each stem. Flowers orange with black spots. **Price each, 20c; per 5, 80c.**

Caladium Esculentum

Or **Elephant's Ear**—Very easily grown. For obtaining tropical effects in lawn and garden planting this beautiful plant takes a prominent place. Bright green leaves, 3 to 4 feet long and 2½ feet wide. **Each, 25c; per 10, \$2.25.**

Tuberose

Orange Flowered Single—This is absolutely the freest and best bloomer of all the tuberoses. The single is exceptionally fragrant and its tall spikes of star-shaped flowers are very beautiful. **Each, 10c; 10 for 75c; 25 for \$1.75.**

Albino tuberose—Early bloomer, dwarf habit. Flowers waxy white and single. Very fragrant. **Each, 10c; 10 for 75c.**

Large-Flowering Cannas

No other bedding plant will give the same uniform good results in our varied and trying climate. They do well in all sections of the country and stand pre-eminently at the head of the list, succeeding in any sunny position in any kind of soil, but responding quickly to liberal treatment. For best results the beds should be spaded two feet deep and a generous amount of well-decayed manure of any kind thoroughly incorporated, and at all times supply water freely. For best effect plant in large masses of one color, setting out the plants 18 inches apart.

Burbank—About three feet. This is really half way between orchid and truss, Cannas. The color is a pure, strong capary yellow, with some red spots in throat; a beautiful color. The flower is often four to five inches across and they are profuse bloomers. **Each, 10c; \$1.00 per doz.**

Uncle Sam—4 to 5 feet. Strong grower; leaves are large. Flowers come in immense clusters; are of a very bright scarlet color, and do not turn purple, like some red Cannas. If you want a very glowing red, plant the Uncle Sam. Green foliage. **Each, 15c; 10 for \$1.25.**

Hungaria—Green foliage. Planted singly or in masses, it catches the eye instantly and demands attention. The petals are large and waxy, made up into big, round, full trusses. Its color forcibly suggests the well-known Paul Noyron Rose, and is unquestionably one of the most attractive pink Cannas ever produced; 3½ to 4 feet. **30c each; \$3.00 per dozen.**

Dr. Robert Funke—It is impossible to convey the full value of this magnificent bedding variety with its massive, erect trusses of deep, blood-red flowers, and green foliage, produced with a freedom that leaves nothing to be desired in effectiveness. Unqualifiedly the best deep red bedding Canna. **5 ft., 15c each; \$1.50 per dozen.**

Speciosum Album

King Humbert—The grandest Canna ever offered. Large heart-shaped leaves of bronze, the dark ribs sharply defined, crowned with immense heads of orchid-like flowers. Individual petals are of the largest size; velvety orange-scarlet, flecked carmine; rose tinted at margin and base. **4 to 4½ feet. 15c each; \$1.25 per dozen.**

Wyoming—Seven feet. Purple foliage. One of the most majestic Cannas. Blossoms orange colored, true orchid shape, with large rounded petals that flap and flutter in the breeze like glistening silken flags. **10c each; \$1.00 per dozen.**

David Harum—Three-foot; flowers intense vermilion-scarlet; very prolific; one of the freest bloomers we know of. Bronze leaves. **Each, 10c; per dozen, \$1.00.**

Madam Crozy—Flower scarlet with narrow gilt edge; very popular variety; foliage bright green; height, 3 feet. **10c each; \$1.00 per 12.**

Panama Special (New)—Dull red overlaid old rose, edged and slightly mottled with gold; under side of petals, creamy yellow, with a heavily mottled border of red. This unique "Butterfly" effect captivates the ladies on sight. Green foliage. **Each, 15c; per 12, \$1.50.**

Wintzer's Colossal—Without doubt the largest flowered Canna to date; flowers over 8 inches

across. Strikingly vivid scarlet that retains its brilliancy. 5 feet. Green foliage. **15c each; \$1.50 per dozen.**

PLANTS REQUIRED TO FILL A CIRCULAR BED

Diameter	6 in. Apart	12 in. Apart	18 in. Apart
3 feet	28	7	..
4 feet	48	12	6
5 feet	80	20	8
6 feet	112	28	13
7 feet	152	38	17
8 feet	200	50	23
9 feet	256	64	28
10 feet	320	80	36

**INSURES SUCCESS
WITH LEGUMES**

For Alfalfa, Clovers, Vetches, Cowpeas, Soybeans, Peas, Beans—
Carries no Weeds or Plant Diseases—Enriches the Soil—Stimulates
Growth

"NITRAGIN" INCREASES YIELD—MAKES FERTILE SOIL

Don't Sow Legume Seed Without Inoculation

"Nitragin" is the trade name of the germ that acts on the legume root, drawing nitrogen from the air and converts it into plant food. As a result it insures a uniform "catch" quickly growing a strong, healthy, hardy plant. At the same time the soil is enriched for the nourishment of the succeeding crop. But remember, only legumes inoculated with a good reliable culture, such as "Nitragin," will do this. Use "Nitragin" on all legumes. Make your farm fertile.

Inoculate Seed with "Nitragin"—Get a Bumper Crop

In order to get a bumper crop your farm must be fertile. Your farm cannot be fertile unless you can grow legumes successfully, to get a "catch," to insure an even stand, you must in a great many cases use a good, pure culture, such as "Nitragin." The pure culture system of inoculating legumes is endorsed by the U. S. Dept. of Agriculture, by experiment stations, by agricultural experts, and by farmers who have used "Nitragin." The leading seed firms through the country are also endorsing pure culture for all legumes. Science has definitely proven that certain crops must find certain bacteria in the soil or they will prove a disappointment or a failure. If you have failed to secure a "catch" it's because there is something lacking in the soil. The problem in a great many cases has been solved, that it lacks bacteria sufficient to insure a "catch." Be sure to state crop for which "Nitragin" is intended.

PRICES—ANY CULTURE

½ acre size (Shipping weight 4 oz.)	.....	\$0.50
1 acre size (Shipping weight 8 oz.)	.....	1.00
2 acre size (Shipping weight 1 lb.)	.....	1.80
5 acre size (Shipping weight 2½ lbs.)	.....	4.00
10 acre size (Shipping weight 5 lbs.)	.....	7.50

Be sure to state what crop the "NITRAGIN" is to be used for.

You can also get the special GARDEN "NITRAGIN," which is good for Peas, Beans and Sweet Peas, and large enough for the average garden, for 35c, postpaid. Simply order: GARDEN "NITRAGIN"—35c, postpaid.

"NITRAGIN" is shipped to you by mail or express in a ventilated can in a granular medium, in which the germs will live for a long time.

Include "NITRAGIN" with your seed order—Mention crop you want it for

Nico-Fume

This Nico-Fume is used extensively by growers of house plants, florists, etc., for destroying green lice, thrips, and other injurious insects on house plants. For spraying use 1 to 2 teaspoonfuls of liquid to each gallon of water. Price, ¼ lb., 50c; 1 lb., \$1.50; 4 lbs., \$5.50; 8 lbs., \$10.50, liquid form.

Black Leaf 40

A concentrated solution of nicotine sulphate. This is suitable for spraying all kinds of trees, vegetable plants and other plants, for various insects, aphids, etc. It is also one of the most valuable dips for various kinds of stock diseases and insects; cattle scab and lice; sheep scab, lice and ticks, and is recommended by the State Board of Sheep Commissioners, and is officially permitted by the United States Bureau of Animal Industry and all State Cattle and Sheep Boards. One dipping in Black Leaf 40 kills ticks on sheep and most of the eggs. It remains in the wool for considerable time, and most of the young ticks which hatch later drop off and die. One pound to 90 gallons for dipping purposes. ½ lb., \$1.00; 1 lb., \$1.75; 2 lbs., \$3.25; 10 lbs., \$13.75.

Spray Your Trees! Dry Lime Sulphur

For many years growers have been using liquid lime sulphur solution; they are thoroughly familiar with its use and the results it

will accomplish. There is no question whatever regarding its efficiency as a spraying material.

A barrel of liquid lime sulphur weighs approximately 600 pounds. Eighty pounds of dry lime sulphur will accomplish the same results. It is easily handled, can be carried over winter safely as it will not leak out of container, and no danger of freezing.

Dry Lime Sulphur in concentrated form requires only the addition of water to produce a spray, possessing all the well known virtues of the lime sulphur solution.

The Uses of Dry Lime Sulphur

It is particularly effective in the control of the following: San Jose Scale, oyster shell bark louse, scale insects; fungus diseases such as peach leaf curl and apple and pear canker, apple scab, brown rot on peach or plum, blister mite, etc.

All orchards should have a dormant or winter spray of lime sulphur. For further information regarding the use of same write us for pamphlet.

We are offering dry lime sulphur at the following prices:

1 pound packages	.....	\$ 0.35
5 pound packages	.....	1.10
10 pound packages	.....	2.00
25 pound packages	.....	4.50
100 pound packages	.....	15.00

For prices and information regarding other spray material, write us.

Prices on Sprayers

Believing there will be lower prices on these goods we are not naming a price now. Write us for lowest quotations.

Price of complete outfit with 4 solid brass nozzles, 2 caps for each nozzle

lowered by loosening two wing nuts. This attachment will save many times its cost the first season. One man can drive and do the pumping and spray 30 acres of potatoes, etc., per day.

We have Power Sprayers for sale. But if a customer already has an orchard pump or intends getting one of ours, why should he go to the expense of setting a large power sprayer? By getting this attachment he has a splendid outfit for both orchard and field work, at less than one-third the cost.

Can be used with any spray pump or nozzles you now have, or with our Barrel Sprayer. Adjustable for rows from two feet six to three feet apart. The guide irons can be fastened to any wagon or cart by a couple of bolts and removed in a moment. The piping can be raised or

Hudson's Perfection Sprayer

advantages of the larger models but at a minimum cost. All valve and nozzle parts are easily accessible.

Pump of heavy tin, 1½ inches in diameter; 14 inches long; tank of galvanized iron or brass, 5½ inches by 8 inches, capacity one gallon.

No. 120G—Galvanized Tank, price each, —

No. 120B—Brass Tank, price each, —

Hudson's Barrel Pump

Hudson's Perfection

An exceptionally well made sprayer, top head concave, bottom convex, all seams riveted and soldered. A practically unbreakable outfit which has no equal for potato spraying, whitewashing or general use. Will handle perfectly all liquids, either thin or heavy.

Pump of seamless brass tubing, mounted inside of tank where it is less liable to damage from careless handling. Has ample capacity to maintain a high pressure and even discharge.

Nozzle is our regular Perfection Shutoff Nozzle, which will operate perfectly at all times.

Made with all brass pumps, and either heavy galvanized steel or brass tank. Price, with Galv. Tank, —; with Brass Tank, —.

Hudson's New Easy

The Hudson New Easy Sprayer is a compressed air sprayer, made especially for use where a sprayer larger than a hand atomizer, but not as large as the regular knapsack type, is needed. Has all the

Hudson's New Easy Sprayer

Hudson's Barrel Pump

This pump has been developed to meet every requirement of a perpendicular barrel pump. It is powerful, light and durable, and will develop better than 250 pounds pressure with ease. Can be used with either one or two lines of hose.

When mounted on a barrel or tank it makes a most convenient and inexpensive outfit for orchard or field use.

Barrel is not furnished.

Cylinder of seamless brass, 1¾x7 inches, with 8 inch stroke. Air chamber, 2x30 inches of high carbon steel; valves are bronze balls, both mounted in one cage and easily removable, fitted with brass intake screen. Swinging type agitator, very efficient.

No. 4—Pump only, without fittings, —

No. 4A—Outfit, No. 4 pump, 15-ft., 1½-in. spray hose, fog nozzle, leakless shutoff and an 8-ft. ¼-in. iron pipe extension complete, price each, —

No. 170—¾-in. brass Y for two lines of hose, each, —

Extra hose, per ft., 32c.

Hudson's Modoc Bucket Pump

Hudson's Modoc Bucket Pump

One of the most effective pumps of its type on the market, absolutely perfect in every respect.

Pump is double acting, has large capacity, and will give 150 pounds pressure at nozzle. This high pressure is easily maintained and gives a steady discharge at nozzle. Valves and plunger are easily removed for cleaning and inspection. All parts except handle and footrest are of brass.

No. 122—Modoc, price each, —

No. 176—Perfection shutoff with Fog nozzle, —

No. 166—Fog nozzle, straight or angle, —

No. 71—Bordeaux nozzle, —

All Hudson Spray Pumps listed are furnished with Perfection Shut-off with Fog Nozzle without additional cost to you.

Bug Death

A non-poisonous powder to be applied dry or mixed with water and sprayed on the plants. It is death to the potato, squash and cucumber bugs, currant and tomato worms. It is best applied dry with a duster or bellows at the rate of about 12 lbs. per acre. Price, 1 lb., 25c; 3 lbs., 55c; 5 lbs., 85c; 12½ lbs., \$1.75; 100 lbs., \$12.50.

Dickey Shaker, for applying above, 65c ea.
B. D. Shaker, 90c ea.

Pat. March 16 and Nov. 9, 1897

"Practical Potato Culture"

Is what its name implies, a treatise edited by a practical grower of long experience. E. A. Rogers, Maine, who is at the head of Seed Improvement Department of that State which holds the record of the largest yield per acre.

It contains 128 pages with 26 half-tone illustrations, indexed under 38 Chapter heads, giving information of General Farming, Potato Soils, Humus, Deterioration of the Potato, Seed and Cutting of Same, Saving Potato Boll Seed, Fertilizers, Cultivation, Insecticides, Harvesting, Storehouses, Marketing, Home Gardens, Melons, etc.

The price of this valuable book is 50c, but for the present we will mail copies free to our customers upon receipt of names and addresses plainly written and 6c postage stamps to pay postage.

Bug Death Aphis

The alarming increase of all forms of pests, diseases and climatic influences affecting plant growth and crop development places upon the grower constantly increasing burdens. More and more must spraying or dusting be the reliance of every grower in-doors and out. It is evident that dusting is to insure protection in the future beyond that possible by any liquid spray. This applies to orchards as well as house plants, greenhouses or field operations.

For sucking insects, lice, aphis, flea, beetles and fungus, this preparation is offered with full confidence in its protective as well as destructive power. There is no place where it can work injury, its sole mission being to protect and to save.

For the Currant worm, the Flea beetle, the Rose or Tree aphis, as well as other forms, its destructive power is assured. Dr. Twitchell has for 16 years relied on Bug Death, which constitutes the base of Bug Death Aphis, in all his field and garden work, with complete success.

The housewife will here find the ideal agent to use for the health of all house plants, and the greenhouse worker be assured security from all necessity for using any of the arsenical preparations; the orchardist finds here the ideal dust for his trees carefully mixed, **ready for use**; the gardener be insured against attacks from those pests and diseases which so often work serious injury, and all the while the health of the plant and life of the soil will be enhanced. That it is absolutely free from all forms of arsenic gives it a peculiar value with those who would seek freedom from the dangers attending the use of that indestructible mineral poison, whose only mission is to kill. We offer **Bug Death Aphis**, believing that it will meet a long felt want and prove of incalculable value to all growers.

DIRECTIONS

Apply, using Dickey Bug Death Duster, cheese cloth bag, blower gun, or, for apple trees, power blower.

First application should be when leaves are half-grown, and second just as petals fall.

With all house plants apply as soon as presence of aphis or lice is suspected. A generous application will at all times promote health and prevent attacks.

12 oz., Sifter Top, each 25c, postpaid; 80-lb. Kegs, by ft., \$11.50.

Master's Rapid Plant Setter

A wonderful labor-saving tool for transplanting Cabbage, Tobacco, Tomato, Sweet Potato, Cauliflower, Egg-Plant, Strawberry and all similar plants.

Each plant is SET, WATERED AND COVERED in one operation. The roots are firmly set by the absorption of the water almost as if they had grown there, and every plant will grow even in the hottest, driest weather. You can set your plants just when you are ready, regardless of the weather.

A Labor Saver

This Setter is a wonderful labor-saving tool. There is no stooping or lame backs. All of the hard labor is eliminated, and it makes transplanting easy, pleasant work. Sets 8,000 to 15,000 plants per day. This Setter is recommended by the most of the leading Agricultural Colleges over all other methods of transplanting—is strongly built and will last for years.

PRICE, \$6.75 EACH. POSTPAID, \$7.20 EACH

SATISFACTION GUARANTEED OR YOUR MONEY BACK

Planet Jr. Garden Tools

Make the work of your family garden light, quick and interesting, and get a bigger yield. Planet Jr. guaranteed implements are backed by over 40 years' experience.

No. 1 Planet Jr. Combined Drill Seeder and Wheel Hoe, Cultivator and Plow

Price, complete,
\$18.75

Sows all garden seeds from small-est up to peas and beans.

Every purchaser of the No. 1 machine will find it an excellent seed sower; a first-class double-wheel hoe. It is a practical, every-day time, labor and money-saver.

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

Price, complete,
\$23.00

As a Seeder Only
(No. 4D), \$18.25.
Holds $2\frac{1}{2}$ Quarts of Seed.

This accurate, durable and easy-running tool sows all garden seeds from the smallest up to peas and beans in hills 4, 6, 8, 12 or 24 inches apart, or in drills at the proper thickness and depth; rolling down and marking out the next row all at one passage. No time is lost. No seed is wasted. By removing the seeder parts and substituting the tool frame, you have a first-class single wheel hoe with a set of specially hardened steel tools, the best made for hoeing, plowing, cultivating, opening furrows, hilling, etc. Makes the care of a garden a pleasure as well as very profitable. Can be used successfully by men, women or growing boys. Pays for itself in a season and will last for years.

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

Price, \$26.00
Holds $2\frac{1}{2}$ qts.

Steel
Frame

This combination is intended for gardeners who have a large enough acreage in crops for a double wheel hoe to be used to good advantage, and yet prefer not to buy seeders and wheel hoes separately, and for the family garden where a double wheel hoe is preferred.

As a seeder it is practically the same as the Planet Jr. No. 4, and as a wheel hoe has the same steel frames and cultivating attachments as the Planet Jr. No. 12 Double Wheel Hoe.

Two acres a day can easily be worked, and when it is done, it will be a better job than several men could have done in the same time with hand hoes.

No. 31 Planet Jr. Combined Drill Seeder and Single Wheel Hoe, Cultivator and Plow

Price \$15.00
No. 31D as a Drill
Seeder Only
Price \$12.00

This new combined tool is of great value to thousands of gardeners who have never felt able to own, either a seed drill or a wheel hoe. It will sow even a small packet of garden seed with great precision in a narrow row from $\frac{1}{4}$ to 2 inches deep. Quickly changed to a splendid wheel hoe. A special machine for the small gardener at a price he can afford to pay.

Planet Jr. Star Pulverizer, Leveler and Weeder

Price \$7.10

This new tool is especially adapted for preparing the seed bed. After the ground has been plowed with the Wheel Hoe plow or spaded, this Pulverizer will be found of great value in smoothing and fining the surface of the soil, putting it in the best possible condition for the seed planter.

The real blade cutting $13\frac{1}{4}$ inches, levels the ground perfectly. After the crops are started, it may be used between the rows as a weeder or as a crust breaker, leaving a fine mulch.

Planet Jr. Garden Tools

Nearly two million soil-tillers all over the world are saving time, lightening labor and getting better results by using Planet Jr. guaranteed farm and garden tools. Let us show you what they'll do for you.

No. 12 Planet Jr. Double and Single Wheel Hoe, Cultivator and Plow

Price \$15.00

A double and single wheel hoe in one. Has steel frames and 14-inch steel wheels. Straddles crops till 20 inches high, then can be worked between rows with one or two wheels.

The hoes are wonderful weed killers and leave the ground almost level. The cultivator teeth are of improved design and admirable for deep work. The plows are invaluable for opening furrows for manure, etc.; for covering and for plowing to or from the crop. The leaf lifters enable close work when plants are large or leaves are flat on the ground. The greatest hand cultivating tool made. All steels are now hardened by a new process, giving longer wearing and easier running tools.

No. 12½ Planet Jr. Double and Single Wheel Hoe, Cultivator and Plow

Price \$15.00

This tool is the same as No. 12, except it has a pair of three-prong cultivator teeth in place of the single teeth. The tooth next to the row is narrow and runs shallow; the middle tooth is wider and runs ½ inch deeper; the outside tooth is wider still and runs another ½ inch deeper.

No. 13 Planet Jr. Double and Single Wheel Hoe

Price \$10.50

This tool is the No. 12, with 6-inch hoes only, these being the tools that are most used. Any of the attachments shown with No. 12 or 12½ may be added at any time.

No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow

Price, \$12.25

Steel Frame
15-inch Steel Wheel

These Single Wheel Hoes are the highest type of the class. They have a great variety of attachments which adapt them to a large variety of work, and there is scarcely any garden cultivation they will not do.

Nos. 16 and 17 have the same steel wheels, frames and handles, but the attachments sold with each vary.

The handles are adjustable in height. The frame is steel, convenient and strong, with quick change device by which to exchange the tools without removing the nuts.

All attachments are of a special pattern, carefully tested by practical men; no others ever offered compare with them. All the steel parts are high carbon steel, oil tempered and specially hardened, finely formed, finished and polished and work to a charm. Everyone who cultivates needs one.

No. 17 Planet Jr. Single Wheel Hoe

Price, \$10.25

Steel Frame
and Wheel

You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The No. 17 has a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work.

Planet Jr. Garden Tools

Get away from useless drudgery and old-time wasteful cultivating methods in your family garden and on your farm. Use the Planet, Jr., and do the work of 3 to 6 men better, quicker, cheaper. Planet Jrs. are light, strong lasting.

No. 119 Planet Jr. Garden Plow

Price \$6.50
24-inch Steel
Wheel

No. 119—This tool will appeal to those who prefer a high wheel tool for their garden work. Where the soil has not been so thoroughly and carefully prepared, the high wheel undoubtedly makes an easy running tool. The equipment is so complete that it will meet all the needs of the ordinary garden, where adjustments and refinements of the higher priced wheel hoes are not required.

No. 8 Planet Jr. Combined Horse Hoe and Cultivator

Price \$24.50

No other cultivating machine is so widely known, for it is in use throughout the civilized world. So strongly built as to withstand incredible strain, yet light and easy to handle. Opens and closes furrows, hoes right up to the plants without danger of injury, throws dirt to or from the row and throws back from center again. Cultivates any depth desired, and adjusts for any width. The teeth, made of beveled steel, specially hardened, retain their cutting shape and outwear anything made. The steel wheel won't clog. The handles adjust up, down or sidewise.

No. 9 Planet Jr. Combined Horse Hoe and Cultivator

Price \$18.25

Is identical with No. 8, except that it has no depth regulator, and has a plain wheel instead of lever wheel.

No. 60 Planet Jr. Double Wheel Onion Hoe

Price \$8.50

This new tool is a departure from all previous Wheel Hoes. It is adjustable for the complete culture of onions, or general hoeing. The new all-steel hoes are a decided improvement over the older models. The arch carrying the hoe is adjustable, eliminating the necessity of tool frames generally found on other types. Experience of years has proven our six-inch hoes to be the most consistent and efficient soil mulchers and weed killers of all attachments now in use.

No. 90 Planet Jr. Twelve-Tooth Harrow, Cultivator and Pulverizer

Complete with Steel Wheel. Price \$24.50
No. 90B (without Pulverizer). Price \$20.75

Gardeners cultivate better than formerly and find it pays. The chisel-shaped teeth on this tool go as deep or shallow as you like, close to row, without injuring plants, cut out all weeds, stir the soil and mellow and fine it as with a garden rake. Any width from 12 to 32 inches. A special favorite with strawberry and tobacco growers, market gardeners, truckers and small fruit growers. The wheel won't clog; the pulverizer leaves the ground in perfect condition for seeding or plant setting.

PLANET JR. EXTRAS

4½-inch Hoes, complete, S100.....	pair	\$1.50
6-inch Hoes, complete, S101.....	pair	1.65
7-inch Hoes, complete, C. & D1.....	pair	1.85
8-inch Hoes, complete, C. & D1.....	pair	2.00
4½-inch Hoe Steel, C. & D1, No. 552/3.....	pair	.75
6-inch Hoe Steels, C. & D1, No. 1092/3.....	pair	.85
7-inch Hoe Steels, C. & D1, No. 1700/1.....	pair	1.10
8-inch Hoe Steels, C. & D1, No. 997/8.....	pair	1.20
Steel Cultivator Teeth and Bolt.....	each	.45
Plows for Double Wheel Hoe.....	pair	1.85
Plow for Single Wheel Hoe.....	each	1.85
Three-Prong Cultivator Teeth.....	pair	2.20
Disc Hoes.....	pair	4.00
Rakes, 3-tooth.....	pair	1.40
Rakes, 5-tooth.....	pair	1.80

72-Page Planet Jr. Catalogue Free

Describes 70 tools, including Seeders, Wheel Hoes, Horse Hoes, Harrows, Orchard and Best Cultivators. Write a postal for it.

I got one of your Planet Jr. 2-row Corn Cultivators No. 72, and I like it fine. I wish you would send me six of the improved 8-inch Sweeps.

Elk Point, S. Dak.
C. C. KLINE.

Norcross Cultivator Hoes

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

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

The "Norcross" is the only Cultivator-Hoe with detachable handle-ferrule (Pat'd.), which provides for its use as a wheel plow attachment. Professional gardeners declare that no wheel plow on the market has an attachment equal to our Cultivator-Hoe. All prongs are detachable.

Price, 5 prong, \$1.35; 3 prong, 95c each; midget, 50c each. Attachment for wheel hoe, 10c each. Parcels postpaid.

Wheeled Cultivator,
No. PEW5

As illustrated with the 5-prong PE5, cultivator attached.

Also has a keen edged high carbon tool steel wood cutter 9 inches wide. Under most conditions both cultivator and weed cutter can be used at the same time. If the ground is stony or wet the tools can be used separately.

The cultivator can be quickly detached, put on a hoe handle and used as a hand tool.

The wheel is 14 inches in diameter—plow style maple handles enameled red with black grips. All steel parts royal blue color. By Parcel post 13 lbs. Price \$4.50 each. Parcel post paid, \$5.00.

PULL-EASY
TRADE MARK

Adjustable
Garden Cultivators

Cultivator Hoe, No. PE5

Combines the convenience of the popular 5-prong style with the additional advantage of the great PULL-EASY adjustable feature. Teeth are 9 inches long and very broad and strong. These long grasping teeth will cultivate deeper and more thoroughly than any other garden tool.

Made for husky work in all kinds of soils. At full width of 12 inches is a first class rake. Adjustable in width from 6 to 12 inches. Tooth points concaved for perfect scouring. Middle tooth removable.

4 ft. straight-grained ash handle. Weights, 2 lbs. packed for Parcel Post shipment 4 lbs. Price \$1.40 each. P. P. Paid \$1.55.

ADJUSTABLE
2" TO 6" WIDE

Junior Cultivators,
No. PEJ1 and PEJ4

With a short 1 ft. handle (No. PEJ1) is for careful close work in flower beds or around bushes and low-spreading plants. The same 4-tooth cultivator head on a 4-foot maple handle (No. PEJ4), is for women and children to use in vegetable garden plots. A big favorite in school garden plots. Both tools are adjustable from 2 to 6 inches wide.

Weight by Parcel Post 2 lbs. PEJ1, 60c each. PEJ4, 75c each. P. P. Paid, 75c and 90c.

Cultivator Rake, No. PEC

At full width of 18 inches is better than an ordinary rake for preparing the seed bed, because of sturdy, long teeth. When vegetables are small the middle tooth is quickly removed for straddling plants and working two rows at once.

By means of wide-winged thumb nuts at ends of parallel bars, it is secured for cultivating in one stroke at any width of row from 7 to 18 inches wide. The instant adjustability of this cultivator makes it the most popular garden tool manufactured.

Hardwood polished handle, white ash, 4½ ft. long.

Weight 3 pounds. Teeth 3 inches long. Packed in corrugated paper for Parcel Post shipping 4 lbs. Price \$1.50 each. P. P. Paid \$1.75.

Clipper Mills—No. 1 B, No. 2 B

The Clipper Mill is a great institution. This mill has revolutionized the cleaning, grading, and separating of corn, grains and seeds. It will grade, clean, and separate all of these items more rapidly, perfectly and satisfactorily than any other fanning-mill made. It is better built and more durable than any other fanning mill. It screens out all of the dust, fine particles of dirt, chaff, etc., before it goes over the fan, consequently there is less dust in operating than from any other mill. It is easy to operate and of a very great capacity. The Kite Hopper for the cleaned grain or seed holds five bushels, most other machines require separate baskets or boxes in which to catch the grain. The above statements are strong, but they are absolutely true. Every person who has once used a Clipper Grain or Seed Cleaner would never discard it for any other make. We venture to say that 99 per cent of the Seed Houses of the World use Clipper Mills for their main cleaning. If there was a better mill made than the Clipper the Seed Houses would of necessity have them. The fact that the Seed Houses of the world use the Clipper we consider the greatest recommendation for this mill. These mills can be operated by hand or power. Each mill, if you request it, will be equipped without additional charge, with a power pulley. Each mill is equipped with twelve screens suitable for cleaning, grading and separating all kinds of grain and seed, and seed corn. These screens are very durable as they are made of perforated zinc steel. The capacity of the No. 1 B is 40 bushels of market wheat per hour, 12 bushels of clover seed per hour. No other mill will handle near this quantity. Every Clipper mill is guaranteed both as to material and workmanship and is also guaranteed to excel all other seed and grain cleaners on the market. It is guaranteed to us by the manufacturer and that guarantee is reinforced by our guarantee; in fact, we guarantee this mill to grade, clean, and separate any grain or seed that is not impossible to separate. It will not separate one grain from another where the weight and size is the same, but if there is a difference in weight or size it will make a perfect separation. It is the best mill for grading seed corn and each mill is equipped with special seed grading screens for edge drop planters. This season of light wheat it will pay you well to screen your seed wheat over the Clipper, planting only the best. If you will grade your seed grains each season you will increase your yield, inside of five years, from five to twenty per cent. Now, whatever a man soweth, that shall he also reap, or in other words, if you sow weed seeds or poor seed, you are bound to reap that of like quality, and kinds. Separate them with the Clipper. Most other mills depend entirely upon the screens for their work and with unsatisfactory results. The Clipper cleans all straw and foreign matter from the grain before it enters the air shaft, and then it strikes the vertical blast, and that does the rest. The Clipper screens are so arranged as to be in plain view and of easy access to the operator while the machine is in operation. Anyone desirous of obtaining the very best, inexpensive, and most durable mill for general use, the above facts would dictate the purchase of the Clipper. Give it a trial and you will use no other mill. It is endorsed and used by State and Government Stations.

Announcement Extraordinary

This mill sells everywhere without corn grading screens, or equipped with ten screens for \$39.50. We will deliver this mill at your station, freight paid, and include the extra corn grading screens, or twelve screens for \$39.50. The No. 2 B mill, of nearly twice the capacity, operated by hand or power as you wish, freight paid to your station, \$47.00.

Lawn

Insurance

Grass makes the lawn; dandelions are only disfigurements. Granting that the dandelion possesses beauty—flowers should be in the flower beds.

The Hall Dandelion Puller is an absolute guarantee to a fine lawn. It saves the lawn because it gets the root. It leaves no bad looking hole to mark your work. The trowel-shaped blade slides into the ground while a patented prong catches the root. When it is pulled up you are done with that particular dandelion and its progeny. The root comes with it. The Dandelion Puller will be sent you for 55c, parcels post paid.

Crys-Co Grit and Shell Producer

ITS ECONOMICAL FEATURES

In buying CRY-S-CO, you get a shell producer and grit combined. The chicken gets more lime from CRY-S-CO than from the genuine oyster shell, and fresh water shells that are being substituted for oyster are not to be compared at all with CRY-S-CO. The gritty part of CRY-S-CO thoroughly grinds the food, being hard, sharp and cubical, and saves the buying of a separate grit for this purpose. The heavy white cotton sack in which CRY-S-CO is packed is worth 10 cents to any poultry raiser. **Price per 100 lbs., \$1.25; 50 lbs., 65c; 25 lbs., 50c; 5 lbs., 30c.**

Magic Weeder Hoe

The Magic Weeder Hoe is the best garden hand-weeder we have ever used. Each tooth works separately on springs and is sure death to the weed. **Prices, Size A, 20c; size B, 25c; size C, 35c; size D, 45c; size E, 50c; size F, 75c; size G, \$1.00; size H, \$1.25; size K, \$1.25. Postpaid.**

Pruning Shear, California Pattern

Very good quality. At this low price you cannot afford to be without a pair. **Price \$1.00 parcel postpaid.**

Pruning Shears

French pattern, American made. These are highly finished, made of the very best material and will last a life time. They are the kind we use in our own nurseries. **Each, \$3.00, postage paid.**

Garden Trowel

Style A—Steel, hardwood handle, finely varnished, 6-inch steel blade, lower half polished, upper half lacquered blue. **Price, each, 45c, postage paid.**

Style G—Hardwood handle not varnished; 6-inch steel blade; finish, plain lacquered. **Price, 35c, postage paid.**

The Gem Seed Potato Cutter

Made stronger than ever before. No weak parts.

24 inches long, 8 inches wide, weight 8 lbs. Cutter will last a lifetime.

Can you afford to be without one? **Price, \$4.00.**

The GEM SEED POTATO CUTTER shown herewith has all the essential features necessary to a first-class tool. It will cut any size potato in pieces uniform in size, thereby insuring more accurate planting than when power planter is used. The operator to get the best results, will pick up the tuber, look for the seed or blossom end, passing it over the knife on upper side of

The Eclipse Rotary Hand Corn Planter

Has given unequalled satisfaction during the last twelve seasons. It eclipses all others, having a positive feed and four changes of discs. It is extremely simple, and works much easier than other styles. Plants anything from cane to corn. The handiest tool on the place. **Price, \$2.40; postpaid, \$2.65.**

The Cyclone Seed Sower

This is the best knapsack broadcast grain and seed sower made, and any person sowing any kind of grain or grass seed will more than save the cost of it on a very few acres besides sowing the seed much more evenly than they possibly can by hand. Order one to come with your grass seed. **Price, each, \$3.00; postpaid, \$3.30.**

**BRINGS YOU A REGULAR
\$2.00 SACK**

Raise All Your Chicks

White Diarrhea, the national poultry plague, kills millions of baby chicks every year. The poultry raiser's loss from this dreadful disease is tremendous. It's a crime against the poultry raiser's efforts and his labors. Stop losing from 30 to 55 per cent of your spring hatch. Prevent White Diarrhea by using Mayer's Six Weeks Baby Chick Developer.

Mayer's Six Weeks is put up in sealed sacks only. One sack will last an ordinary flock of 140 chicks for six weeks. Don't confuse these sacks with the ordinary four to six-ounce package, because they are much larger and contain absolutely no filler. It is made up entirely of concentrated medicine and food.

Is a Chick's Life Worth One Cent?

Think this over—what are you doing for your chicks? Are you giving them a chance to earn a big profit for you? For less than one cent a chick you can make sure of raising 95% of your hatch or your money back. The big sack that I am offering you here will last 140 chicks six weeks. Our grandfathers used to say, "An ounce of prevention is worth a pound of cure." This old saying is as true today as it ever was. Raise all your chicks. Use Mayer's Six Weeks Baby Chick Developer.

More Than a Preventive for White Diarrhea

Mayer's Six Weeks Baby Chick Developer is guaranteed to prevent White Diarrhea and raise 95% of all your chicks or your money back—but it does still more than this—it is a tonic, a food, a builder of tissue, blood and bone. It is a scientifically prepared chick food that accomplishes the same wonderful results as the scientific foods that are used for babies the world over. Order today. Price \$1.00; 6 packages, \$4.75; 12 packages, \$8.50.

Laymore

"MAKES THE LAZY HENS LAY"

Every poultry raiser in the world is looking for some good, practical way to increase the egg supply and make bigger poultry profits. The big trouble with the poultry business has been that the hens lay only when eggs are cheap, and quit laying when eggs are high priced. Since the

discovery of Laymore, the world's greatest laying tonic, thousands of poultry raisers are making bigger poultry profits than they ever thought possible. Their hens keep laying all winter long—they hurry through the moult and put on feathers quickly. You can get your hens to lay eggs at a cost of 12 cents a dozen. A half cent's worth of LAYMORE is sufficient for 12 hens. By taking advantage of my liberal offer here, every reader of this catalog can get enough Laymore to last 100 hens for 6 weeks FOR ONLY ONE DOLLAR. I guarantee Laymore to double your yearly egg production or your money back. Order right away.

Sold Under an Absolute Money-Back Guarantee

The experience of thousands of poultry raisers has been so remarkable and successful that I sell Laymore under the absolute guarantee that it will double your egg production or your money back. You have nothing to lose and everything to gain, so why not take advantage of my liberal offer of two dollar packages for only \$1.00 before it is withdrawn?

This wonderful new discovery is a scientific preparation that makes your hens lay when eggs are high priced. It supplies the natural diet that hens easily get in the spring and summer, when they are laying their best. Give them Laymore when they can't get this natural diet and you will double your poultry profits. Laymore hurries your flock through the moult, starts them laying quickly and keeps them laying practically all the year round. Price, \$1.00 for two full sized packages.

OUR DUROC HOGS

There are hogs, and then there are other real hogs. We believe we have the real ones, and I think we have convinced every visitor to our immense hog ranch that ours are equal to or a little better than the others. There are lots of good breeds of hogs besides the **Durocs**, and undoubtedly a great many of you are growing those other breeds, and we are not knocking them as they are good. We are growing the **Durocs** because we believe they are the most profitable, and that is why one grows hogs. We believe we get larger litters and mature a larger number per litter than other kinds. We produce lots of pigs at nine months old that weigh better than 300 pounds. We have the very best strains of the **Durocs** to head our herds—the **Orions**, **Pathfinders**, the **Great Wonder**, **Defenders**, **Sensation**, the **Senators**. You will recognize in the above the highest types of **Durocs**.

Our hog ranch is, we believe, the best equipped of all of the hog ranches of the Northwest. Our farrowing houses for the early pigs are built of brick and are as comfortable as the ordinary dwelling house. This insures good growth from the start on all of the early litters; it insures strong, healthy pigs, the kind you want. The feeding is done on cement feeding yards, or from troughs in a big cement floored feeding house. This house is over 200 feet long and accommodates more than 500 pigs at one time.

If you are already in the thoroughbred **Duroc** business you want new blood; if you are going into it you want to start right. If you are a young fellow going to school and want to compete with others in the thoroughbred business buy from us and the stock will be just the kind that you want to improve your herds or to make the future herd.

All of our hogs and pigs are double treated for cholera, vaccination at least six weeks previous to shipment.

Blood Will Tell

We are heading our herds of **Durocs** this year with the best blood of the **Duroc** World, such as **Gurnsanco Sensation**, son of **Great Sensation**, 228725, who sired the World's Grand Champion for 1919 at National Swine Show, also **Gurnsanco Orion**, son of **Great Orion**, 268037, the Grand Champion at Nebraska State Fair, 1918, and Grand Champion National Swine Show, 1918.

The Duroc Hog Ranch

I have told you about the Hog Ranch and I want you who are interested in hogs of any breed to visit our ranch this coming summer and see the equipment and almost thousands of red pigs.

Our Prices and Terms

We have adopted the following plan of sale. We ship to you after weaning, properly crated, guaranteed to reach destination in good condition, single pigs, either male or female, \$45.00 each; a trio consisting of one male and two females, not related, for \$100.00.

Distance Apart to Plant

The distances recommended here are for this section only. In other localities it may be advisable to change them.

	Feet Apart	No. Required Per Acre
Apples and Crabs.....	20x24	90
Cherry and Plum.....	12x20	182
Hansen Plums.....	12x16	228
Currants and Gooseberries.....	4x 8	1,360
Blackberries and Raspberries.....	3x 8	1,810
Strawberries.....	1x 4	10,888
Asparagus.....	1x 4	10,888
Pie Plant.....	4x 8	1,360
Deciduous trees or Evergreens for shelter belt.....	4x12	940

Number of Trees or Plants to the Acre at Given Distances

12x12 inches...43,560	30x30 inches... 6,970	5x 4 Feet..... 2,178	12x12 Feet..... 302
18x18 inches...19,360	36x24 inches... 7,260	8x 3 Feet..... 1,815	16x16 Feet..... 170
24x18 inches...15,520	36x36 inches... 4,840	8x 8 Feet..... 680	20x20 Feet..... 108
30x12 inches...17,424	4x 4 Feet..... 2,723	10x10 Feet..... 435	30x30 Feet..... 48

How, Why, When, and What For, and the Results A Wonderful Crop

Free Bulletins

For the last year we have had our experts working on a number of publications, small pamphlets treating on nearly every vegetable, flower, plant, tree, grain crops, insects, fungus, and, in fact, practically everything or disease that troubles your crop of trees, plants, grains, etc. These are all issued in pamphlet form and they are free to our customers. The list given below you will find on the margin of the order envelope, which is enclosed with this catalog. All we ask in placing your order is to check the pamphlet in which you are interested. They will be packed with your order and sent without cost to you. This is Gurney service, and we want to remind you forcibly that whenever you have farm, garden, landscape, or orchard problems, write us all about it. We are sure we can help you and we are mighty glad to do it.

Alfalfa
Apples
Asparagus
Beans
Beets and Mangels
Broom Corn
Bulbs
Cabbage
Cane
Carrots
Cauliflower
Celery
Climbing Vines
Clover, Red
Clover, White Dutch
Cucumbers
Canning

Cuttings
Dynamiting
Evergreens
Field Corn
Forest Trees
Fungus and Fungicides
Hedge Plants
Hogging Off Corn
Hot Beds and How to
make them
Insects and Insecticides
Kafir Corn
Millets
Milo Maize
Mushrooms
Musk Melons

Onions
Pastures
Peas
Peanuts
Peonies
Peppers
Perennials
Plums
Pop Corn
Potatoes
Pumpkins
Rhubarb
Roses
Rotation of Crop
Shrubs, Flowering
Small Fruits

Free Bulletins

Small Grains
Smuts
Soil Fertility
Spraying
Squash
Strawberries
Sweet Clover
Sweet Corn
Sweet Peas
The Making of a Lawn
Tomatoes
Tree Seeds
Turnips and Rutabagas
Watermelons

Tree Protectors

These are made of veneering about one-sixteenth of an inch thick and ten by twenty inches square. They must be soaked for a few minutes in water, then bent around the tree and secured by a string or wire. They are extremely valuable and almost a necessity as trees are ordinarily grown.

In placing them they should be nearly closed at the top to prevent mice from crawling over and getting inside. They protect from: **Borers, Mice, Rabbits, Sunscald and Bark Bursting.** Price, \$1.65 per 50; \$3.00 per 100.

Big Bill Robinson happens to be an adjuster for the **Lion Bonding Company** of **Omaha, Nebr.**, and a planter of **Gurney Seed**. When Bill is on the train he thinks of his, the best garden in his "neck of the woods," and then puts on paper some very pleasant thoughts.

Little Voices

W. A. Robinson

I

Can you hear the little voices
In the woodland's sheltered places,
Singing softly to each other
'Neath the mellow leafy mold,
Giving promise of the Springtime,
When the flowers' cheery faces
Will come laughing to the sunshine
And forget the winter's cold?

II

Can you hear the balmy breezes
From the Southland's sunny places,
Softly sighing, gently crying,
To the buds that love them so?
Come out, leaflets, for we miss you,
We have waited long to kiss you,
Lift your faces to the sunshine
And forget the winter's snow.

III

Can you hear the tiny raindrops
O'er the meadow's fertile spaces,
Softly falling, faintly calling,
To the seeds asleep below?
Springtime's waiting here to meet you,
Singing birds are here to greet you,
Southland winds are softly calling
And it's time for you to grow.

The Soil

W. A. Robinson

I

There's a gift of God
In the furrowed sod
If labor's share ye do.
For the seed ye sow
Shall be multiplied
By the sunshine, rain and dew,
And for sweat and toil
That ye give the soil
Tenfold shall return to you.

II

There are riches untold
In the seas of gold
Made by the ripened grain.
It's the pay of the soil
For the sweat and toil
Of the plowman's brawn and brain,
And the sickle's tune
Shall sing full soon
To gather the promised gain.

III

There are fortunes born
In the fields of corn
That grow 'neath the summer sun.
God's infinite care
Placed them there
And by sweat and toil they're won,
And the cribs shall hold
Their garnered gold
When the harvest work is done.

TABLE AND RATES FOR PARCEL POST FROM YANKTON, SOUTH DAKOTA.

Weight of Packages	Local Zone	1st and 2nd	3rd	4th	5th	6th	7th
8 oz. to 1 lb.	\$0.05	\$0.05	\$0.06	\$0.07	\$0.08	\$0.09	\$0.11
1 lb. to 2	.06	.06	.08	.11	.14	.17	.21
2 lbs. to 3	.06	.07	.10	.15	.20	.25	.31
3 lbs. to 4	.07	.08	.12	.19	.26	.33	.41
4 lbs. to 5	.07	.09	.14	.23	.32	.41	.51
5 lbs. to 6	.08	.10	.16	.27	.38	.49	.61
6 lbs. to 7	.08	.11	.18	.31	.44	.57	.71
7 lbs. to 8	.09	.12	.20	.35	.50	.65	.81
8 lbs. to 9	.09	.13	.22	.39	.56	.73	.91
9 lbs. to 10	.10	.14	.24	.43	.62	.81	1.01
10 lbs. to 11	.10	.15	.26	.47	.68	.89	1.11
11 lbs. to 12	.11	.16	.28	.51	.74	.97	1.21
12 lbs. to 13	.11	.17	.30	.55	.80	1.05	1.31
13 lbs. to 14	.12	.18	.32	.59	.86	1.13	1.41
14 lbs. to 15	.12	.19	.34	.63	.92	1.21	1.51
15 lbs. to 16	.13	.20	.36	.67	.98	1.29	1.61
16 lbs. to 17	.13	.21	.38	.71	1.04	1.37	1.71
17 lbs. to 18	.14	.22	.40	.75	1.10	1.45	1.81
18 lbs. to 19	.14	.23	.42	.79	1.16	1.53	1.91
19 lbs. to 20	.15	.24	.44	.83	1.22	1.61	2.01
20 lbs. to 21	.15	.25	.46	.87	1.28	1.69	2.11
21 lbs. to 22	.16	.26	.48	.91	1.34	1.77	2.21
22 lbs. to 23	.16	.27	.50	.95	1.40	1.85	2.31
23 lbs. to 24	.17	.28	.52	.99	1.46	1.93	2.41
24 lbs. to 25	.17	.29	.54	1.03	1.52	2.01	2.51
25 lbs. to 26	.18	.30	.56	1.07	1.58	2.09	2.61
26 lbs. to 27	.18	.31	.58	1.11	1.64	2.17	2.71
27 lbs. to 28	.19	.32	.60	1.15	1.70	2.25	2.81
28 lbs. to 29	.19	.33	.62	1.19	1.76	2.33	2.91
29 lbs. to 30	.20	.34	.64	1.23	1.82	2.41	3.01
30 lbs. to 31	.20	.35	.66	1.27	1.88	2.49	3.11
31 lbs. to 32	.21	.36	.68	1.31	1.94	2.57	3.21
32 lbs. to 33	.21	.37	.70	1.35	2.00	2.65	3.31
33 lbs. to 34	.22	.38	.72	1.39	2.06	2.73	3.41
34 lbs. to 35	.22	.39	.74	1.43	2.12	2.81	3.51
35 lbs. to 36	.23	.40	.76	1.47	2.18	2.89	3.61
36 lbs. to 37	.23	.41	.78	1.51	2.24	2.97	3.71
37 lbs. to 38	.24	.42	.80	1.55	2.30	3.05	3.81
38 lbs. to 39	.24	.43	.82	1.59	2.36	3.13	3.91
39 lbs. to 40	.25	.44	.84	1.63	2.42	3.21	4.01
40 lbs. to 41	.25	.45	.86	1.67	2.48	3.29	4.11
41 lbs. to 42	.26	.46	.88	1.71	2.54	3.37	4.21
42 lbs. to 43	.26	.47	.90	1.75	2.60	3.45	4.31
43 lbs. to 44	.27	.48	.92	1.79	2.66	3.53	4.41
44 lbs. to 45	.27	.49	.94	1.83	2.72	3.61	4.51
45 lbs. to 46	.28	.50	.96	1.87	2.78	3.69	4.61
46 lbs. to 47	.28	.51	.98	1.91	2.84	3.77	4.71
47 lbs. to 48	.29	.52	1.00	1.95	2.90	3.85	4.81
48 lbs. to 49	.29	.53	1.02	1.99	2.96	3.93	4.91
49 lbs. to 50	.30	.54	1.04	2.03	3.02	4.01	5.01

WEIGHTS AND MEASURES AND AMOUNT OF SEED SOWN TO THE ACRE

	Weight per Bush.	Quantity to Acre		Quantity to Acre
Barley, broadcast	48 lbs.	110 lbs.	Clover } together }	4 lbs. Clover
Beans	60 lbs.	80 lbs.	Timothy } for }	11 lbs. Timothy
Bromus Inermis	14 lbs.	18 to 20 lbs.	Red Top } one acre }	4 lbs. Red Top
Buckwheat	48 lbs.	24 lbs.	Beets, in drills	5 to 6 lbs.
Clover, red, alone	60 lbs.	10 to 15 lbs.	Carrot, in drills	2 to 3 lbs.
Clover, white, alone	60 lbs.	8 lbs.	Corn, in hills	7 to 10 lbs.
Clover, Alsike, alone	60 lbs.	8 to 10 lbs.	Corn, for soiling	2 to 3 bu.
Clover, Alfalfa, alone	60 lbs.	12 to 20 lbs.	Corn, sweet	6 to 8 qts.
Clover, sweet	60 lbs.	5 to 15 lbs.	Onion Seed	4 to 5 lbs.
Flax	56 lbs.	30 lbs.	Onion Sets, in drills	200 lbs.
Grass, Lawn, weight depends on mixture			Peas, Garden	120 lbs.
Grass, Kentucky Blue	14 lbs.	75 lbs.	Peas, Field	150 lbs.
Grass, Orchard	14 lbs.	50 lbs.	Potatoes (cut tubers)	8 to 15 bu.
Grass, English Rye	14 lbs.	45 lbs.	Pumpkins, in hills	4 to 6 lbs.
Grass, Red Top, solid seed	14 lbs.	35 lbs.	Rape, Dwarf Essex	5 to 10 lbs.
Grass, Timothy	45 lbs.	10 to 14 lbs	Squash	3 to 4 lbs.
Grass, Millet	50 lbs.	17 lbs.	Turnip, in drills	1 lb.
Oats	32 lbs.	25 lbs.	Turnip, broadcast	1 lb.
Rye	56 lbs.	70 to 100 lbs.	Rutabaga, broadcast	1 lb.
		95 lbs.		

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CARRIE
GOOSEBERRY

PERFECTION
CURRANTS

PROGRESSIVE
EVERBEARING
STRAWBERRY

PROF. HANSEN'S
OHTA
RASPBERRY

BETA
GRAPE

PROF. N.E. HANSEN

The originator
and introducer of
more good fruits
and forage plants
for the great north-
west than any other
living man.

A vintage advertisement for Grimm's Alfalfa. The central figure is Professor Niels E. Hansen, an elderly man with a white beard and glasses, wearing a grey suit and a black hat. He is holding a large, healthy alfalfa plant with thick green stems and a dense root system. The plant is positioned in front of a circular inset showing a vast field of alfalfa under a sunset sky. The field is filled with rows of green alfalfa plants. In the background of the field, there are some buildings and trees. The overall scene is framed by a border of various colorful flowers, including purple, blue, yellow, and pink blossoms.

Professor
NIELS E. HANSEN
AND A COSSACK
ALFALFA PLANT.

A FIELD OF
COSSACK