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Will H. Ingersoll

Annual Catalogue of
Blue Ribbon Seeds
Season of **1913.**

Department of Agriculture
Washington, D. C.

BLUE RIBBON GEM
CANTALOUPE

WOOD, STUBBS & CO., SEEDSMEN,
INCORPORATED
219-221 E. JEFFERSON ST., LOUISVILLE, KY.

WOOD, STUBBS & CO.'S CELEBRATED BLUE RIBBON LAWN GRASS SEEDS

FOR VARIOUS SOILS, CLIMATES AND LOCATIONS

Used and Endorsed in all sections of America as the **FINEST QUALITY** and **MOST SATISFACTORY** in Results for Small or Large Lawns, Tennis Courts, Golf Links, Parks, Cemeteries, etc., producing short, velvety green turf in 6 to 8 weeks which is of permanent lasting qualities.

BLUE RIBBON EVERGREEN. For northern and middle latitudes, this has been found the most satisfactory lawn grass seed that has ever been used. It is far better than the Kentucky Blue, producing a beautiful green sward in quicker time, is better adapted to various soils and stands heat, drought of summer as well as severe cold, better than any of the various mixtures so commonly offered.

Whether for large or small plot, Blue Ribbon Evergreen Lawn Grass Seed will prove entirely satisfactory, and we believe it the best lawn grass seed offered anywhere. It weighs 20 pounds per bushel, where ordinary mixtures are only 14 pounds, therefore is more economical.

PRICES—Postage paid—Pint 15c.; Quart 25c.; 4 quarts 90c.

Without postage—Pint 10c.; Quart 20c.; 4 quarts 65c.; Peck (5 lbs.) \$1.25; Bushel (20 lbs.) \$4.00. 5 bus. and over at \$3.50 per bus.

SHADY GREEN LAWN GRASS. A special lawn green seed for damp or shady situations, composed of the best growing, velvety green grasses, we have excellent reports from satisfied customers using this, and recommend it to be as satisfactory as anything which can be used for such locations.

PRICES—Postage paid—Pint 20c.; Quart 35c.; 4 quarts \$1.25.

Without postage—Pint 15c.; Quart 30c.; 4 quarts \$1.00; Peck \$1.75; Bushel \$6.00.

DIXIE VELVET LAWN GRASS. For the far South and dry western states this is particularly recommended. It is a combination of short, thick-growing grasses, with Bermuda grass, and affords a velvety green sod the year around. Splendid for terraces facing southward, when other sorts burn out.

PRICES—Postage paid—Pint 20c.; Quart 35c.; 4 quarts \$1.25.

Without postage—Pint 15c.; Quart 30c.; 4 quarts \$1.00; Peck \$1.75; Bushel \$6.00.

PREPARATION, SOWING, ETC.

FOR NEW LAWNS the ground should be deeply plowed or spaded, cultivating and smoothing to break up all clods, removing all trash and gotten as finely pulverized and smooth as possible. If not rich, use W. S. & Co. Lawn and Garden Fertilizer, 5 lbs. to 300 square feet or 500 to 1,000 lbs. per acre. **For prices see page 81.** Sow seed in February or March or April, 1 quart to 250 square feet (12 x 20) or 4 to 5 bushels per acre, covering with a light rake or harrow, and afterwards roll or board the ground.

For renovating old lawns, harrow or rake over the old grass especially the bare spots, apply one-third to one-half as much seed and good application of fertilizer, rolling afterwards.

Pull out or cut with a knife weeds or coarse grasses which spring up from all newly cultivated soils. Cut regularly with a lawn mower during the season, but not closer than two inches during the summer. In very dry weather a thorough watering once a week in the evening will be beneficial, but too much will drown out the grass, and it will require reseeding next year.

TO OUR FRIENDS AND CUSTOMERS

We are pleased to say that the past year has been a most prosperous one for us, and has resulted in a largely increased business which is very gratifying.

BLUE RIBBON SEEDS have now a nationwide fame. Our trade extends from ocean to ocean and from the extreme North to the Gulf. Of course the bulk of our customers are in the Central States and to these we must look for our general business. We want to do the largest business this year we have ever done. Can we count not only for your valued orders, but a word of recommendation to your neighbors and distant friends?

BLUE RIBBON GARDEN SEEDS are grown especially for us on contract by most careful growers and many stocks are selected and bred with a view to certain climatic conditions for producing best results. **Blue Ribbon Flower Seeds and Bulbs** are grown and selected with care to satisfy the most exacting. **Blue Ribbon Grass, Clover, and Field Seeds** have a reputation second to none and as our facilities for recleaning and handling are unsurpassed, we offer the highest stocks at very reasonable prices.

We promise our best endeavors to fill orders promptly and liberally with satisfactory stocks. With thanks for the past liberal patronage and wishing you a successful New Year, we are,

Louisville, Ky., January 1, 1913.

Very truly yours,
WOOD, STUBBS & CO.

Store and Office, 229-231 E. Jefferson Street.

SPECIAL FEATURES OF THIS CATALOGUE

CULTURAL INFORMATION for all crops under heading of the varieties.

MONTHLY CALENDAR, telling work in garden and on the farm as well as seeds to be sown each month. Page 45.

PLANTING AND MATURITY TABLE. A complete list of crops telling when to plant, distances apart, quantities to the acre, time of maturity, etc. Page 46.

SPRAY CALENDAR. A short concise list of principal insects and diseases attacking plants, trees, etc., with information for preventing and cure. Page 74.

LAWNS. Short concise information on the care and maintenance of. Pages 3 and 4.

A BEAUTIFUL CALENDAR FREE

Our yearly calendar with many of our customers has become their daily guide for garden and farm planting.

The design is a beautiful new process lithograph in colors, the size over all being 11x21 inches. The days of the month are printed in large size type with Sundays and holidays in red, and can be seen for considerable distance off. On the back of each calendar month we give work for the garden and farm in addition to seeds which are to be sown, and much useful information.

This valuable calendar is sold for 15c, postage paid. To our customers, however, who order 50c worth of seeds, or over, we will mail this beautiful calendar free, providing it is requested when the order is sent.

Our stock of calendars is limited, and this offer holds good only as long as the stock is unexhausted.

SEEDS BY MAIL will travel safely, and the postage rates are as follows:

PACKETS—OUNCES AND ¼ LBS. are Mailed Free at prices charged.

ON BULK SEEDS add for postage as follows: 1 lb. 8c, 1 pt. 8c, 1 qt. 15c extra.

SEEDS BY EXPRESS.—The Special Express Rate on seeds is 20 per cent less than the usual merchandise rate, and this is far the best way to order goods sent, provided the order is of moderate weight, and the distance is not too great. If desired, we will quote you special rate to any point if the quantity of goods be given us, and where large quantities of seeds are wanted, will quote prices delivered.

SEEDS BY FREIGHT.—Freight rates from Louisville to almost any point in the country are very low, due to the fact that we have a great many railroads centered here. Special rates to any point, or delivered prices quoted on request.

We would especially advise seeds being sent by freight or express in preference to mail, as they will travel more safely, and if Garden Seeds are included with Field Seeds, Implements, or Fertilizers, the price of delivery to your station will be comparatively little.

NO ORDERS SENT C. O. D. unless one-third of the amount is remitted in advance to cover charges.

FOR CONTENTS OF THIS CATALOGUE SEE PAGE 80.

Wood, Stubbs & Co.'s Seed Warehouse and Elevator, 14th and Walnut Streets

OUR FACILITIES

We maintain in our office a laboratory for testing for purity and germination all seeds that we sell. This is in charge of a competent expert graduate seed analyst and all qualities are rigidly inspected before being sent to customers. Our store, 229-231 East Jefferson Street, is equipped with modern conveniences for the quick delivery and distribution of small orders, and we like to have our customers visit us while in the city.

Our new warehouse at 14th and Walnut Streets is most complete in all equipments for unloading cars, weighing, recleaning, sacking, and handling all field seeds in the most up-to-date manner. We have facilities for unloading five cars at a time. Equipments for unloading cars in bulk, elevating, weighing, recleaning, sacking in even weight sacks, all without any hand labor further than shoveling from the cars. Our seed-cleaning machines are the most up-to-date in the country, some of them are of special design, made for us for doing particular work. Warehouses proper have about 68,800 square feet of space, and in addition we have bin capacity for bulk seed and grain for about sixty cars.

With ample facilities for handling our business, purchasing of superior stock, good trackage and wagon facilities for economical deliveries, we offer you better qualities at as low prices as any reliable seed house in the country.

We carry one of the largest assortments of seeds in the Central West and do not offer anything but what we think will give satisfaction, hence this catalogue does not contain an endless variety of novelties. We will be pleased to give information on any crops and quote prices on stocks if wanted in quantities that are not offered here.

RETROSPECT AND PROSPECT

On the whole, the past year has been a generally satisfactory one for most farmers and gardeners throughout the country. While some crops such as wheat have made only fair returns in the central sections and moderate prices have prevailed on some commodities, the increased yields of others and high prices on some crops have more than counter-balanced losses in most instances.

Tobacco in all sections has made a very good crop and good prices are being obtained on most types and grades. Cotton in the South has made a good crop with good prices. This section will be in generally prosperous condition. Cattle and hogs are at top prices. It seems that the production of meats is not keeping pace with the enormous consumption, hence we advise farmers in the central sections to turn more attention to the cattle industry. This means that more extensive areas should be put into grass and forage crops, and some garden crops which are profitable for stock feeding.

Fruit growing in some sections of the Central West is increasing while in others it is decreasing. The decline in this industry is largely due to the fact that farmers are not paying as much attention to quality as they should. Increasing wealth of the country and better financial condition of the majority of the people, makes a demand for higher qualities at better prices. Western fruit growers have realized this and the shipping of Oregon Apples, Colorado Cantaloupes, California fruits of all kinds, where there are excessive freight rates, proves that it is profitable, but generally only so because the quality of products from these sections are superior to those of the East.

There seems to be an ever increasing variety and range of insects and diseases which attack fruit and other crops, and it behooves agriculturists in general to study and make preparations for preventing these diseases and insects. The San Jose Scale is a menace which should be fought rigidly. Plant diseases, wilts, rots, rusts, etc., are increasing. All insects seem to be more general now than twenty years ago.

Every farmer should have a good sprayer and know intelligently how to use it. Weeds in out-of-way places should be destroyed, both the spring and fall, to prevent the feeding of insects and hibernating over winter. Clean culture should be practiced and the endeavor of every farmer or gardener should be to produce as much on one acre as he has formerly grown on two. Truck growers are especially recommended to study the effects of fertilizers, cultivation, improved methods, and above all to produce quality which will command the highest prices.

The grass seed markets this season have had a heavy decline and all values are lower, in some instances one-third of the prices which have prevailed for the last two years. Corn has made a large crop of fine quality. Oats are exceptionally good crop with low prices. Hay generally is better but much poor quality is offered due to sowing poor seed, and allowing a dissemination of weeds.

ESTABLISHMENT AND CARE OF LAWNS

So many questions are asked us about the care and preparation for lawns that we have given quite a little space to this subject, which is a most important one. Nothing adds to the beauty of a house and grounds more than a well kept lawn. Unfortunately the average resident has to depend on the tender mercies of some itinerant so-called gardener, and frequently this class of people is unreliable. We therefore caution two things—first, that good, first-class seed be purchased and it had better be done by the owner; second, see that all the seed that is bought is sown on your own lawn.

The following suggestions and information are written in concise form. If further information is desired, we will be pleased to give it on request.

The question of sodding or sowing requires consideration as to effectiveness and results. Good sod is hard to obtain, usually contains more or less weeds and does not make a nice even turf. It is valuable only for terraces or steep inclines and sometimes as edging for lawns. A good thick stand of grass can be obtained from seed at much less expense and will produce a good lawn in six weeks after sowing.

NEW LAWNS

The best preparation of land for grass in large areas is deep plowing with a two-horse plow, disc harrowing, then smooth with a sharp-tooth harrow, then reharrow with a sharp-tooth harrow to remove all sticks, roots, large clods, so that the ground will be left smooth and in fine pulverized condition. After the last harrowing is done, apply the fertilizer, then sow the seed one quart to 250 square feet, 60 to 100 pounds per acre. Then harrow it lightly with a tooth harrow with teeth reversed, so as to cover about one-half inch deep, then roll twice if possible. In sowing, it is best to divide the seed into two quantities, sowing one-half one way and the other half the other way to get an even distribution. In small plots spading, then raking with a hand rake to thoroughly smooth and level the surface will do, applying the fertilizer and seed, then raking and rolling.

OLD LAWNS

It may not be necessary to spade or plow up an old lawn if there is a moderate stand of grass. Raking it over in the spring, removing the dead grass, roots, sticks, and trash with a sharp-tooth rake, either hand or horse, then sowing the seed at the rate of one quart to 400 to 500 square feet, 30 to 50 pounds per acre, will give good results. This should be afterwards raked in and then rolled if possible.

SOWING

The best time for sowing naturally depends on the locality. In temperate and Northern latitudes depending on the section, from February to first of May is best, but sowings even in May can be made at times with good success, if the weather is seasonable. The end of August and during September in the fall are really better than spring for sowing grass seeds but as old lawns at this time are usually apparently in fairly good condition, nearly all the seeding is done in the spring. If new lawns are to be sown, however, and can be done in the fall, we advise it, because less weeds come up and the grass gets a good stand before winter and the lawn goes into spring with a good sod, on which weeds will have a very poor chance of establishing themselves.

The practice of sowing seeds on the snow or before a rain is not recommended, as the grass seed gets washed into clumps or sometimes floats off entirely, with rapid thaws or washing rains. It is not necessary to be continually sowing grass seeds on a lawn all through the spring or summer, as is sometimes the case, because if the proper amount is well put in at the start, a good sod will be obtained and needs no thickening further than the gradual and natural development of the grass. The seeds should be scattered evenly and if fertilizer is used, half of it had better be put on the same time the seed is sown and the other half after the seed is up an inch and a half high, or all of it can be put on at the time the seed is sown if desired. If lime is required, it should be done during the previous late fall or winter or very early spring.

In the Southern States fall sowing for winter lawns will have to be done. For summer lawns, if sowing of Bermuda Grass is to be done, it should not be sown until the ground becomes warm, say the end of March or in April.

FAILURE OF LAWNS

The principal cause of grass dying out in the summer and being succeeded by coarser grass is too much watering. Constant sprinkling or soaking with water causes the soil to sour, prevents chemical action and washes out soluble plant food. After winter is over such lawns are more or less bare of fine lawn grass, and as the winter has killed the coarser grasses and weeds the ground is very unsightly. In an ordinary summer of moderate rain really no sprinkling need be done. In very dry seasons watering once a week in the evening is beneficial, but when it is done a good soaking should be given to the lawn, but should not be sprinkled every day.

FERTILIZERS

The constant clipping of leaves exhausts the supply of plant food, therefore a fair amount of fertilizer is required. A light dressing of well rotted stable manure applied in the fall is best for sandy or loose soils. A good commercial fertilizer five pounds for 300 square feet, 400 to 800 pounds per acre, depending on conditions, is best for general soils and should be applied in the early spring. Commercial fertilizer for grass should contain at least 3 to 4% of Ammonia, 14 to 15% of Phosphoric Acid and 5 to 6% of Potash and is best obtained from a mixture of $\frac{3}{4}$ Raw Bone, 3-20 Nitrate of Soda and 1-10 Muriate of Potash. Raw Bone is good alone, likewise Ground Phosphate Rock, but where the latter is used, double the quantity recommended above should be applied. A top dressing of Pulverized Sheep and Cattle Manure, with weeds eliminated, gives splendid results. Nitrate of Soda alone, 100 to 200 pounds per acre, produces a very quick and stimulating growth but is not lasting. We do not recommend it on good permanent lawns, but it is useful where a quick growth is desired for a particular purpose. Any high ammoniated fertilizer would be better applied with two applications rather than one at an interval of say four weeks apart, otherwise much of the Ammonia is dispersed or washed out before the grass can absorb it.

CUTTING

This should be done regularly with a lawn mower before the grass gets too long. Scythes should only be used around shrubbery, trees, and in corners where the lawn mower will not reach and care should be used not to cut too close in the summer, two inches is close enough. Clippings had better be removed if long and heavy, as if allowed to stand they may cause the grass underneath the piles to die. Never allow the grass to get too long before the winter, as thick mats of grass cause a good deal of it to die out.

ROLLING

Rolling is of great benefit, especially in the spring. The freezing and thawing causes unevenness and spews up grass roots, so that heavy rains will wash away the soil from them, causing dying out. Continual rolling every week smooths down the ground, causes the grass to take a deep vigorous hold on the soil and produces thickness, so that the lawn has the appearance of a rich velvet green carpet. If half the energy put into watering was put into rolling, there would be a wonderful difference in the appearance of the average lawn. A heavy roller from 400 to 600 pounds is best, but on steep inclines may be too heavy for general use. A water balanced lawn roller can be weighted to suit conditions, therefore is preferable.

WOOD, STUBBS & COMPANY, BLUE RIBBON SEEDS

CHARACTER OF SOIL

Soils best suited to most domesticated plants should be **alkaline** rather than **acid**. Acid soils are generally termed sour and become so from acids accumulated by decay of vegetation, lack of sufficient drainage, exhaustion of lime in the ground, or an excess of injurious gases in the air from the smoke of cities of proximity to blast or smelting furnaces, which sometimes affect vegetation for many miles. Acids are, as a rule, easily dissolved by rain water, hence good drainage will carry them away, therefore deep plowing, spading or tiling of stiff or wet land is so beneficial.

Lime is the cheapest and most effective **alkalining** or correcting agent, rendering the soil **neutral**. It also changes the physical condition from a sticky tenacious impermeable soil to a somewhat crumbly and more porous condition. Ground Phosphate Rock corrects acidity to a large extent, in addition to adding a large supply of Phosphoric Acid, which is so necessary for grass growth.

A brief description of various soils with methods of improvements are suggested herewith.

SANDY SOILS. These usually filter through plant food rapidly and are not sufficiently tenacious to retain moisture to allow grass roots a firm hold and dry out easily. The proper remedy is to apply two to four inches of stiffer or clay soil of reasonably good quality, if necessary removing some of the same and working it in with the balance. It sometimes happens that such soils are underlaid with clay at a depth of four to six inches, in which case deep spading or plowing to mix sub-soil with the top soil can be done. Otherwise such soils will require annual dressings of rotted stable manure, pulverized sheep manure, or a good commercial fertilizer each spring and continued watering, which has a tendency to kill out the grass.

LOAMY SOILS (that is Clay with a proportion of Sand). These are best suited to all domesticated grasses. They retain plant food easily and draw sufficient moisture from the lower strata, even in dry seasons, to support growth. Loamy soil where grass is not growing well and weeds grow and moss is prevalent, is evidently sour, which can be corrected by using Ground Limestone Rock or Slaked Lime, at the rate of three to four pounds per 100 square feet or 1,000 to 1,500 pounds per acre, applied as a top dressing from November to March preferably.

STIFF OR HEAVY CLAY SOILS. These when not sour are most suitable for grass, but as the drainage is usually bad, they are benefited by working in some material, such as coarse strawy manure, street sweepings or sand to make them less tenacious. Where new excavations have been made and some of the clay from the underneath soil spread out and smoothed off for the lawn, it will be necessary to apply two to four inches of good rich loamy soil or well rotted manure on the top before the seed is sown for the grass to take hold.

WET AND BADLY DRAINED SOILS. These are usually sour and the best remedy is to drain the water off the soil. Tile draining is the best, though expensive. Open ditches are more common being cheaper. In small plots, a few dry wells bored with a six-inch auger down through the sub-strata to gravel or rock, then placing four-inch sewer tiles, cap side down on top of each other, to within six inches of the surface, then covering with a slate and filling in around the pipe, and filling with soil on the top of slate and leveling off, will give satisfactory drainage, without being very expensive. In the suburbs or country, the most economical and effective and least expensive method is dynamiting the sub-strata five or six feet below the surface. This can be accomplished safely without noise and the top soil will be undisturbed, but for further information write E. I. DuPont DeNemours Powder Co., Wilmington, Delaware, for free booklet. Where drainage is not possible, however, lime is recommended.

WEEDS

All soils freshly worked produce weeds, the seeds of which were buried deeply in the soil, but when brought near the surface germinate and grow. Weeds are **annual** (coming up yearly from seeds) and **perennial** (each year from the same root). Nearly all annual weeds as well as most tall growing weeds will be killed with the lawn mower. Those giving most trouble are the ones which the lawn mower can not reach, such as plantain, dandelions, etc. If hand cutting with a knife deep down is properly done will eradicate these and if this is left to passing gardener, see that it is done properly. If this class of weeds are exceptionally thick so that the grass and weeds are about in equal proportions, it will be economy to use some chemically prepared powder like Granulated Lawn Dust, scattering over the weeds on a clear day. Tall growing weeds in fence rows or corners or where the lawn is not cut regularly can be destroyed with a weak application of Weed-Bane. See page 75.

VALUE OF GOOD SEED

Too much stress can not be laid on this, as poor seed filled with weeds is dear at any price.

For general lawn purposes, **Blue Ribbon Evergreen Lawn Grass** will give the most satisfactory results. It is a combination of Kentucky Bluegrass with other fine growing grasses which give a quick start until the bluegrass has a chance to grow and get a hold. **Kentucky Bluegrass** alone is very slow growing at the start, more or less dormant in the summer but beautiful in the fall and early spring months. **Creeping Bent Grass** is very desirable for light sandy soil; **Wood, Stubbs Shady Green Lawn Grass** for very low, wet or badly drained soil. Prices and descriptions of Lawn Grass Seeds are given on the first cover page.

ABOUT WARRANTING SEEDS

Wood, Stubbs & Co. give no warranty, expressed or implied, regarding description, quality, productiveness, or any other matter connected with the goods they send out, and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are to be returned at once, and any money that has been paid for them will be refunded. Every order received for articles in this catalogue will be executed on these conditions only.

GENERAL LIST OF

BLUE RIBBON VEGETABLE SEEDS

IN BULK AND PACKETS

Postage. Pkts. and oz. mailed free. Bulk seeds add 8c per lb., 8c per pt., 15c per qt.
Express. On seeds and bulbs 20% less than general merchandise rate.

GARDEN AND FARM PLANTING CALENDAR, page 45. Planting and maturity table, page 46.

ARTICHOKES

There are two distinct kinds as offered below. The Large Globe produces undeveloped flower heads which are cooked like asparagus, being very delicious, and is fast becoming an important crop for the South, to which it is particularly suitable. The Jerusalem produces tubers which are excellent for stock and quite often used for table, being boiled like potatoes. Also excellent for mixed pickles.

LARGE GLOBE. Half an ounce produces 300 plants sufficient for a good-sized garden. Six ounces per acre. Pkt. 5c, oz. 25c, 1 lb. \$3.00.

Culture.—Seed sown in hotbed is transplanted in May. If in the open ground, sow in April in rows fifteen inches apart and one inch deep, thinning out to four inches, and transplanting the following spring to rows three feet apart and two feet between the plants. Should be given slight protection in winter with litter or manure.

JERUSALEM (Tubers). Besides table purposes, the principal use is for stock feeding, being especially valuable for hogs, preventing cholera, and are exceedingly nutritious. They produce an enormous crop, and when once planted, come up for years afterwards; hence for a field crop, select some land to be devoted to Artichokes exclusively, and they will continue to produce for years. A good yield is 200 to 300 bushels per acre. One quart, cut, plants 60 to 75 feet,

6 bush. per acre. Plant and cultivate like potatoes. Per qt. 20c, by mail 35c, pk. 65c, bush. \$2.00. Special price in large quantities.

ASPARAGUS

An Asparagus Bed is easy to make and lasts a lifetime.

Asparagus for market pays better than almost any other crop.

Every private permanent garden should have a bed of Asparagus. If properly looked after, it will last for twenty years. It is a most delicious vegetable, and has fine medicinal qualities. An acre of Asparagus properly attended to will yield \$250.00 to \$300.00 annually. To those contemplating Asparagus commercially, we would

recommend the book "Asparagus," by F. X. Hexamer, which we can supply at 50 cents.

One ounce sows 50 feet, producing about 800 plants. Ten pounds sow one acre. One pound produces plants to set one acre.

Seeds sown in March or April. Set roots in February or March, or in November.

One hundred roots plant a bed one hundred feet long, sufficient for medium garden. An acre requires 4,000 to 7,000.

Culture.—Asparagus beds are planted with good roots one or two years old. The size of asparagus depends more on high fertilization than on the variety. Plow or dig out trenches eighteen inches wide and six to ten inches deep, making the trenches six or eight feet apart. In the bottom of the furrow scatter four or six inches of well-rotted manure, then cover in two or three inches of soil which should be slightly mixed with a top of manure; and then set the plants twelve to fifteen inches apart in the rows. Spread out the roots carefully and cover with soil and manure, care being used not to cover the crowns more than two or three inches at first, as the first shoots from the young roots are not strong enough to force through a deep mass of earth. To make white asparagus, the beds must be freshly and lightly earthed up each spring just before the growing season commences. To raise asparagus roots from seed sow the seed thinly, one inch deep in rows fifteen inches apart. Keep clean of weeds and thin out the plants to four inches apart. When one or two years old, set out in permanent beds, as given above.

Do not cut Asparagus too late in the spring, as it is liable to exhaust the plants. Most practical growers on the day that they stop cutting, throw down the beds with a plow and then harrow the ground, leaving the plants to grow. During November or in the early winter, the dry growth is cut off and burned and a mulch of manure put on the top of the rows, which is afterwards worked into the soil when the beds are thrown up again in the spring. The higher the beds are raised, the longer are the stalks of white Asparagus. If green is desired, it is not necessary to hill up so high. For a small garden, Asparagus roots can be set in double rows, instead of single.

Insect Remedies.—For the asparagus beetle, use Slug Shot, freshly slacked lime, or sulphur, well dusted on before the dew has disappeared.

COLUMBIAN MAMMOTH WHITE. Clear white shoots, not tinged with pink or purple, tender and excellent quality. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c, 5 lbs. 45c per lb.

PALMETTO. A favorite sort in Southern section, being a little earlier than other sorts. Thick, succulent shoots somewhat more pointed at the tips than Conover's Colossal. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c, 5 lbs. 45c per lb.

GIANT ARGENTUIL. The best French sort, highly prized by growers. Leaflets closely contracted at tips, which are blunt. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c, 5 lbs. 45c per lb.

CONOVER'S COLOSSAL. Old standard sort. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 40c, 5 lbs. 35c per lb.

ASPARAGUS ROOTS. We carry extra strong, well-grown roots in the spring months. Prices: 50 roots 50c, 100 roots 90c, 250 for \$2.00, per 1,000 \$7.00. Special prices in large lots.

BEANS

DWARF

Called String Beans, Bush Beans, and Snap Beans.

These are always popular for family gardens, and if planted about every two weeks, commencing about April 1st and continuing until the last of August, a supply will be kept up the whole summer. For market uses they are profitable where cheap labor or where there are plenty of children for picking. An acre of beans usually produces 75 to 120 bushels, which sell for from 50c to \$1.00 per bushel.

For Beans in bulk by mail, add 8c to pint and 15c to quart prices. Pkts. postpaid.

One pint sows 80 feet. An acre requires one to one and a half bushels. One half pint planted every three weeks is sufficient for a medium garden. They are ready for the table in from forty to sixty days after planting.

Culture.—Beans do not require heavy manuring; in fact if the soil is fairly good it is better to use a good fertilizer, such as Acme Brand B. B. P. The fertilizer should be well mixed in the furrow with the soil before the beans are planted. For field culture, plant in rows two and a half feet apart and about three inches between the beans, covering the seed to a depth of about two inches. If to be cultivated by hand in small gardens, the rows may be eighteen inches apart. Up to the time of blooming, cultivate often, but never while the vines are wet, as the pods and leaves would become discolored.

Taylor's Green Pod Beans.

GREEN PODDED VARIETIES

TAYLOR'S GREEN POD. Market gardeners have found this an extremely profitable sort, coming in, as it does, a week or ten days ahead of Valentine or other stringless sorts, and while not producing quite as large pods as the others, the fact that it is absolutely stringless and so early makes it very profitable, and will give satisfaction for private garden. The pods are about four inches in length, straight, bright green, and of excellent quality. Seed is yellowish, oval in size, and about the size of Golden Wax. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 70c, bush. \$5.00.

FULL MEASURE. This new variety is a cross between Improved Refugee and Yosemite Mammoth Wax. It inherits the productiveness of the Refugee, makes long, straight, handsome green pods, and is entirely stringless. The plant is a very strong, rank grower, and produces handsome green pods in greatest abundance. Closely follows in earliness New Stringless Green Pod. Splendid for market or family gardens. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 70c, bush. \$4.50.

GIANT STRINGLESS GREEN POD. The pods of this variety resemble the well-known early Valentine, and they are fully one-third larger, and the crop is borne almost as early. The plants are of robust growth, pods five to six inches in length, of light green color, slightly curved, and very meaty and stringless. A most excellent sort for either market garden or family use. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 70c, bush. \$4.50.

NEW STRINGLESS GREEN POD. Of robust growth, producing beautiful, long straight, round-podded snaps, which are absolutely stringless. By reason of its unusual hardiness, extreme earliness, and wonderful productiveness, and with handsome pods of the finest quality, this is one of the most popular of the green-podded snaps, either for market or family use. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 70c, bush. \$4.50.

SPECIAL PRICES TO LARGE GROWERS OF BEANS.

Full Measure Beans.

BEANS—Continued

GREEN PODDED VARIETIES—Continued

IMPROVED EARLIEST RED VALENTINE. "The Blue Ribbon Stock."

This is far superior to ordinary strains, being round-podded, earlier and more prolific than cheap Western stocks. It is stringless, with round, meaty pods 4 to 5 inches in length, slightly curved, and of unexcelled quality. For earliness and superior yield our Improved Blue Ribbon stock is far the most superior strain offered. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 60c, bush. \$4.00.

BLACK VALENTINE. A comparatively new variety which is becoming very popular with early growers because it is much more hardy than the other stringless sorts, stands more frost and cold weather, consequently can be planted earlier with less risk. It is a little earlier than the Red Speckled Valentine, very productive, round, straight, tender pods, and good either for home use or market. The beans are very dark brown, almost black, slightly mottled with dark brown. Pkt. 5c, qt. 20c, 4 qts. 60c, bush. \$3.50.

Early Yellow Six Weeks. Extra early, green-podded sort, with long, flat pods. Valuable only for very earliest planting. Pkt. 5c, pt. 10c, qt. 15c, 4 qts. 50c, bush. \$3.75.

Extra Early Refugee. Pods straight and stringless; borne in clusters and easily picked. Good for very early or late use for table, shipping, and splendid for pickling. Pkt. 5c, pt. 10c, qt. 15c, 4 qts. 50c, bush. \$3.75.

TENNESSEE GREEN POD. A favorite sort in East Tennessee and the Middle Southern States. The beans are brown color, a little larger than Kentucky Wonders, and are very hardy, capable of withstanding cold, inclement weather better than other sorts. It is very productive, producing long, flat pods which are not stringless, but on account of its extreme earliness and productiveness is very popular. We recommend this only for extremely early planting for market purposes, though where it is well known it is well liked for family use. The fact that it is not stringless, however, detracts from its quality. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 75c, bush. \$5.50.

DWARF HORTICULTURAL. (Also called locally Italian Beans.) Large green pods, splashed with carmine. Excellent either as snaps in the green state, or shelled green or dry. In this neighborhood is one of the very best selling beans on the market. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 70c, bush. \$4.50.

Varieties for Shelled Beans Only

	Pkt.	Pt.	Qt.	4 Qts.	Bu.
Royal Dwarf White Kidney. Excellent green or dry for soup, boiling, or as baked beans.....	5	10	20	60	\$4 50
French Red Kidney. Similar to above; beans are maroon color	5	10	15	60	4 00
Dwarf White Navy. More prolific than the common white bean. Finest table quality.....	5	10	15	50	3 50
Dwarf White Marrow. Very popular dwarf-growing sort; beans are fully twice as large as the well-known Navy Beans; most excellent quality, and readily salable on the market.....	5	10	20	55	4 00

Tennessee Green Pod Beans.

WAX PODDED BEANS

Very tender and excellent for family use. Command best prices on the Northern Markets. Excellent for pickling.

WARDWELL'S KIDNEY WAX. The most popular of early wax sorts. Pods long, tender, and finest quality; liable to rust, however. This sort is the one so largely planted by Southern truckers for shipping, and on account of its fine appearance and excellent quality is very popular for market and home use. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 70c, bush. \$5.00.

KEENEY'S RUSTLESS GOLDEN WAX. Probably the largest yielding of all the wax sorts, producing great numbers of pods. Almost absolutely free from rust, a vigorous grower, throwing out tendrils somewhat resembling a pole bean. Pods long and straight, flat, of bright yellow color, stringless, and of good quality. We strongly recommend this for general cultivation for market uses. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 70c, bush. \$5.00.

Dwarf German, or Black Wax. Pods about four inches long, round, of a beautiful waxy color, very brittle; a favorite variety for home use or market and pickling. Pkt. 5c, pt. 15c, qt. 20c, 4 qts. 70c, bush. \$5.00.

Davis' White Wax. Largely grown for shipping. First early, nearly always rust proof, extraordinarily productive, full and solid, of a beautiful yellow appearance; not entirely stringless. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 70c, bush. \$5.00.

Dwarf Golden Wax. Very early, stringless, of flat shape, and rich golden yellow color. Vines not so vigorous as Rustless Golden Wax, but does not produce tendrils. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 70c, bush. \$5.00.

POLE OR CORN-FIELD BEANS

These are more easily gathered than the dwarf beans, and yield considerably more. They need good strong poles, and are often planted in strong growing corn.

Culture.—Pole Beans are more sensitive to cold and wet than the Dwarf Beans and should not be planted before May. Set poles eight feet long firmly in the ground, four feet apart each way, and put five or six beans in each hill.

Packets of all Beans 5c each, postpaid. Beans in bulk by mail, add 8c per pint, 15c per quart.

WHITE SEEDED KENTUCKY WONDER. An early maturing white seeded pole bean, having the same characteristics as the ordinary Kentucky Wonder, which, however, has dun-colored seed. It is very desirable for snaps, unsurpassed as green shell bean, round pods, very long, irregular in shape, and quite stringless. Fine, vigorous and very productive. Pkt. 5c, pt. 15c, qt. 30c, 4 quarts \$1.10.

GOLDEN CARMINE PODDED HORTICULTURAL. A week to ten days earlier than Horticultural Pole. In comparison the pods are equally as large, stringless, bright golden color when very young. As they approach full size, are mottled and streaked with an unusually bright carmine color on the bright ground, which gives the pods (when ready for market) a strikingly beautiful and attractive appearance. Excelling in earliness, quality, handsome appearance

and productiveness, will make it the most desirable strain of this well-known and popular bean. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.00.

IMPROVED KY. WONDER, or OLD

HOMESTEAD. The most popular of all pole beans, especially in this section. Vines are vigorous in growth, the pods are immense, often obtaining a length of nine or ten inches, and borne in large clusters. Bright green, very solid, meaty, tender, and stringless when young; assuming a saddle-back shape with age, being broader in width than depth, and becoming somewhat irregular and spongy as the beans ripen. Dried beans are long, oval, and dun color. Very early and one of the best for general purposes in our list. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.00, bu. \$7.00.

Cut Short, or Corn Field. (Red Speckled.) An old popular variety, one of the best for planting among corn. Vines are not quite so heavy as Kentucky Wonder, and will produce a good crop without the use of poles. The pods are short, tender, bearing the beans very close together in the pods. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 70c.

Lazy Wife's Pole. Pods produced in large clusters very abundantly, and are four to five inches in length. Dark green, rather flat, broad, thick, fleshy, and entirely stringless. Beans pure white and excellent for shelling. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.00.

HORTICULTURAL POLE OR SPECKLED CRANBERRY. The well-known variety. Vines moderately vigorous, pods short, broad, bright green, but becoming streaked with red. Beans large ovate, splashed with maroon. Excellent either green or dry and very popular. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 75c.

FAT HORSE OR CREASEBACK. On account of its extreme earliness and its habit of perfecting all its pods the same time it is highly regarded. Vines are small to medium, but very vigorous and wonderfully productive in good soil. Pods are very symmetrical, round, and quite fleshy, borne in clusters from four to twelve. Medium length, silvery green color, and are the best quality as snaps, equaling many of the dwarf sorts. Seeds are white, rather small, and can be used for baked beans in winter. Pkt. 5c, pt. 15c, qt. 25c, 4 qts. 80c.

White Seeded Kentucky Wonder.

Kentucky Wonder Pole Beans.

Two Money Makers

Blue Ribbon Gem Cantaloupe
Blue Ribbon Gardeners' Special Tomato

All growers should plant these extensively

LIMA BEANS

DWARF OR BUSH VARIETIES

Dwarf lima beans are preferable for small gardens, especially in places where poles are hard to obtain. They do not yield as heavily as the pole limas, but Wood's Prolific and Henderson's are much earlier than pole sorts; hence they are profitable, and should be generally planted.

One pint of small-seeded sorts plants from 100 to 125 feet, and is sufficient for an ordinary garden, or 1 quart of the large-seeded sorts. For succession, make two plantings four weeks apart. Mature in from 75 to 90 days from planting.

Culture.—Plant in May, in rows like dwarf bush beans; drop two beans every twelve or fifteen inches apart. Cultivate like snap beans.

Packets of beans 5c each, postpaid. Postage on beans in bulk, pint 8c, qt. 15c.

BURPEE'S IMPROVED BUSH LIMA. Pods enormous in size, borne abundantly and well-filled with handsome beans which are larger and thicker than the old Burpee's Bush Lima. It is upright in growth, vigorous, heavy foliage, and fully a week earlier than other large bush lima beans. Dried beans are greenish white, and with the increased size of pods and beans will yield one quarter to one third more than Burpee's Bush. Pkt. 10c, pt. 25c, qt. 45c, 4 qts. \$1.50.

NEW FORDHOOK BUSH LIMA. A great improvement on the Dreer's Bush Lima in that the plants are very erect, hold the foliage well up off the ground, and exceedingly longer pods, which contain four to five beans each. It is extremely prolific, earlier than Burpee's, and more prolific than any of the large types. The large beans are very fat, lie so closely together in the pods that they are flattened on the ends, and the beans are very easily shelled. We strongly urge this for both market and family uses. Pkt. 10c, pt. 20c, qt. 35c, 4 qts. \$1.25.

NEW WONDER BUSH LIMA. The beans are about as large as Burpee's Bush Limas, but are much more prolific and superior in yield. The pods are long, contain three to four beans each, and are borne in profusion until frost. While not quite so early as Wood's Prolific Bush Lima Beans, the fact that the beans are larger will make it popular where large lima beans are desired. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.00.

WOOD'S PROLIFIC BUSH LIMA. A very much improved type of Henderson's Bush Lima, having much more foliage and producing a larger crop of beans at least one-half again larger in size. It is as early as any, very productive, and the most satisfactory of all small-seeded bush sorts. Pkt. 5c, pt. 15c, qt. 25c, 4 qts. 90c.

Henderson's Bush Lima. This standard variety has enjoyed great popularity. They are two weeks earlier than the pole limas, and wonderfully productive, averaging about sixty pods to the bush, bearing three to four small beans. Of hardy growth, compact, very prolific, and continue in bearing till frost. Pkt. 5c, pt. 15c, qt. 25c, 4 qts. 90c.

Burpee's Bush Lima. The bush form of the well-known large lima, and although not so early or productive as the preceding variety, the large size of the beans makes it desirable. Pkt. 5c, pt. 15c, qt. 25c, 4 qts. 90c.

Wood's Prolific Bush Lima Beans.

Burpee's Improved Bush Lima.

Greene County, Tenn., February 1, 1912.
For some years I have been purchasing a quantity of field and garden seeds from you, and they have proven all you claim for them. The Winter Turf oats are the best oats for this climate, and always produce a good crop. The Boone Co. Seed corn purchased from you the year 1905 is now well adapted to this climate, and wins first prize wherever exhibited.

NEWTON MYERS.

LIMA BEANS—Continued

POLE VARIETIES

These are nearly always a very profitable crop, the beans when in the green state, considering the extra size, usually selling for more per gallon than we charge for the seed. Whenever poles are plentiful we would advise large crops of Pole Lima Beans, as if unsalable green, they can be sold dry in the winter, producing 15 to 20 bushels shelled beans per acre.

Large seeded sorts require one quart to 100 poles; $\frac{3}{4}$ bush. to acre. Small Lima require about one-third the quantity.

Culture.—Set poles four feet apart, plant about four or five beans to the hill after the ground is warm. Use the hoe for cultivating.

CARPINTERIA POLE LIMA. A new variety, producing beans of largest size, with a greenish tint, which is so much desired both for market and family use. The beans are of the very finest quality, thin skin, extra tender, and of the finest flavor. Vines vigorous, strong, very productive, pods 5 to 6 in. long, closely filled, usually with four to five beans. Splendid for home use or market garden. Pkt. 10c, pt. 20c, qt. 35c, 4 qts. \$1.25.

FORD'S MAMMOTH PODDED. This is the result of twenty years' selection by a successful market gardener, and far surpasses in size and productiveness any other varieties. Pods usually contain five to seven beans of most excellent quality. Vines grow vigorously, setting the beans early, and continue bearing until frost. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.00.

Jersey Extra Early. Matures four or five days earlier than ordinary large limas, producing large beans and well-filled pods. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.00.

King of the Garden. A favorite sort on account of its large size and profuse bearing qualities. Usually produces four or five beans to the pod. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.00.

Large White Lima. Somewhat smaller than the two preceding sorts. Well known. Pkt. 5c, pt. 15c, qt. 25c, 4 qts. 90c.

Small Lima, or Butter Bean. A well-known variety producing beans and pods about half the size of the preceding sorts, but ten days earlier and much more prolific. Our stock of this is very superior. Pkt. 5c, pt. 15c, qt. 25c, 4 qts. 90c.

Carpinteria Pole Lima Beans.

King of the Garden Lima Beans.

BRUSSELS SPROUTS. Too little attention is paid to this important crop. They are one of the most delicious fall and winter vegetables, being cooked like cabbage.

One ounce produces 2,000 plants. 4 ounces to the acre.

A variety of the Cabbage family, and one of the most delicious vegetables. Plants grow from two to three feet high, and bear on their stalks or stems from 50 to 100 buds, which resemble miniature Savoy Cabbage heads one to two inches in diameter. Requires same treatment as late Cabbage, but when the buds are partially developed it is better to break down the leaves to allow the buds more room for development. Brussels Sprouts usually do best sown in May, transplanting in June.

Perfection. The best variety; is closely covered with large, compact sprouts. Pkt. 5c, $\frac{1}{2}$ oz. 10c, oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.50.

BROCCOLI. This vegetable resembles the Cauliflower, but is hardier, and, on this account, better for fall planting. Culture same as Cauliflower. **Insect Remedies**—See under the head of Cabbage.

White Cape. Heads white, close and compact. A standard sort. Pkt. 10c, oz. 25c, $\frac{1}{4}$ lb. 75c, lb. \$2.50.

GARDEN BEETS

CROPS VERY SHORT AGAIN. A popular crop with both market gardeners and private gardeners, producing quickly. Beets fresh from the garden are always much more delicious than those half wilted. Make about three sowings at different times for a succession. If too many are produced for garden, they are excellent for stock feeding, and as a field crop yields four to seven hundred bushels per acre. Poorly shaped roots are usually due to lack of lime in the soil.

One ounce sows sixty feet of drill, 7 pounds to the acre. Ready to use in 40 to 75 days from sowing. In hotbeds sow in January. In open ground in February, March, or April. For late beets sow in July or August.

Culture.—Beets thrive best in rather light, mellow, and deeply worked soil, which has been thoroughly enriched with well-rotted manure or fertilizer, which should be well mixed with the soil. Sow in rows fifteen inches apart and thin out the plants to four inches apart. For gardens the drills need not be more than twelve inches apart.

NOTE.—Our Beet Seeds are saved from selected, well-shaped roots, and are used extensively by market gardeners and truckers everywhere. Our prices per pound (and 5 pounds) are very low.

Packets of Beet Seeds are 5 cents each; 6 for 25 cents. Postage free on pkts., ozs., and $\frac{1}{4}$ lbs. For Seeds in bulk by mail add 8 cents per lb. extra.

CROSBY'S IMPROVED EGYPTIAN (see Cut). The ideal first early variety for sowing in hotbeds or early planting outside Crosby's Improved Egyptian is really the result of selection from the old Egyptian, and is almost universally pronounced the ideal market gardener's beet. It is very early, has small top, fine globe-shaped roots, can be pulled early, and is of excellent quality. (Note.—Our stock of this is unsurpassed in quality.) Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 35c, lb. \$1.00, 5 lbs. and over 90c per lb.

Detroit Dark Red.—A splendid deep red turnip beet, with very small upright tops, early maturing, and makes nice, round finely-shaped roots. This is one of the finest of all for early market or home use, and will be found one of the best of all for forcing in hotbeds. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 35c, lb. \$1.00, 5 lbs. and over 90c per lb.

EXTRA EARLY ECLIPSE. (Blue Ribbon Stock.) One of the most desirable and popular varieties of the early beets in our list. It is very early, globe-shaped, flesh dark and tender. Whether wanted for market or family use, for very early or main crop, this will be found one of the 10c, $\frac{1}{4}$ lb. 35c, lb. \$1.00, 5 lbs. and over 90c per lb.

Bastian's Early Blood Turnip. Of quick and large so deep as Blood Turnip. Very popular with crop. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 85c,

Extra Early Egyptian. Earliest of all, smooth 25c, lb. 85c, 5 lbs. 80c per lb.

Improved Early Blood Turnip. Standard sort for main crop. Deep red, good size, globe-shape. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 85c, 5 lbs. 80c per lb.

EDMOND'S EARLY BLOOD TURNIP. Splendid dark red. For main crop, for market, or table use. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 85c, 5 lbs. 80c per lb.

Half Long Blood. Fine for late crop or winter. Half long. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 75c.

Long Smooth Blood. Late, dark flesh, deep roots, withstands drought and heat. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 75c, 5 lbs. 70c per lb.

most satisfactory of all. Pkt. 5c, oz.

growth, bright red color, not quite gardeners for a second early or main 5 lbs. and over 80c per lb.

flattish, deep red. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb.

BEETS FOR STOCK FEEDING

MANGELS AND SUGAR BEETS. These yield enormously, sometimes making fifteen tons per acre, and are very nutritious and fattening, not only improving the health and general condition of stock, but greatly increasing both the quantity and quality of milk in cows. They are much superior in their feeding qualities to Turnips, and are a much surer and larger yielding crop. Every farmer should grow them.

Culture.—Sow in April, May, or June, at the rate of six pounds to the acre, in rows two and a half to three feet apart, and when three inches high thin out to eight inches apart. Soak the seed 24 to 36 hours before sowing, and sow when the ground is moist. The roots should be taken up before frost and packed away in the barn for winter use, or they can be put into piles or ridges five or six feet high, on a dry, sloping situation, and covered lightly with straw or pine tags, with a light layer of earth on top. When freezing weather comes on, throw on four or six inches of earth. This gradual covering prevents heating. A protection of boards to shed away heavy rains is also desirable.

Yellow or Orange Globe. Grows almost entirely above ground, and is especially adapted to shallow soil, and is also, on this account, easily pulled. The roots are beautiful and symmetrical in shape, of large size, and splendid keepers. Oz. 5c, $\frac{1}{4}$ lb. 15c, lb. 35c, 5-lb. lots and over 30c per lb.

Golden Tankard. Recommended on account of its milk-producing qualities. It is of rich yellow color, sweet flavor, and yielding heavy crops of fine-shaped roots. Oz. 5c, $\frac{1}{4}$ lb. 15c, lb. 40c, 5-lb. lots and over 35c per lb.

BEETS FOR STOCK FEEDING—Continued

Mammoth
Prize Mangel.

Mammoth Prize Long Red. Dark red, of immense size, single roots often weighing 20 to 25 lbs. The best for good, deep loamy soil. Oz. 5c, $\frac{1}{4}$ lb. 15c, lb. 40c, 5 lbs. and over 35c per lb.

Silesian Sugar. Highly prized on account of the large amount of sugar it contains. Very productive and a good keeper. Oz. 5c, $\frac{1}{4}$ lb. 15c, lb. 35c, 5 lbs. and over 30c per lb.

Lane's Imperial Sugar. One of the most popular varieties for stock, and one which will succeed well throughout this latitude or farther South. Grows to a large size, is more like Mangel Wurzel in character, but the flesh is sweeter and tenderer; in fact sometimes used for table. Oz. 5c, $\frac{1}{4}$ lb. 15c, lb. 40c, 5 lbs. and over 35c per lb.

SWISS CHARD

Or Silver-Leaved Beet.

Also called Spinach Beet.

This variety does not make edible roots, but is grown for the broad white - leaved stalks which can be bunched together and cooked in the same manner as Asparagus. It is a splendid summer vegetable and will do well in middle latitudes. The young roots may be gathered also and cooked like Spinach. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Swiss Chard.

CAULIFLOWER

Blue Ribbon Snowball Cauliflower.

$\frac{1}{4}$ oz. produces about 500 plants.
3 oz. make enough to set out an acre.
Mature heads in 90 to 100 days from the planting.

Culture.—For early forcing, sow in December or January, or for spring planting, in January or February in gentle hotbeds or cold frames. For field culture sow and give the same treatment as for early or late Cabbage. They require plenty of manure, moisture, and good culture. After they begin to head, fasten the leaves together over the top to protect from the sun and keep white.

BLUE RIBBON SNOWBALL. This we consider the very finest strain of Snowball Cauliflower. It is grown for us by one of the most careful Denmark growers, and will produce heads of snowy whiteness and unexcelled quality. Dwarf compact growth, exceedingly early, very hardy, and under favorable conditions every plant will make a fine solid head. The best for forcing or early field crop. Pkt. 20c,

$\frac{1}{4}$ oz. 85c, 1 oz. \$3.00, $\frac{1}{4}$ lb. \$10.00, lb. \$36.00.

Danish Giant. An extra large and reliable sort which is somewhat later than the above, and especially valuable for outside planting, as it withstands dry weather and forms fine heads under adverse conditions. Pkt. 20c, $\frac{1}{4}$ oz. 85c, oz. \$3.00, $\frac{1}{4}$ lb. \$10.00, lb. \$36.00.

Earliest Snowball. A fine strain for field crop, early or late. Pkt. 10c, $\frac{1}{4}$ oz. 60c, oz. \$2.00, $\frac{1}{4}$ lb. \$7.00.
Extra Early Dwarf Erfurt. Many gardeners use this for forcing and for outside. Head a little larger than Snowball, not quite as early. Pkt. 10c, $\frac{1}{4}$ oz. 60c, oz. \$2.00, $\frac{1}{4}$ lb. \$7.00.

CAULIFLOWER PLANTS in Season. Prices about 25c per dozen; \$1.50 per 100. Special prices in large lots. No plants sent by mail.

BLUE RIBBON CABBAGE SEEDS

SELECT AMERICAN GROWN STOCKS

Charleston Wakefield Cabbage.

1 oz. makes 1,500 good plants; 6 oz. sown will set an acre. For early use sow in frames in December, January, or February. For summer and early fall, sow out of doors in March. For late use sow in April, May, or June, according to period of maturity.

An acre of Cabbage usually sells from \$150 to \$200.

A FEW RULES FOR PLANTING AND GROWING CABBAGE SUCCESSFULLY.

Don't have the soil in the seed bed as rich as the field to which the Cabbage is transplanted, or the plants will be starved after transplantation.

Don't seed too thickly or force the growth too rapidly, or the plants will grow too tall, slim, and tender, and the growth be more seriously checked by adverse conditions.

Root deeply to resist drought. When setting out, plant up to the first leaf-stems. Supply plenty of moisture and manure or Acme High Grade Vegetable Fertilizer.

Don't sow the seed for a whole crop at one time, for plants of different age are differently affected by adverse circumstances, and by division a planter will have a better chance to profit, at least from a part of his crop.

Give high fertilization, work frequently and deeply.

Insect Remedies.—For flea beetles in seed bed, dust the plants with Tobacco Dust or Slug Shot. For cabbage worms, dust with Slug Shot, or Paris Green diluted with flour or land plaster 1 to 60. For terrapin or harlequin bugs hand-pick them. Where troublesome each year, sow Spring Kale or Mustard as "catch crops" in between every tenth row, then destroy plants and bugs with coal oil.

FIRST EARLY CABBAGES

EARLY JERSEY WAKEFIELD. The standard first early Cabbage for the market grower. Heads conical, medium size, little outer foliage, and can be planted closely. Our strain of this is specially fine, being very early, of good size, and uniformly reliable heading qualities. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

LARGE or CHARLESTON WAKEFIELD. (Blue Ribbon Stock.) The principal sort now planted by growers for early market, about one week later than Jersey Wakefield, but making much larger heads, sometimes weighing fifteen pounds. Our strain of this is unsurpassed, combining earliness, large size, uniformity in heading, and solidity. We recommend it for market, home use, or shipping. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

EARLY SPRING. The earliest flat head sort; about four days to a week later than Charleston Wakefield. Of fair size and solidity for so early a flat-head sort, and especially suitable to light or well-drained soils, as it heads quite close to the ground. Quality excellent, and commands good prices on the market. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

Early Winningstadt. Very early, conical-shaped, medium-sized, hard heads. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.40.

Large York. An old standard sort, medium size, loose heads. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.40.

If hotbeds or frames are not available, we can supply our nearby customers with plants of the principal early sorts. We can also supply **SOUTHERN PLANTS** if considerable quantities are wanted, and ask intending purchasers to write us, stating what quantity they will need.

Early Spring Cabbage.

BLUE RIBBON CABBAGE SEEDS—Continued

SUMMER AND AUTUMN VARIETIES

Solid South Cabbage.

SOLID SOUTH. A magnificent cabbage, resembling the Early Summer, but is earlier, larger, more uniform, has fewer outside leaves, and is less liable to run to seed if sown in the fall. This is one of the important varieties for market gardeners and truckers and is easily the best of the summer varieties for the family garden and for shipping. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

LOUISVILLE DRUMHEAD. The favorite summer and fall variety among growers here, and becoming very popular in all localities, makes large, hard, solid heads of uniform size, is short-stemmed, has few outside leaves, and is of compact growth. We have selected home-grown seed from the best and most careful growers here; also Northern-grown seed from stock procured here.

Home-grown Seed. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 85c, lb. \$3.00.

Northern-grown Seed. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

EARLY FLAT DUTCH. Short-stemmed, flat-tish solid heads, very reliable heading. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

ALL HEAD EARLY. Second early, deep flat solid heads. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

EARLY SUMMER. Splendid second early, large round heads. Popular with gardeners everywhere. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

ALL SEASONS. A good variety for general use summer or fall. Heads round, flattened on the top, large and solid. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

HENDERSON'S SUCCESSION. Similar to All Seasons, but a little later, fine sure-heading sort, very solid, and a good keeper. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

EARLY DRUMHEAD. Similar to Early Summer. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

SUREHEAD. Fine for late crop. Deep, round, thick heads. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

LARGE LATE DRUMHEAD. Rounder on the top than Flat Dutch, and not quite so short-stemmed. Good, large heads. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

MAMMOTH ROCK RED. The largest, surest heading red cabbage. Fine for pickling and kraut. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

DANISH BALL-HEAD, OR HOLLANDER. A splendid, large, hard-heading variety for late, and used most extensively in the winter cabbage districts. Has few outside leaves, produces round, white heads, crisp and tender, and a splendid keeping sort. The best for kraut and pickling, evaporating, and fine for market, storing, and shipping. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

PRIZE HEAD LATE FLAT DUTCH. This we have always found a reliable and sure header, producing large, round, solid heads, flat on the top, of low-growing habit, and few outer leaves.

There are various strains of Flat Dutch Cabbage offered, but if you want the best of all, be sure and get our "Prize Head" stock. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

AMERICAN PERFECTION DRUMHEAD SAVOY. The best and largest heading of the Savoy Cabbage. Few people seem to know the delicious flavor of Savoy Cabbage. It is far superior to the flat-leaved sorts, and as tender as cauliflower after frost. Should be in every private garden. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

Prize Head Late Flat Dutch Cabbage.

CARROTS

CROPS VERY SHORT AGAIN THIS YEAR

Every garden should have a plentiful supply of Carrots. They are useful for soups, boiling, and splendid for pickles, and if any are left over, make the best food for horses, live stock, and hogs.

1 oz. sows 100 feet of drill; three lbs. to the acre. Ready for the table in 40 to 70 days from germination. Sow from March till June.

Culture.—Carrots do best on a light, well-manured, deeply-worked soil. Sow in drills twelve inches apart and half an inch deep, and afterwards thin out to three to six inches apart. To keep for winter, pack the roots in moderately dry earth or sand in the cellar, or they can be pitted out of doors.

Packets of all varieties 5c each. All bulk seed by mail, add 8c per lb. for postage.

EARLY SCARLET HORN. (45 days.) One of the best for early planting out of doors. Roots top-shaped, a true half-long. Skin and flesh orange red. Pkt. 5c, oz. 10c, ¼ lb. 35c, lb. \$1.00.

CHANTENAY. A medium early heavy yielding variety of orange red color, of crisp and tender flesh. Fine for table use or as a field carrot for stock. Pkt. 5c, oz. 15c, ¼ lb. 50c, lb. \$1.50.

OXHEART, or GUERANDE. This is deserving of general cultivation. It grows three or four inches in diameter, is early, nearly oval in shape, and finest quality. Pkt. 5c, oz. 15c, ¼ lb. 50c, lb. \$1.50.

SCARLET INTERMEDIATE. A fine, handsome carrot, in form midway between the long Orange and Early Scarlet Horn. The roots are large, uniform, and symmetrical, with scarcely any core. Splendid either for garden or field culture, and very popular both for market or family table. Pkt. 5c, oz. 10c, ¼ lb. 35c, lb. \$1.25.

HALF-LONG DANVERS. Thick growing, good quality, and makes very satisfactory yields. Pkt. 5c, oz. 10c, ¼ lb. 35c, lb. \$1.00.

HALF-LONG SCARLET. (Stump Rooted.) Bright orange-colored flesh, easily pulled, and well adapted to shallow soil. Pkt. 5c, oz. 10c, ¼ lb. 35c, lb. \$1.00.

IMPROVED LONG ORANGE. The most popular main-crop sort in cultivation. The roots are long and tapering, and of a deep orange color, and free from side roots. One of the best winter sorts, and is largely grown for table, market, and stock. Pkt. 5c, oz. 10c, ¼ lb. 35c, lb. \$1.00.

LARGE WHITE BELGIAN. (For Stock.) Grows to an enormous size, making very large yield of most nutritious and fattening feed for stock. Oz. 5c, ¼ lb. 15c, lb. 50c, 5 lbs. at 45c per lb.

Knox County, Tenn., Sept. 29, 1912.
Last Spring I ordered from you some Oxheart Carrot Seed, but you did not have them and as it was planting time you sent Chantenay in place of them. I planted half of my crop out of the seed you sent and they made the finest carrots I have ever grown. Will want nothing but Chantenay next year. I have never seen any on the Knoxville market near as fine as mine were this year.
H. B. TROTTER.

COLLARDS

This is highly prized by the people of the Southern States, where it is used as Greens. It grows like cabbage, but does not form heads, but yields abundantly. Collards also are excellent feed for stock.

Culture and insect remedies same as for Cabbage.

NORTH CAROLINA SHORT STEM. Has a very short stem, large spreading leaves, very hardy, withstanding drought in summer and cold in winter. Its flavor and cooking qualities are the very best, and it has unquestionably proved far superior to any Collards in cultivation. Pkt. 5c, oz. 10c, ¼ lb. 30c, lb. \$1.00.

TRUE GEORGIA. The old standard sort for use in the South. Pkt. 5c, oz. 10c, ¼ lb. 25c, lb. 75c.

CORN SALAD

An excellent salad for winter and spring. Sow in September in drills 9 inches to 1 foot apart. Tread on the rows to make the soil firm, and it will germinate better. When severe weather comes on, cover lightly with clean straw or leaves. Can also be sown early in spring.

LARGE SEEDED. Round leaved; the best variety. Pkt. 5c, oz. 10c, ¼ lb. 20c, lb. 60c.

Half-Long Danvers Carrot.

CELERY

A very profitable crop and one that can be grown successfully in this climate. It requires plenty of moisture, heavy manuring, and careful attention. For celery as a commercial crop, we recommend the book "Celery Culture," by W. R. Beattie. Price 50c postpaid.

Golden Self-Blanching Celery.

golden color, combined with a warm, rosy pink on its outer ribs. The stalks are very thick, solid, and brittle; and very finest flavored celery. Not quite so early as White Plume, but a better keeping sort and far better quality. Pkt. 5c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.50.

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. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

PERLE LE GRAND. A splendid variety for both early and late. Its beautiful full golden heart and rich, nutty flavor are unapproached by any of the older sorts. Not only is this a good early variety, being among the first fit for use, but is also valuable as a winter keeper, remaining in perfect condition till late in spring. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

FIN DE SIECLE. One of the best winter sorts, producing extremely solid stalks of most excellent flavor. Grows to enormous size; solid, crisp formed yellow golden heart, and will be found most satisfactory for either family or market uses. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

Giant Pascal. Large and robust in growth, but very solid. Fine late sort. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

Pink Plume. Similar to White Plume, except in color, and better flavor. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.75.

GOLDEN SELF-BLANCHING. The best of all for private gardens. Dwarf growing, requires little earthing, and of finest quality and flavor. French-grown seed. Pkt. 15c, oz. \$1.00, $\frac{1}{4}$ lb. \$3.50, lb. \$12.00. American-grown. Crop failed.

Celeriac, or Turnip-Rooted Celery. Roots used only, boiled or raw. Has a delightful flavor. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

One ounce sows about 100 feet and produces about 8,000 good plants. Four ounces to set one acre. Matures in 120 to 150 days, according to season and location.

Culture.—Sow in February, March, or beginning of April in rows in fine, rich soil, and, if dry enough, press the soil firmly with a roller or the back of a spade. Keep the seed-bed well watered, as Celery germinates very slowly. Transplant from June to August. Celery does best in a moist, mucky soil, and in situations where plenty of water is abundant in the soil. It can be planted in single or double rows, earthing up as it grows two or three times, and in doing this, care should be taken not to let the earth get into the heart of the plant. When severe cold weather comes, take up and transplant solidly in a bed close together, and cover gradually with leaves, hay, or straw, as necessary to prevent freezing.

IMPROVED WHITE PLUME.

The favorite sort with most gardeners on account of its earliness and requiring very little earthing up. It blanches very easily, is of fine, attractive appearance, medium size, but not so good flavor or as tender as other sorts. Our stock of this is especially fine, producing fine, solid stalks. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 80c, lb. \$3.00.

GOLDEN ROSE, or PARIS ROSE-RIBBED CELERY.

An attractive, self-blanching sort, of beautiful rich,

CELERY PLANTS Supplied in Season. Varieties: White Plume, Giant Pascal, and other sorts. Prices about 50c per 100, \$4.00 per 1,000. Special prices in large lots. No plants sent by mail.

CORN

GARDEN VARIETIES

1 pint to 200 hills; 6 to 8 quarts to the acre. Plant for succession every two weeks from April till July. Ready for table in from sixty to ninety days from planting.

Culture.—Plant the Early Corns in well-manured ground last of March or early in April. Sugar Corn should not be planted until the ground gets warm. Cultivate deeply and often. The early varieties of Sugar Corn can be planted during July for late roasting ears.

Packets of all varieties of Corn 5c each, postpaid. In bulk, add 15c per quart, 8c per pint if to be sent by mail.

EXTRA EARLY AND EARLY SORTS

The following are not Sugar Corns, but are valuable on account of their extreme earliness, because they are early and make large size ears and mainly used for market, but the extra early sorts will be valuable for private uses.

EXTRA EARLY ADAMS. The earliest of all, bearing small ears close to the ground. Usually profitable and desirable on account of the extreme earliness. Shelled, pkt. 5c, pt. 10c, qt. 15c, 4 qts. 45c, pk. 85c, bu. \$3.00.

EARLY ADAMS. A little later, larger growth, and producing larger ears than Extra Early Adams. Shelled, pkt. 5c, pt. 10c, qt. 15c, 4 qts. 40c, pk. 75c, bu. \$2.50.

EXTRA EARLY NORTHERN FIELD. Similar to the well-known Northern Field but at least 8 to 10 days earlier. The ears are a trifle smaller, but grains are straight on the row, and makes a fine corn for early table use, coming in just after the Adams Early. This corn is also very superior for very early field crop, or very late planting when other sorts will not mature, and yields a good crop. Pkt. 5c, qt. 15c, 4 qts. 50c, pk. 85c, bu. \$3.00.

EARLY NORTHERN WHITE FIELD. The most popular of all for second early in this locality, and the main sort for very late planting. Ears symmetrical, good size, having straight rows, and corn is of fine quality. On ears, doz. 30c, per 100 ears \$2.00. Shelled, pkt. 5c, pt. 10c, qt. 15c, 4 qts. 35c, pk. 65c, bu. \$2.00.

EARLY RED DRIVER. Similar to above, of deep carmine color when dry, but white when in cooking stage. Excellent yielder, good for market, table, or as a field crop. Shelled, pkt. 5c, pt. 10c, qt. 15c, 4 qts. 35c, pk. 60c, bu. \$2.00.

SWEET OR SUGAR

If you want to make money out of corn, plant extensively Early Evergreen or Stowell's Evergreen or Late Mammoth, or some other good large sugar corn, and establish a trade on it with a few greengrocers. The customers of this greengrocer would not be satisfied to buy any other corn thereafter. An acre of good sugar corn will produce 750 to 1,000 dozen ears, which sell readily at 10c per doz. Every private garden should grow plenty of sweet corn, as if too much for home consumption is produced it can be easily sold in the neighborhood at good prices.

EARLY SORTS

GOLDEN BANTUM. A very early sugar corn, dwarf in growth with stalks averaging about four feet. Ears are small, five to seven inches in length, but are borne very productively, two or three fine ears to the stalk. Color of the grain is creamy yellow, very sweet and tender and fine flavor, and very much liked for private gardens. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 65c, pk. \$1.20, bu. \$4.50.

Extra Early Adams.

Golden Bantum
Sweet Corn.

Extra Early Northern Field Corn.

SUGAR CORN—EARLY SORTS—Continued

MAMMOTH WHITE CORY. A good extra early, producing medium-sized ears of finest quality. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 50c, pk. 85c, bu. \$3.00.

BLACK MEXICAN. The sweetest of all. Very early, good size, and good yielding. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 50c, pk. 85c, bu. \$3.00.

CROSBY'S EARLY SWEET. A little later, with ears longer than either of above sorts, and more symmetrical. Deep grains and fine for market or home use. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 50c, pk. 85c, bu. \$3.00.

MAIN CROP SORTS

EARLY EVERGREEN. An improvement over the Stowell's Evergreen in that it comes ten days earlier and produces almost as large ears. The grains are pure white, very deep, tender, and luscious. For second early or main crop we highly recommend it. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 50c, pk. 85c, bu. \$3.00.

COUNTRY GENTLEMAN. A favorite second early or main-crop variety with all private gardeners for its tenderness, delicacy, small, deep grains, and sweetness. The ears are of fair size, frequently three or four to the stalk. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 60c, pk. \$1.00, bu. \$3.50.

STOWELL'S EVERGREEN. Although a late variety, this has long been a favorite. It makes good-sized ears, has very deep grains, and will remain in the green state longer than any other sort. This we regard as one of the best for main crop, and is exceptionally tender and sugary. Pkt. 5c, pt. 10c, qt. 15c, 4 qts. 50c, pk. 85c, bu. \$2.75.

Country Gentleman Sweet Corn.

LATE MAMMOTH SUGAR. This is the latest but largest of all the Sugar Corns. The ears grow to an immense size, and are of fine quality and flavor. Pkt. 5c, postpaid; pt. 10c, qt. 20c, 4 qts. 50c, pk. 85c, bu. \$3.00.

FIELD CORNS. For description, prices, etc., see Field Seeds.

POP CORN

This is particularly the boy's crop, and one in which he takes as much interest as his elders. The amusement and pleasant hours passed while sitting around the fireside on a winter's night popping corn leaves memories that are always recurred to with delight in after years.

MAPLEDALE PROLIFIC. Very prolific. Grows about six feet high, and the ears are all of good size. It pops pure white, and is excellent quality. Pkt. 5c, pt. 15c, qt. 25c.

RICE. A very popular white variety with pointed grains. Very highly prized for popping. Pkt. 5c, pt. 15c, qt. 25c.

QUEEN'S GOLDEN. This is a large-eared and handsome pop corn.

The grains are large, pop perfectly white, and are exceedingly tender. The stalks grow about six feet high, and yield three or four ears each. Pkt. 5c, pt. 15c, qt. 25c.

One pint each of these three varieties of Pop Corn for 35c. If by mail, add for postage 20c.

Stowell's Evergreen Sweet Corn.

CRESS, OR PEPPER GRASS

Curled. Used for salad. Oz. 5c, 1/4 lb. 15c, lb. 40c. | **Water.** For garnishing and salads. Pkt. 5c, oz. 30c.

CUCUMBERS

FINEST SELECT STOCKS

Special prices on large lots quoted on request.

Do not overlook planting a bed of late cucumbers for pickling. If you have too many, your neighbors can use them, or they can be sold readily in the markets. A good crop will produce 150,000 fruits per acre.

1 ounce is sufficient for 50 hills, 2 lbs. to the acre. Plant in April or May for early crop. Ready for the table in from 50 to 75 days from planting.

Culture.—For very early field crop, plant in hotbeds, in pots or small paper boxes, or on pieces of sod, grass side down, so that they can be readily transplanted, or plant in the open ground as soon as the weather becomes settled warm, about the end of April or during May, in hills about four feet apart each way. Cucumbers may be protected from threatened frost by hand glasses, or even by a paper held down at the corners by a handful of earth. The hill should be previously prepared by mixing a shovelful of well-rotted manure or a small handful of Acme Brand B. B. F. Fertilizer with the soil. For main field crop, plant in May and put about ten seeds in each hill, and when all danger of insects is past, thin out to four. The fruit should be gathered when large enough, whether wanted or not, for if left to ripen on the vine it destroys the productiveness. For late pickling, plant in June or July.

Insect Remedies.—For spotted and striped beetles the remedy is Tobacco Dust sprinkled liberally on the vines and hills while the dew is on. For the cucumber borer, which bores into the cucumbers, hand-picking and destroying infested cucumbers is the only remedy.

DAVIS' PERFECT CUCUMBER. This is more on the type of an English Frame Cucumber, containing very few seeds. The color, a dark green, slightly tipped with white at the end, remains in a fresh condition longer than any other sort, and sells readily at considerably above ordinary sorts, such as White Spine, Long Green, etc. The vines are very vigorous, therefore should not be planted too close, or it will not do so well; five feet apart is close enough. In growing for outside it produces good crops, and as there is great resemblance to the hothouse cucumber, it commands better prices than the ordinary sorts. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 40c, lb. \$1.00.

IMPROVED EARLY WHITE SPINE. The favorite variety with nearly all gardeners and truckers for early and main crop. The fruits are smooth, of good shape, splendid deep green color, shading to whitish at the tip end. Our stock of this is extra fine and well adapted either for growing in greenhouses, frames, or outside, for early or late planting. A splendid sort for pickles. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

ARLINGTON WHITE SPINE. A selection from the White Spine, being more pointed at each end. The young fruits are usually crisp and tender, of dark green color, so that this variety is considered by many to be the best for small pickles. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

KLONDIKE. This sort is becoming a leader among growers for market for early or late crops. Fruits are of Improved White Spine shape, do not show quite as much whiteness at the tip ends, are long, hold their deep green color longer than any other sort, and of unsurpassed quality. Color deep rich green. Very productive and extremely early for so fine a variety. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

IMPROVED LONG GREEN. A popular cucumber for all purposes, being highly prized for family use and pickling. Fruit about 12 inches long when fully grown, of a dark green color, firm and crisp. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

Green Prolific, or Boston Pickling. One of the best for pickling; dark green, very productive, and of uniform small size. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

WESTERFIELD'S CHICAGO PICKLING. A very prolific and valuable pickling cucumber. Very popular with Chicago growers,

and more largely planted than any other sort in that vicinity. Fruit medium length, pointed at each end. Color deep green, flesh crisp and tender. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

Cumberland. Particularly valuable for pickles, besides combining fine qualities which make it an excellent table sort. A strong, vigorous grower, exceedingly productive. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

Early Frame, or Early Short Green. Excellent for table use and pickling. Plants vigorous and very productive. Fruits straight, medium length and of good quality. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

Jersey Pickling. Intermediate between Long Green and Green Prolific, forming long, slender, cylindrical fruits of dark green color. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

Gherkin, or Burr. A small, oval-shaped, prickly variety, used exclusively for pickles, for which it is very desirable. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

White Spine Cucumber.

Improved Long Green Cucumber.

If You are a Cantaloupe Grower, Plant Blue Ribbon Gem; it is the Best and Most Profitable of All Green Fleshed Sorts.

WOOD, STUBBS & COMPANY, BLUE RIBBON SEEDS

ENDIVE

Green Curled Endive.

A very delightful and refreshing vegetable; used mostly for salad and a substitute for lettuce, which it resembles. Endive may be grown at any season of the year, but is generally used only in the late fall.

Culture.—Sow in August in drills eighteen inches apart, and when large enough thin out to one foot apart. When nearly grown, tie up the outer leaves to blanch the heart. In dry seasons give plenty of water.

GREEN CURLED. This is one of the hardiest and best varieties for general use. The deep green leaves are beautifully cut and curled, easily blanched and become very crisp, tender, and fine flavored. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

Large Green Curled. A large, coarse, strong-growing variety, which, when tied up, blanches well. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

EGG PLANT

We can supply nearby customers with plants in case they have no hotbeds to produce them. One plant produces two or three large fruits.

1 oz. produces 1,500 plants. 4 oz. to the acre.

Ready for the table in 120 days from sowing.

Culture.—In February or March sow in hotbeds and keep warm. When two inches high, transplant to pots or to good rich soil. About the middle of May set out three feet apart each way, and protect from bugs by dusting lightly with Slug Shot.

NEW YORK IMPROVED PURPLE. One of the best and largest varieties in cultivation. Our strain of this variety is especially fine. The plant is robust, low-growing, branching freely, and bears large, oblong-shaped purple fruits. There are many varieties of Egg Plant offered, but we consider this superior to any other. Pkt. 5c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.00.

IMPROVED SPINELESS. This variety is almost entirely free from spines or thorns, and on this account more easily gathered. The fruit resembles New York Improved. Pkt. 5c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.00.

BLACK BEAUTY. Ten days to two weeks earlier than the New York Improved Purple, fruits a little bit longer in shape and slightly darker. It is entirely free from spines around the corolla, of dark rich purplish black color; very attractive. Splendid for early crop or very late planting for market or family uses. Pkt. 10c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.00.

Black Beauty Egg Plant.

HORSE RADISH

Horse Radish produces no seed, but is grown from pieces of the roots.

Culture.—Mark off the rows two and one-half feet apart in rich, moist, well-prepared ground, and set the pieces of roots eighteen inches apart in the rows, vertically, the small end down, and the top, one to two inches below the surface. Cultivate thoroughly until the tops cover the ground, when their shade will keep down the weeds. An acre requires about 11,000 roots.

Small roots, doz. 15c, per 100 60c, per 1,000 \$5.00.

NEW HORSE RADISH (Maliner Kren). This new variety was introduced in the United States from Bohemia, and has proved to be the earliest, largest yielding, and finest horse radish that has ever been planted in this country. Cuttings planted in April will produce fine large roots for grating the first of the following October, being about five months from planting. It is pure white, free from disease, grows to enormous size when left in the ground until spring, and yields as high as four tons to the acre. The particular advantage of this horse radish, however, is that it is adapted to almost any kind of soil, from the heaviest to the sandiest, standing dry weather much better than the old-fashioned sort. Roots at 20c per dozen. If to be sent by mail, add 6c per dozen for postage. 85c per 100, \$6.00 per 1,000.

The corn and peas which I ordered from you arrived in first-class condition, in much less time than expected. Freight also less than expected owing to distance. I am much pleased at the appearance of seed, also the quick and business-like manner in which you handled this order. Am sure I saved enough on this order in buying from you to pay freight though only a small order. When in need of more seeds you may expect my order, also will speak a good word for you when I can. Wishing you much success, I am,

Franklin County, Ark., April 20, 1912.

D. D. BRADNER.

KALE OR BORECOLE

Culture.—Sow either broadcast or in drills eighteen inches apart, from first of September till the middle of October. It may also be sown in February or March, at which time the Smooth or Spring Kale is best. Of late years the latter has been largely sown in the fall, making greens earlier than the winter sorts. Protect with straw or coarse litter in severe weather, as it can be cut during the winter and spring. Sow winter sorts at the rate of three or four pounds to the acre. Spring Kale can be sown broadcast at the rate of eight pounds to the acre, or four or five pounds in drills.

Green Curled Siberian Kale.

For Bulk Seed by Mail, add 8c per lb. for postage.

Dwarf Curled Siberian. The old standard winter variety. The leaves are a bright green color, tinged with purple, and beautifully curled and delicate in flavor. In the latitude of Louisville it will stand throughout the winter without protection. Oz. 5c, $\frac{1}{4}$ lb. 15c, lb. 40c, 5 lbs. at 35c per lb.

Homegrown Siberian. Kentucky-grown stock of the Green Curled Siberian which produces leaves not quite so curled as the Northern grown offered above. Oz. 5c, $\frac{1}{4}$ lb. 15c, lb. 35c, 5 lbs. at 30c per lb.

Dwarf Green Curled Scotch or Norfolk Kale.

DWARF GREEN CURLED SCOTCH, or NORFOLK.

One of the most popular shipping sorts; very largely used in the Norfolk trucking district. The leaves are of a bright green color, beautifully curled. Should be sown in rows or broadcast in August and September. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c, 5 lbs. at 50c per lb.

Spring or Smooth Kale. A hardy, quick-growing, smooth-leaved variety, which makes a fine salad. Very hardy, and is largely grown in September for use during the winter and spring months. The best for sowing in the spring. Large pkt. 5c, lb. 15c, 2 lbs. 25c, 10 lbs. at 10c per lb.

KOHL-RABI

A vegetable intermediate between the Cabbage and Turnip, which combines the flavor of both. It forms a turnip-shaped bulb above the ground, which is prepared for the table like turnips. If used when young and tender, makes a delicate and desirable vegetable.

Culture.—For early use sow in hotbeds or in the open ground in March or April, in rows eighteen inches apart. Thin out or transplant like cabbage. Can also be sown in June or July for fall. One ounce will sow 200 feet of drill.

Early White Vienna. Splendid sort for general use, having white, tender flesh, and making good-sized bulbs. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

LEEK

The Leek is generally considered superior to the onion for soup flavoring, etc.

Early White Vienna Kohl-rabi.

Culture.—Sow as early as practicable in the spring in a light, rich, moist soil in drills half an inch deep. When six or eight inches high, trim off the tops and roots and transplant to rows one foot apart and six inches apart in the row, setting them three to four inches deep and earthing up as they grow, so that the necks will become well blanched. The seed may also be sown in September, and the young plants transplanted in the fall, or early in the spring to where they are to remain. One ounce will sow about one hundred feet of drill.

LARGE FLAG. Very large and popular variety. Perfectly hardy. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.
GIANT MUSSELBURGH. Enormous size, leaves large and broad, mild and pleasant flavor. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

Large Flag Leek.

Your seeds I find are true to name and I take pleasure in recommending you to my neighbors.
 Franklin County, Ark., April 6, 1912.
 WM. E. WILLIAMS.

LETTUCE

This should be in continuous supply in every private garden from early spring until late fall, and sowings should be made accordingly, using Black Seeded Simpson for earliest crop, followed with Grand Rapids, Blue Ribbon Big Boston, Imperial Cabbage, Deacon, Hanson, Shotwell's Brown Head. Then in July, August, and early September sow Blue Ribbon Big Boston for late crop. Good heading summer lettuce sometimes yields \$600.00 to \$800.00 per acre.

One ounce sows 300 feet of drill; 3 lbs. to one acre. One ounce produces 2,500 plants. An acre in set plants requires about 50,000 set 8 x 15 inches.

Culture.—For winter forcing make sowings from September to February. Sow the curled varieties about every four weeks, the Head or Cabbage sorts about six weeks apart. As one crop is cut out another can be planted. For early spring crop sow under glass in January or February, and transplant in the spring. For succession sow at intervals of three weeks until end of April. For autumn use sow in July. For fall planting sow the hardy varieties in September and transplant, when large enough, to cold frames nine inches apart.

Packets of all varieties 5c each; 6 for 25c. Pkts. and ounces mailed free. Bulk seed by mail, add 8c per lb. for postage.

CURLED OR LOOSE HEAD VARIETIES

BLACK SEEDED SIMPSON. (White Paper Lettuce.)

A very popular sort among market gardeners. Forms a large, loose head; its nearly white curly leaves thin, exceedingly tender, and of good quality. Splendid for growing under glass and early planting outside. Pkt. 5c, oz. 15c, ¼ lb. 35c, lb. \$1.00.

TILTON'S WHITE STAR. A splendid sort either for forcing or outdoors. Bright color, crisp, long keeper, and superior to B. S. Simpson for greenhouses not having full sunlight. Pkt. 5c, oz. 15c, ¼ lb. 35c, lb. \$1.00.

GRAND RAPIDS. This variety is especially adapted to greenhouses or forcing in frames, and is generally recognized as the standard of forcing lettuce. The plant is upright, forms a loose head of large green leaves, crimped at the edges, not liable to rot, and stands some days after ready to cut. Splendid for market, shipping, or family use, either indoors or outside. Pkt. 5c, oz. 15c, ¼ lb. 35c, lb. \$1.00.

EARLY CURLED SIMPSON. White seeded. Makes a curled, loose head; early and tender. Pkt. 5c, oz. 15c, ¼ lb. 35c, lb. \$1.00.

DENVER MARKET. An early variety, making large, solid heads; leaves crimped like Savoy Cabbage; very crisp and tender, and desirable either for home or market use. Pkt. 5c, oz. 15c, ¼ lb. 35c, lb. \$1.00.

Black Seeded Simpson Lettuce.

HEADING OR CABBAGE VARIETIES

Blue Ribbon Big Boston Lettuce.

BLUE RIBBON BIG BOSTON. A distinctly improved type of the Big Boston, and one of the best of all for early growing in the field or forcing in hotbeds. If grown under favorable circumstances the heads will measure from ten to twelve inches across. Of a bright, lively green color without the brownish markings on the old-fashioned sort. The heart and inner leaves are pure white, of a delicious flavor, very tender, and splendid quality. We strictly recommend this to be used by all market gardeners as their main planting of Big Boston, and it will prove entirely satisfactory for early crops for family gardens. Pkt. 5c, oz. 20c, ¼ lb. 60c, lb. \$2.00.

MAY KING. Of quick growth and produces large, handsome heads with few outside leaves. Color light green, outer leaves folding closely, producing round, solid heads six to seven inches in diameter. Splendid for market gardeners or private use. Pkt. 5c, oz. 15c, ¼ lb. 35c, lb. \$1.00.

LETTUCE PLANTS supplied in season. Varieties: Black Seeded Simpson, Big Boston, and California Cream Butter. Per 100, 30c; 1,000, \$2.50. Special prices in large lots. No plants sent by mail.

Your strain of Grand Rapids Lettuce seed is the best that I can get anywhere.

Washington County, Md., April 5, 1911.

J. R. GROUND.

LETTUCE—Continued

HEADING OR CABBAGE VARIETIES

—Continued

IMPERIAL CABBAGE. Gardeners who have grown this lettuce say there is no better heading sort for main-crop spring planting. The heads of light green color outside, with yellowish white heart, are large, solid, and of finest quality, and very tender. It is slow in running to seed, grows quickly, is an even, reliable header, and will be found thoroughly satisfactory, both for outside planting and in frames. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

BIG BOSTON. One of the most popular of all for forcing or spring crop outside, and more largely used for market generally than any other sort. Heads are large, very crisp and solid, of light green color, and uniformly reliable heading. Extra selected stock. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

CALIFORNIA CREAM BUTTER. In shape this is distinct, heading up like a cabbage, almost as solid. The color is light green, almost white, the flavor rich and buttery, and very tender. Specially recommended for spring and summer use. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

DEACON CABBAGE. Medium-sized head, very light green. Solid, crisp, and one of the best table sorts for summer. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

ICEBERG. A reliable heading sort, with crisp, tender, indented leaves, which when wet with dew gives a crystalline appearance. Very satisfactory. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

IMPROVED HANSON. One of the best of the summer varieties. Color light green, with crimped edges; heads extremely large, solid, and fine appearance, hence popular for market. Quality a little coarse, but on account of its reliable heading is one of the best for summer use. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

SALAMANDER. A bright green attractive summer variety, producing large, solid heads, very smooth, tender leaves, and of the finest quality. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

SHOTWELL'S BROWNHEAD. Large heads, with outer leaves brownish, and golden yellow heart; uniformly reliable heading, withstands hot weather well, and one of the slowest of all to seed. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

TRIANON COS. The Romaine Lettuce of the French. Leaves upright, very crisp, and in great favor with many people. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

Henderson's New York. The largest heading sort grown for outside; light green leaves, somewhat coarse. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

I planted some of your beans and they are coming fine, and no one here has ever seen such growth of beans, they look like the stalks in the book, not many leaves but all beans. I am very much elated with the showing your seed have made here, and are a good "Ad" for you. Seeds bought from other parties do not get in sight with your stuff in quality or growth. I have butter beans on my vines over one inch long.

Marion County, Ky., June 17, 1912.

Lee County, Va., March 2, 1912.

GEO. CAMPBELL.

Enclosed find check for \$128.45 to pay invoice February 27, 1912. I want to thank you for sending me such a nice lot of seed. They seem to be really better than the samples you sent me.

JNO. W. TRENT.

CANTALOUPE OR MUSK MELON

Blue Ribbon Gem Cantaloupe.

Culture.—Prepare hills four to six feet apart; a rich, moderately dry, sandy soil or sod land is best, using well-rotted stable manure or Acme Brand B. B. B. Fertilizer, which should be well mixed with the soil. When danger of frost is past, plant ten or twelve seeds about an inch deep in each hill, and when danger of insects is over, thin out to four plants to the hill. Ashes, lime, or even dry road dust is excellent to sprinkle over the young plants when the dew is on, to prevent the attacks of insects; to promote fruitfulness, pinch the ends of the vines when they begin to blossom, especially if the growth is very luxuriant, and cultivate until the vines cover the ground.

Insect Remedies.—The yellowish green and spotted melon bug is the principal enemy of the melons, not only eating the leaves of the vines, but also eating holes in the melons. The liberal use of Tobacco Dust in and upon the hills and vines is one of the best remedies for this and other insects that prey upon the melons and melon vines.

Seeds in pkts., ounces, and $\frac{1}{4}$ lbs. mailed free. To pound prices add 8c if to be mailed.

BLUE RIBBON GEM. A distinctly new and very much improved Cantaloupe of the Rocky Ford type, from which it has been bred. It is two weeks earlier, very much more productive, a little more netted, and almost entirely rust and blight-proof. Most of locality have planted this sort for the past four years and are highly pleased with it. Those who have not planted Blue Ribbon Gem have overlooked what we think is the best green-fleshed, medium-sized Cantaloupe ever offered.

Blue Ribbon Gem retains all of the characteristic sweetness of its parents, grows a trifle larger in size, and is so much superior in growth, productiveness, earliness, depth of meat, and appearance, that it will become the most important of the Netted Gem type. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

Blue Ribbon Gem is undoubtedly the biggest money-maker in Cantaloupes that can be planted for market.

TIP TOP. This is one of the most popular of all large-growing melons and especially preferred by gardeners or private gardens where the soil is very rich. The outer rind is smooth, of whitish green color, flesh salmon, very thick, and exceedingly sweet and of good flavor. A splendid market sort and one that will please for family use, especially in rich soils. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

Tip Top Cantaloupe.

Extra Early Hackensack.

LONG ISLAND BEAUTY. Melons of large size, well flattened and heavily ribbed and netted. A very handsome appearance, green and very deep flesh of fine quality. This variety ripens as early and resembles the Hackensack, but is superior and one of the leading market varieties. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 30c, lb. \$1.00.

CHAMPION MARKET. An oval-shaped, medium-sized melon, which is highly prized by many growers for market. It is medium early, thickly netted, flesh light green, and good quality. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 80c.

PAUL ROSE. A cross of Osage with Netted Gem. Medium size, oval, very deep salmon flesh, sweet and luscious. Splendid. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 80c.

EXTRA EARLY HACKENSACK. Ten days earlier than Large Hackensack. Roughly netted skin, flattish shape, good quality. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 80c.

CANTALOUPE—Continued

BURREL'S GEM. Similar in shape to Netted Gem, but of deep salmon flesh, exceedingly luscious. One of the best sorts for market or family use, being exceedingly prolific and suitable to nearly all soils. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

WOOD'S PERFECTION. One of the best of large Cantaloupes, whether wanted for shipping, the nearby market, or home use. Gardeners using this variety speak in highest terms of its sterling qualities, and wherever tried it is the most popular of all for main crop, where good-sized melons are wanted. The flesh is thick, of a beautiful deep rich green color tinted with salmon; unusually sweet and luscious. The melons average about one-half again larger than Rocky Ford, very netted, and distinctly marked ribs. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

Rocky Ford Cantaloupe.

EXTRA EARLY HANOVER. The earliest of all Cantaloupes, and on this account highly recommended for early market. It is of medium size, round, and flattened at the ends, ribbed and well netted. The flesh is fairly good quality; its main value, however, is its extreme earliness, and for this reason it is one of the most profitable sorts which can be planted. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

OSAGE, or MILLER'S CREAM. Medium size, round shape, salmon colored, very thick flesh, with smooth, grayish skin. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 75c, 5 lbs. 65c per lb.

EMERALD GEM. Medium size, oval, smooth, green rind, thick salmon flesh, very sweet and fine flavored. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

Large Hackensack, or Turk's Cap. A popular large sort, heavily netted and ribbed, greenish flesh. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c, 5 lbs. 50c per lb.

Baltimore, or Acme. Oblong shape, twice as large as Rocky Ford, well netted and ribbed. Deep, sweet, greenish flesh. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 50c.

Banana. Long, smooth, yellow-skinned; salmon flesh. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

Glass Melon. Small fruits about the size of an orange. Skin greenish yellow. Fine for preserves, pickles, sweetmeats. Very prolific. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

ROCKY FORD. This famous melon is well known everywhere, and has been the standard shipping variety. The melons are really the true Netted Gem type, medium-sized, oval, and very sweet and fine flavored. Very prolific, and continue bearing enormous varieties of fruit during the entire season. Fine stock. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c, 5 lbs. and over 50c per lb.

NETTED GEM. Introduced twenty-five years ago, and still retains its great popularity in all sections. The fruits are of medium size, oblong, ribbed, and netted, very firm and solid, will bear handling remarkably well. Vines vigorous, very prolific in fruit, and almost all of them can be relied upon to be sweet and highly flavored. Our stock of this is from selected melons. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c, 5 lbs. and over, 50c per lb.

Extra Early Hanover Cantaloupe.

I have used Blue Ribbon Gem Cantaloupe for the last four years and must say that it is without doubt the finest variety of green flesh melons for market uses or table that I have ever planted. I have made more money every year on Blue Ribbon Gem than on any other sort I have ever used, and I recommend it to all market gardeners and truck growers as unquestionably superior to anything of this type. I have been a practical cantaloupe grower for more than fifteen years.

Jefferson County, Ky., Nov. 9, 1912.

JNO. R. WATSON.

WATERMELONS

Large Buyers. We will quote special prices of **Melon Seeds** on request. Send us list of your requirements.

To some people all watermelons are good; others discriminate in quality. The best flavored melons for family garden are Florida Favorite, Kleckley Sweets, Temple Gray, Watson, Halbert's Honey, and Georgia Rattlesnake. To grow watermelons successfully, especially where the ground is very rich, give them plenty of room, and it is claimed that pinching off the vine behind the melon, allowing two to the vine, will produce them exceedingly large.

One ounce plants 30 hills; 2 lbs. to the acre. Plant early in May, or for late use, in June.

Culture.—Cultivate exactly like Cantaloupe, giving more room, say ten or twelve feet apart, each way.

Insect Remedies.—See under Cantaloupes.

Packets, ounces, and $\frac{1}{4}$ lbs. mailed at prices. In bulk by mail, add 8c per lb.

Temple Gray Watermelon.

TEMPLE GRAY. One of the best melons, either for market or home use. Attains a larger size than any of the long, dark green melons, frequently growing fifty pounds in weight. Will stand shipping fairly well, is of extra fine appearance and unsurpassed quality. Flesh tender, firm, and very sweet and luscious. White seeds tipped with black. We obtained it in Tennessee, where it is the most popular with all growers when once planted. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

WATSON. A famous big, sweet watermelon, somewhat similar to Temple Gray, though a little bit darker green in color. Melons are long, average large size, splendid shippers, and one of the best table quality melons on the market. It is rapidly superseding other sorts for Southern growing, and is highly recommended for nearby markets or family gardens. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

Watson Watermelon.

FORDHOOK EARLY. A splendid early variety, producing melons of medium size. The fruits are rather short, inclined to be round, with dark green skin striped with lighter green. Flesh bright red, very crisp and sweet, and splendid quality. The rind is thin and is better for nearby markets than shipping. Its fine quality will recommend it as a good sort for family gardens for very early crop. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

HARRIS' EARLIEST. One of the best early sorts for shipping or market. The melons are oval or oblong, beautifully striped with dark green and gray. Flesh bright red, sweet, crisp, and delicious. Harris' Earliest is a very productive variety, and so extremely early that good melons can be picked the first of July in this latitude. The size averages twenty to thirty pounds. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c, 5 lbs. at 50c per lb.

Kleckley Sweets Watermelon.

KLECKLEY SWEETS. This is one of the best flavored melons in cultivation, and of a shape and color that is extremely desirable. The rind is very dark green, very thin, flesh deep scarlet, fine, and of delicious quality. For the home market and family garden it is decidedly one of the best. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c, 5 lbs. at 70c.

WATERMELONS—Continued

SWEET HEART. A fine shipping melon of large size and fine quality. The vines are very vigorous and productive, bearing the fruit early. Melons uniform in size, oval-shaped, and very heavy. The rind is light green, thin but firm; flesh bright crimson, sweet and tender. Particularly fine for shipping or market for main crop, being of such fine appearance that they sell readily. Pkt. 5c, oz. 10c, ¼ lb. 15c, lb. 50c, 5 lbs. 45c per lb.

McIVER'S WONDERFUL SUGAR MELON. A variety of recent introduction, which is of good shape and color, sweet, productive, and very satisfactory for home use or market. Melons often attain great weight, are of very handsome appearance, never crack or lose their fine flavor in a wet season. The color is light green, shaded with darker stripes. Pkt. 5c, oz. 10c, ¼ lb. 15c, lb. 50c, 5 lbs. at 45c per lb.

HALBERT'S HONEY. Of splendid quality, and especially desirable for home use or nearby market. Has a dark green, very thin rind, exceedingly attractive, meat so crisp and tender that well-ripened melons split ahead of the knife in cutting. Melons are long, blunt at both ends, and vines very productive. Pkt. 5c, oz. 10c, ¼ lb. 20c, lb. 75c, 5 lbs. at 70c per lb.

FLORIDA FAVORITE. This has long been a prime favorite for home consumption, for which purpose it is regarded by many as the finest melon grown. Ripens early, has dark skin with light green stripes and light crimson flesh; exceedingly sugary, and so delicious and melting that one feels perfectly satisfied when eating Florida Favorite. Pkt. 5c, oz. 10c, ¼ lb. 15c, lb. 50c, 5 lbs. and over at 45c per lb.

GEORGIA RATTLESNAKE. Melons are long in shape, of light green color with dark stripes, and grow of uniformly large size and symmetrical shape. In Georgia this variety is one of the most highly prized of all. The rind is remarkably thin, though it stands shipping well, and the flesh most tender, sweet, and luscious, it being a rare thing to find a melon that is not of superior quality. A satisfactory one to grow for all purposes. Pkt. 5c, oz. 10c, ¼ lb. 15c, lb. 50c, 5 lbs. and over 45c per lb.

Florida Favorite Melon.

	Pkt.	Oz.	¼ lb.	1 lb.	5 lbs.
KOLB'S GEM. The famous shipping sort. Oval, dark mottled green, very tough rind, solid flesh; large and attractive, but not of fine quality.-----	5	10	15	40	35
Peerless. Fruit medium-sized and oblong in shape, dark green rind; flesh bright scarlet, solid, crisp, tender, and of the highest flavor. Vines moderately vigorous, hardy, and productive.-----	5	10	15	50	45
Dark Icing, or Ice Cream. Round, medium size; skin dark green, flesh bright red, exceedingly tender and delicious. Fine for early home use or nearby market.-----	5	10	15	50	45
Triumph. Similar to Kolb's Gem, except darker green and attains larger size. Splendid for shipping or growing for prizes where size counts.-----	5	10	15	50	45
Jordan's Gray Monarch. Light green, oblong, large size and good quality. In high favor for home use, shipping, and market.-----	5	10	15	50	45
Citron. For preserving.-----	5	10	20	55	50

Mushrooms.

well and packed evenly. In these beds plant the broken pieces of spawn about 1 to 1½ inches in diameter, 6 inches apart, and cover with 2 inches of light soil. A brick usually weighs about 1¼ lbs. and plants 8 or 10 square feet. Water should be given sparingly, and should be lukewarm. Mushrooms will appear in about six weeks.

MUSHROOM SPAWN. Mushrooms can be grown in cellars, sheds, or under benches in greenhouses—in hotbeds. Sometimes they are planted in the open air. The crop has proved very profitable in this locality, and we advise large planting, as mushrooms have proved very profitable in this as well as in other markets. Our cultural instructions on Mushrooms are necessarily limited for want of space, but we can furnish books on the subject, one of the best being "Mushrooms and How to Grow Them," by Wm. Falconer, mailed for \$1.00.

Culture.—Use fermenting horse manure at a temperature of 70 degrees, mix with equal weight of fresh sod loam. The beds can be made of the size required, and should be about eight inches deep, packed well and packed evenly. In these beds plant the broken pieces of spawn about 1 to 1½ inches in diameter, 6 inches apart, and cover with 2 inches of light soil. A brick usually weighs about 1¼ lbs. and plants 8 or 10 square feet. Water should be given sparingly, and should be lukewarm. Mushrooms will appear in about six weeks.

English Mushroom Spawn, per lb. 20c, 5 lbs. and over 15c per lb.; postage 5c per lb. extra; case of 100 lbs. at 8c per lb.

I never had better results than I had from the seeds I bought of you last Spring. Had the finest melons of any one around here. Sold \$50.00 worth off of 350 hills and had all we wanted for home use. Shall want some more seeds from you later.

Hardin County, Ky., Nov. 17, 1911.

FRANK JEFFRIES.

Harrison County, Ind., Feb. 24, 1912.

The seeds opened up entirely satisfactory. They are apparently better than I have had for some years.

J. B. WILLIAMS.

MUSTARD

One ounce sows 30 feet, 4 or 5 lbs. per acre.

This is grown to quite a large extent in the Southern States. It is used the same as Spinach or boiled with meat as greens. The white or yellow-seeded variety is cultivated chiefly for medicinal purposes or flavoring.

Culture.—Sow during February, March, or April, or in the fall during September or October, either broadcast or in rows six inches apart. Cut when three inches high. Sow one ounce to eighty feet of drill, or broadcast at the rate of five or six pounds per acre.

Southern Giant Curled. An improved variety, much esteemed in the South. Very succulent, pungent, and of sweet flavor. Oz. 5c, $\frac{1}{4}$ lb. 15c, lb. 50c.

White. Used for salad. Oz. 5c, $\frac{1}{4}$ lb. 10c, $\frac{1}{2}$ lb. 25c.

Black. Oz. 5c, $\frac{1}{4}$ lb. 10c, lb. 25c.

Mustard Seed for Pickles. Lb. 15c.

Southern Giant Curled Mustard.

OKRA OR GUMBO

One ounce sows 40 feet of drill, 15 lbs. per acre. Plant in April or May. Matures in sixty or seventy days from planting.

This vegetable should be more generally grown, as it adds consistency and makes a fine flavoring for soups, stews, and gravies. Also gives a good flavor to canned tomatoes.

Culture.—When the ground has become warm, sow thickly in drills three feet apart, and when large enough thin out to eight inches apart in the rows. To keep for winter use slice the pods when young and tender into narrow rings; string and hang in the shade to dry.

PERKINS' MAMMOTH POD. A very productive variety, extremely long pods, which, when ready to use, are four to five inches in length. Handsome green color and good quality. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c.

WHITE VELVET. This variety bears round, white, smooth pods, unlike other varieties, which are ridged or square-edged. The pods are of extra large size, and are produced in great abundance. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c.

Improved Dwarf Prolific, or Density. An excellent prolific sort. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 40c.

Tall. Produces dark green ridged pods. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 40c.

ONION

One of the most useful and healthy of all vegetables. It should be planted in all forms, sets to produce big onions, seed to produce pickling onions, and some of these pickling onions can be in turn set out in the late fall for early green spring onions. The Potato Onion is especially valuable for this, as if all the green onions are not used they will make a fine quality cooking onion in the early summer. Potato Onions grow only from sets, and are found under the heading "Onion Sets." A good crop of onion sets is three to four hundred bushels per acre. Large onions from seed produce three to eight hundred bushels per acre. Six hundred bushels is a large average yield.

Sow in March or April out doors. For large Onions at the rate of 5 to 6 lbs. per acre. For sets 40 to 60 lbs. per acre. For Pickle Onions, 1 oz. sows 150 feet. 15 lbs. per acre.

Culture.—For large, fancy onions: Sow in January or February in hotbeds or trays. As soon as the weather opens and the sets are the size of a goose-quill, transplant in rows twelve inches apart and four to six inches between the onions. For main crop: Sow in the open ground in March or April in drills twelve inches apart, thinning out afterwards to three or four inches apart. For sets: Sow in February or March in rows ten to twelve inches apart in smooth, clean, well-prepared land. Keep free of all weeds and cultivate as often as necessary, depending on condition of growth to produce small-sized sets.

LARGE GROWERS OF ONION SETS are requested to ask for special prices on Onion Seed. Prices very unsettled.

The seed of the first two sorts have been grown in this locality, and are the principal ones used here.

SILVER SKIN. Excellent variety for family use. Skin and flesh pure white; mild flavor and flattish shape. The best white onion to grow largely for sets. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 30c, lb. \$1.00, 25 lbs. at 75c per lb.

YELLOW DANVERS. Standard variety; flat-shaped, large in size. One of the principal main-crop sorts for sets or large onions. Keeps well and is a most desirable market or table onion. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c.

ONION—Continued

Red Wethersfield. A quick-growing, dark red sort, desirable for sets or large onions. Uniform in size, shape, close-grained, of mild flavor. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

Extra Early White Pearl. The quickest growing of all the white sorts; makes large, pearly white onions, tender, mild, and of excellent flavor. The seed should be sown in the spring thickly and the sets put out in the fall. In this way large onions may be had before any other sorts are ready. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

PRIZE TAKER, or SPANISH KING. Like nearly all Spanish Onions, this makes extra large size onions, and of particularly fine flavor. The outside skin is a rich yellow straw color, and the flesh is pure white, sweet, mild, and tender. It ripens up fine and hard and makes a very handsome and attractive onion. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 35c, lb. \$1.00.

MAMMOTH SILVER KING. This is one of the largest onions in cultivation, growing to a remarkable size. The skin is a beautiful silver white, flesh pure white, and of a particularly mild and pleasant flavor. It matures early and grows uniformly of large size and perfect form, flattened at the top. Specially recommended both for fall and spring planting. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

Prize Taker Onion.

ONION SETS

Prices subject to Market Changes.

This is one of the largest markets on onion sets in the world, and Louisville sets are shipped to all parts of the United States. Large buyers can get the very lowest market prices from us.

If it be sent by mail add 10 cents per quart for postage.

Culture.—Plant the sets four inches apart in rows about half an inch deep and one foot between the rows, but do not cover the sets entirely. This applies to all varieties except the Potato Onion, which should be planted in rows fifteen inches apart and nine inches apart in rows, and then covered with about one inch of soil. All varieties can be set out in the fall as well as in the spring. Fall plantings of onions are succeeding very well in the South, and should be more generally practiced.

Yellow Danvers. The well-known variety used so largely in this section for dry onions. Pickle onions of this sort, planted in the fall, make excellent bunching onions for spring use. Qt. 10c, 4 qts. 35c, pk. 65c; bushel prices on application.

White or Silver Skin. Pure white, of mild flavor, and usually preferred for private uses, both for cooking and pickling. Qt. 15c, 4 qts. 45c, pk. 75c; bushel prices on application.

Yellow Potato. A mild yellow sort growing in clumps, producing no seed. Stock sold out this season.

GARLIC

A bulbous-rooted plant with strong, penetrating odor, but much esteemed by some for flavoring soups, stews, etc. We frequently receive orders for garlic seed, but we can supply the bulbs only. Prepare the ground the same as for onions and plant the bulbs in drills eight inches apart and four inches apart in the rows, and cover two inches deep. When the leaves turn yellow, take up the bulbs and dry in the shade and lay them up in a loft as you would onions. Bulbs, $\frac{1}{4}$ lb. 15c, lb. 40c. Postage extra $\frac{1}{2}$ c per oz.

PARSLEY

CROP AGAIN SHORT

Champion Moss Curled Parsley.

Parsley is so easily grown and useful for so many purposes that every garden, no matter how small, should have a supply. A very pretty effect is produced if parsley is used as an edging for flower or vegetable beds, and when it is pulled off or cut, shoots out again quickly and keeps up a delightfully fresh, green edging all the season. In the winter parsley can be very profitably grown under glass.

Culture.—Soak the seed in water a few hours, and sow in rich soil early in spring, in rows a foot apart, and cover lightly. Parsley is slow to germinate, and it is sometimes three or four weeks in coming up. One ounce will sow one hundred and fifty feet of drill.

Champion Moss Curled. The best and most improved strain. It is beautifully curled and crimped, and is the best for garnishing and flavoring. It makes an ornamental plant for edging walks. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

Plain. Very hardy and stronger in flavor than the curled. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

PARSNIP

CROP AGAIN SHORT

Parsnips remain in the ground all winter, without protection, and can be dug for use as required until they begin to run to seed in the spring. They are, altogether, a most desirable winter vegetable, and should be much more largely grown than at present.

Culture.—A rich, sandy loam, deeply worked, is the best for Parsnips. Sow in April in drills eighteen inches apart, covering lightly. Parsnip seed is very slow in germinating, especially when the ground is dry. When the plants are two inches high, thin out to four to six inches apart. One ounce of seed will sow two hundred feet of drill. Five or six pounds to the acre.

IMPROVED SHORT NECK HOLLOW CROWN. A superior strain of very enlarged shape at the top, tapering abruptly to a small point. Especially desirable for rich, deep soil. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 75c.

Sugar Hollow Crown, or Guernsey. This is an old standard variety. Smooth skin, tender, and well flavored. It is good either for table or stock. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

PACKETS, OUNCES, and $\frac{1}{4}$ LBS. of SEEDS are postpaid by us. For Bulk Seed add 5c to lb., 8c to pint, and 15c to quart prices.

Improved Virginia Peanuts.

PEANUTS

These can be easily grown, and a supply on hand will afford much gratification to the younger members of the family.

Culture.—Shell the nuts and plant in April or May in drills $2\frac{1}{2}$ to 3 feet apart, dropping them 12 to 15 inches apart in the drill. Work occasionally, cultivating flat and keeping the land clean of weeds.

If by mail add 10 cents per quart for postage.

Improved Virginia. A fine productive strain, making large-sized nuts. Qt. 15c, 4 qts. 40c, bu. \$2.00.

Spanish. An early small-sized variety which is enormously prolific, and the kernels are very rich and fine flavored. It is also very largely grown for stock feeding, the vines and roots pulled up and cured making excellent, nutritious hay or very fattening food for hogs. Qt. 15c, 4 qts. 45c, bu. \$2.50.

PEAS

GARDEN SORTS

Every garden, large or small, should have a splendid supply of this delicious vegetable. Starting with the smooth sorts, such as Blue Ribbon Chieftain, Express, Alaska, sowings should follow of the extra early wrinkled peas, then follow by medium crop peas, and last of all, the main crop peas. In August a sowing of early sorts can be made for fall use. A good yield of peas in pods is from 100 to 150 bushels per acre.

One pint sows 50 feet; $1\frac{1}{2}$ to 2 bushels to the acre. Earliest sorts can be planted in January or February; wrinkled varieties in March till May. For fall, plant in August. A half pint planted every two weeks will yield a succession, and is enough for medium-sized garden. Select different sorts.

The varieties we offer are the best in cultivation, the list embracing all classes from the very earliest to the main crop and late sorts.

Pkts. mailed free. In bulk, add 8c per pint, 15c per qt., if to be mailed.

Culture.—Peas succeed best in light, rich, loamy soil, which has been manured the previous season. Plant in rows two and a half to three feet apart, two inches deep, giving the taller varieties more room between the rows. The dwarf varieties can be planted in rows two to two and a half feet apart. Peas grown as a market crop are rarely ever staked, but when the taller varieties are grown for private use, it is a good plan to sow them in double rows and staked with brush. They should be kept clean and the earth worked toward them two or three times during growth.

Blue Ribbon Chieftain Peas.

EARLY ROUND OR SMOOTH VARIETIES

These mature in from 48 to 60 days from planting.

BLUE RIBBON CHIEFTAIN. Extra Early. Blue Ribbon Chieftain Peas are the most profitable of all the smooth white peas that can be planted for market, as their extreme earliness, being four or five days earlier than any other sort, is bringing most profitable results. We have had this reported from dozens of growers, and sales are increasing on these enormously. It may be a broad statement, but we firmly believe of all the strains of extra early peas in existence, this is without doubt the earliest and one of the best for yielding. In addition to this, the peas are good size, sell readily, and are most excellent quality. The vines average about eighteen to twenty-four inches in height, depending upon the season; pods are borne in profusion, easily picked and well filled, bearing six to eight peas of the finest quality. We unhesitatingly recommend these for general market growing and for family use. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.00, bush. \$7.00.

NEW CLAUDIT, or MAMMOTH ALASKA. This has rapidly grown in favor and is now superseding Alaska. The peas are the same color and average about one and a half times as large, the pods being in about the same proportion. This means that less peas have to be picked to make a barrel. The quality of Claudit Peas for sale on the market is fully equal to Alaska or any other blue peas, and its keeping qualities are better. The vines usually grow $2\frac{1}{2}$ feet high, bearing seven to nine peas to the pod, and retaining their freshness a long time after picking. Blue Ribbon Chieftain and Claudit for early market planting can not be surpassed anywhere. Pkt. 5c, pt. 20c, qt. 35c, 4 qts. \$1.20, bush. \$8.00.

New Claudit Peas.

Was well pleased with seed I bought from you last Spring.

Benton County, July 24, 1912.

F. P. PATTON.

DeKalb County, Ala., Sept. 2, 1911.

I have bought of you off and on for more than ten years, and your seeds and prices have given unexceptional satisfaction.

L. S. NICHOLSON.

PEAS—Continued

GARDEN SORTS—Continued

WOOD, STUBBS & CO.'S EXPRESS. Vines $2\frac{1}{2}$ feet high, bearing in profusion long, straight, well-filled pods. Very hardy, vigorous, large yielding, as early as Alaska, and fine as the main early crop for market or extra early for home garden. Pkt. 5c, pt. 10c, qt. 25c, 4 qts. 85c, bu. \$6.00.

ALASKA. Very popular with market growers and canners. Peas are bluish in color, borne in straight, well-filled pods; very early, and especially valuable for shipping, the pods remaining green longer than white seeded sorts. Height, $2\frac{1}{2}$ feet. Pkt. 5c, pt. 15c, qt. 25c, 4 qts. 80c, bu. \$5.50.

First and Best. An old popular strain of extra early white-seeded peas. Vines $2\frac{1}{2}$ feet. Very productive, and continue to bear longer than most early sorts. Pkt. 5c, pt. 15c, qt. 25c, 4 qts. 80c, bu. \$5.50.

Tom Thumb. An older sort of white smooth peas; very dwarf growth, averaging about ten inches. Very hardy, but not so prolific as the above-mentioned sorts, and valuable only on account of not needing sticks. Pkt. 5c, pt. 20c, qt. 35c, 4 qts. \$1.10, bu. \$7.50.

WRINKLED VARIETIES

The wrinkled peas are the finer, sweeter flavor, and superior to the smooth peas in their table qualities, and on this account are used more generally for the private garden. They are not quite as hardy as the smooth varieties, and on this account should be planted a little later.

Alaska Peas.

EXTRA EARLY WRINKLED PEAS

GRADUS OR PROSPERITY. Undoubtedly the best and earliest large-podded wrinkled pea which has been introduced for many years. New sorts have come out, but due to their shy bearing and lacking vigor in growth, there has been nothing, in our opinion, which has surpassed Gradus. Not only is this an extremely early sort, but the pods are about as large as Telephone, hence market gardeners, as well as private gardeners, all speak well of Gradus. It has heavy stems, large dark green leaves, producing handsome, large pods, measuring four to four and a half inches in length, nearly round, and are filled with large peas which are tender and sweet, and remain edible longer than most other sorts. Gradus peas have always been in such demand that the price still stays high. Pkt. 10c, pt. 20c, qt. 35c, 4 qts. \$1.25, bu. \$9.00.

AMERICAN WONDER. One of the best known of the dwarf early wrinkled peas, which has long been a favorite for family use; vines, growing about nine inches high, are strong, robust, and remarkably productive. Peas delicious, small, and very sweet. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.10, bu. \$3.00.

McLEAN'S LITTLE GEM. A favorite early wrinkled variety, maturing a little later than American Wonder, of a somewhat taller growth, and a little more prolific; pods fair length and peas of excellent quality. Pkt. 10c, pt. 15c, qt. 30c, 4 qts. \$1.00, bu. \$7.50.

Premium Gem. Practically the same as McLean's Little Gem.

NOTT'S EXCELSIOR. Although a few days later than the American Wonder, the pods will average fully one-third larger. For wrinkled peas they are remarkably hardy, and can be planted almost as early as the smooth sorts. Dwarf in habit, of vigorous constitution, and wonderfully productive. Height, 1 foot. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.10, bu. \$3.00.

Gradus or Prosperity Peas.

We have used your seeds many times, and were perfectly pleased, as I made big money by using them, as I found them to be just what you claimed for them.

Hopkins County, Ky., August 28, 1911.

JNO. C. THOMPSON LUMBER CO.

PEAS—Continued

MEDIUM CROP PEAS

Summer Queen Peas.

use. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.10, bu. \$8.00.

SUMMER QUEEN. This is becoming one of the standard sorts for second early planting by gardeners everywhere, and we have never grown or eaten a pea which comes nearer to perfection than this. The peas are large, wrinkled, and of greenish color, sweet, of splendid flavor, and have all the qualities for making them an ideal private sort as well as being productive and profitable for gardeners; height $3\frac{1}{2}$ feet. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.10, bu. \$8.00.

IMPROVED PRIDE OF THE MARKET. A very productive variety, bearing large and handsome pods well filled with peas of splendid quality. Very popular sorts for the private garden and market. Height $1\frac{1}{2}$ to 2 feet. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.10, bu. \$8.00.

Heroine. A medium early green wrinkled pea, coming in between Advancer and Champion of England. Grows two to two and a half feet high, and bears in great profusion; long, slightly curved, pointed pods containing nine or ten large peas of finest quality. An extremely desirable sort for market or home

Champion of England Peas.

LATE OR MAIN CROP PEAS

STRATAGEM. A remarkably fine pea. The vines are almost completely covered with large well-filled pods. Sweet and delicious. Height $1\frac{1}{2}$ feet. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.10, bu. \$8.00.

Improved Telephone Peas.

sorts. The peas are large, round, white, and slightly oval. Height of vine $3\frac{1}{2}$ feet. Pkt. 5c, pt. 10c, qt. 20c, 4 qts. 60c, bush. \$4.00.

For a large, quick crop of Hay, sow Canada Field Peas. For description and prices see Farm Seeds.

CHAMPION OF ENGLAND. Universally admitted to be one of the best late peas grown. Of delicious flavor and a very profuse bearer. One of the best for market or private garden. Height 4 to 5 feet. Pkt. 5c, qt. 25c, 4 qts. 85c, bu. \$6.00.

IMPROVED TELEPHONE. One of the most productive of the wrinkled peas. Of excellent sugar flavor. Rather late in maturing, but one of the best for main crop. Height 4 feet. Pkt. 5c, pt. 15c, qt. 30c, 4 qts. \$1.10, bu. \$8.00.

LARGE WHITE MARROWFAT. Late variety, large, well-filled pods. Vines hardy, strong, and vigorous, pods fine, broad, and of a leathery appearance, and borne near the top of the vine. Contain five or six peas of good substance and flavor, but not sweet like the wrinkled

SELECTED SEED POTATOES

NORTHERN AND SECOND CROP

Second crop potatoes are more generally preferred in this neighborhood than the Northern stocks. They go further and cost less. We carry for late planting, in cold storage, nearly all leading sorts, and will be pleased to quote them in the summer. These should be planted from the 15th of July to the 10th of August in this climate. Potatoes yield 150 to 300 bushels per acre, a good average yield being 200 bushels.

Culture.—Potatoes are planted in rows from 27 to 30 inches apart, dropping the potatoes from 10 to 12 inches apart in the rows. Use Acme Brand Potato Fertilizer in the rows, mixing a little of the soil, and if possible top dress with manure, which afterwards work in the soil. It takes about 3 barrels Second Crop, or 4 barrels of Northern Potatoes to plant an acre.

The prices of potatoes are constantly changing. Please write us for current market prices when ready to purchase.

Prices on Second Crop Potatoes are for full size flour barrel sacks (11 pks.). Price includes the sack. Prices on Northern Potatoes are for 10 pk. sacks, and price includes the sack. If wanted in barrels, add 20c extra for the barrel. All prices on other quantities include sacks.

EARLY VARIETIES

EARLY DIXIE. A new variety which is destined to become one of the leading sorts for very early use, both for market and home garden. The potatoes are round, pearly white in color; have few eyes, which are somewhat indented. It resembles in shape and color Irish Cobbler, but is at least ten days or two weeks earlier than that variety. It is a good cooker, does not have black hearts; smooth skin, mealy, and a good flavor. Early Dixie is particularly suited to light loamy soil. It is large yielding, has moderately vigorous vines and matures its crop earlier than any round white sort that we know. Gardeners who have planted this variety during the past season speak very highly of it, and it will become very popular when known. Our crop was raised on sod land.

Early Dixie Potatoes.

Choice Second Crop. Pk. 60c, bu. \$2.00, 11 pk. bbl. sack, \$5.00.

IRISH COBBLER. One of the general favorites in all localities for early as well as late planting. When it was first sent out it was not claimed to be particularly early, but extensive growing in this

Irish Cobbler Potatoes.

tubers are compact in the hill, and has few small potatoes. Color white; eyes shallow; quality excellent.

Choice Second Crop. Pk. 40c, bush. \$1.25, 11 pk. bbl. sack about \$3.00.

EARLY SIX WEEKS. A very early potato, claimed to mature in six weeks, and especially recommended for early markets and family use. A very large yielding variety, smooth skin, slightly blushed, shallow eyes, and of good appearance. They are of fine texture, good quality, cook mealy and white.

Choice Second Crop. Pk. 40c, bush. \$1.25, 11 pk. bbl. sack about \$3.00.

EARLY SELECTED SEED POTATOES—Continued

Early Ohio Potato.

EARLY OHIO. A favorite variety among gardeners everywhere, and particularly well suited to light or loamy soil, though it succeeds well nearly everywhere. The tubers are oval, have few eyes, smooth skin, color white, slightly flushed with rose, and is of excellent quality. A favorite sort for early market or family use.

Northern. Pk. 40c, bush. \$1.25, 10 pk. sack about \$2.75.

EARLY PURITAN. A pure white early potato which is particularly suitable to light loamy soil. Good yielder, oblong shape, shallow eyes, very salable, and fine quality.

Second Crop. Pk. 35c, bush. \$1.15, 11 pk. bbl. sack about \$2.75.

EARLY ROSE. One of the older varieties, and still largely planted, many growers claiming that it has never been superseded in quality and productiveness. Potatoes are oblong, light pink color at the bud end, cook mealy, and of the finest flavor.

Northern. Pk. 35c, bu. \$1.10, 10 pk. sack about \$2.50.

NEW QUEEN. A splendid variety, resembling the old Beauty of Hebron in appearance, color, and shape, but somewhat earlier and a heavier yielder. Potatoes are oblong, with few eyes. Skin white, slightly flushed with rose, flesh pure white, and cooks dry and mealy. Very popular everywhere, and succeeds well on nearly all classes of soil. It is a good keeping variety and brings the best prices.

Early Rose Potatoes.

Choice Second Crop. Pk. 35c, bush. \$1.15, 11 pk. bbl. sack about \$2.75.

BLISS' TRIUMPH. One of the earliest, and largely planted by truckers and gardeners for early crop, being mostly shipped to Northern markets. Vines are of medium growth, yields very well. Potatoes round, with deeply indented eyes, and of pink skin.

Choice Northern. Pk. 40c, bu. \$1.25, 10 pk. sack about \$3.00.

THORBURN. Largely planted by growers in this section, and is well suited to heavy loams. Potatoes are slightly oblong, skin slightly flushed with pink, smooth, and good quality. A good variety for main early crop for market or home use.

Second Crop. Pk. 35c, bush. \$1.15, 11 pk. bbl. sack about \$2.75.

BEAUTY OF HEBRON. Potatoes are oblong, skin white, slightly tinted, flesh pure white, a splendid cooking variety and excellent flavor. It has always been popular with gardeners and for private use, yielding well.

Choice Second Crop. Pk. 35c, bush. \$1.15, bbl. about \$2.75.

LATE VARIETIES

BLUSH. Oval shape, light pink, smooth skin, eyes shallow, and fair quality. Potatoes average good size, usually heavy yielding, especially on stiff ground, and one of the best keeping sorts for winter.

Second Crop. Pk. 35c, bush. \$1.15, 11 pk. sack about \$2.50.

CARMAN No. 3. A fine round, pure white potato with smooth skin, shallow eyes, and of fine keeping and cooking qualities. It is a good yielding sort, vines vigorous and productive and a fine medium late pure white sort for market or family use.

Second Crop. Pk. 40c, bush. \$1.25, 11 pk. sack about \$3.00.

WHITE STAR. This wonderful yielding variety is the result of crossing the Excelsior with the White Peachblow. It is medium early or late, of large size, bluish white color, of the finest quality and is an excellent keeper.

Second Crop. Pk. 40c, bush. \$1.25, 11 pk. sack about \$3.00.

BURBANK. Of the late Northern sorts, this is more largely used than any other. It is of good size, oblong shape, and an excellent yielder. The flesh is white, and is very mealy and of fine flavor.

Northern. Pk. 35c, bush. \$1.10, 10 pk. sack about \$2.50.

Burbank Potatoes.

SWEET POTATOES—See page 43

PEPPER

Culture.—Sow in hot bed in February or March, and transplant in open ground in May, in rows two to two and a half feet apart, fifteen inches between the plants, or when the ground becomes warm, sow in open ground and set out as above. When transplanted apply liquid manure or some good fertilizer.

Chinese Giant Pepper.

Red Chili. Very hot, small, thin; coral red color. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.
Red Cherry. Small round fruits. Very prolific. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

CHINESE GIANT. An enormous sort, sometimes measuring six inches in diameter. Very handsome, mild, and superior quality for stuffing. Plants are vigorous and very prolific, and peppers are late maturing. We strongly recommend this, either for home use or market for main and late use. Pkt. 5c, oz. 30c, $\frac{1}{4}$ lb. 80c, lb. \$3.00.

CORAL GEM BOUQUET. A dwarf-growing pepper, producing hundreds of small, bright red peppers thickly set on the plants so as to give the plants a most beautiful appearance. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 80c, lb. \$3.00.

RUBY KING. One of the large-sized peppers, fruits four to six inches long; mild, pleasant, dark glossy green, turning to ruby red when ripe. Splendid for stuffing, salad, or pickles. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.75.

Mammoth Golden Queen. Fruits, six inches long by nine to ten in circumference, are borne twelve to fifteen to each plant. Mild and sweet. Use as described for Ruby King. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 50c, lb. \$1.75.

Sweet Spanish Mammoth. Fine for mangoes. Large, of splendid quality. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.75.

Bell, or Bull Nose. A large early sort, of mild flavor. Color purplish red. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.75.

Long Red Cayenne. A bright red hot variety, of long shape, called "Ladyfinger Pepper." Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.75.

PUMPKIN

One oz. plants from 20 to 30 hills; 2 to 3 lbs. per acre.

Are usually planted in cornfields to grow with corn for winter feed. They are considered a very healthy and most nutritious food for cattle in winter. In addition to their value as a stock food, they are also largely used for culinary purposes, the finer grained varieties making excellent pies.

Culture.—Plant in May in hills eight feet apart, mixing a shovelful or two of well-rotted manure in each hill. Put eight or ten seeds in each hill and cultivate till the vines get strong, when they should be thinned out, leaving two or three of the strongest plants in each hill.

KENTUCKY MAMMOTH PUMPKIN. An exceedingly large variety, well adapted to the South, and one that will give the best and most satisfactory results. Notwithstanding the enormous size of this variety, the flesh is fine grained and of excellent flavor. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

JAPANESE PIE. A variety of large size, ranging in weight from thirty to eighty-five pounds. Color of outside rind bluish green, blotched with yellow; flesh salmon, very thick, sweet, and of good flavor. Fine for either stock or making pies. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 75c.

CASHAW, or CROOKNECK. One of the best table sorts; also fine for stock feeding. Very productive and grows to a large size. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 80c.

LARGE CHEESE. A fine, large, flattened pumpkin of splendid quality. Excellent for cooking. Oz. 5c, $\frac{1}{4}$ lb. 15c, lb. 40c.

TENNESSEE SWEET POTATO. Of medium size; creamy white, with light green stripes; flesh quick, fine grained, dry, brittle, and of excellent flavor. Unsurpassed for pies and custards. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 85c.

KENTUCKY FIELD. Splendid for stock feeding. Grows to a large size, round, and of yellow color. Oz. 5c, $\frac{1}{4}$ lb. 10c, lb. 25c, 5 lbs. 20c per lb. Special prices on large lots.

Kentucky Mammoth Pumpkin.

RADISH

FINEST FRENCH GROWN CROPS AGAIN SHORT

Pkts. 5c, 6 for 25. Pkts., ounces, and $\frac{1}{4}$ lbs. mailed free. To lb. prices add 8c for postage.

One ounce sows 100 feet of drill; 10 to 12 lbs. to the acre. For forcing sow in January or February in frames. Outdoors from February to June. For late use, from July to September. Early sorts are ready for the table 21 to 30 days from sowing.

Culture.—To be tender and crisp, Radishes must be grown quickly, and quick growth requires rich soil and plenty of moisture. Commencing with the first mild spell of weather in the spring, sow at intervals of ten days in a light, rich soil that has been deeply dug. They can also be grown as a catch crop between rows of beets, lettuce, onions, etc. Radishes can be forced in the hot beds, but they must have plenty of ventilation and moisture.

EXTRA EARLY WHITE TIP FORCING. Radishes of this type are extremely popular in this locality, both for gardeners and private use. The outer skin is bright crimson color with white tip; flesh pure white. Our strain of this variety is superior to most stocks offered, making a nice, globe-shaped, clean root, with no lateral roots; has very small top and grows much quicker than ordinary strain of White Tip Scarlet. On account of its small top it is largely used for forcing, and extremely satisfactory for earliest use out of doors. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 50c.

Extra Early White Tip Forcing.

EXTRA EARLY WHITE BOX. A small, beautiful, pure white sort, of exceedingly quick growth, forming handsome round white roots of pearly white color. Gardeners who have grown this pronounce it the best round white radish for under glass, and it brings the best market prices. It has a small top, and is excellent for family use as well as market. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 50c.

NEW WHITE ICICLE. This variety has rapidly become a favorite; in fact, there is nothing which has proven superior in this class. It produces beautiful, long white roots, extremely early, hence decidedly popular for forcing, and a splendid sort for light, deep soil for out of doors. In twenty-five days after sowing this radish is ready for pulling, and it retains its excellent qualities longer than any of the early varieties, not getting pithy so soon. Can be sown from under glass from winter through the early spring, and out of doors in spring and early summer. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

NEW ROUND SCARLET CHINA. This splendid new variety has a brilliant crimson color, very showy, and is one of the finest of all for general purposes, as it does not get pithy for a long time after ready to pull. It is round shape, flesh pure white, of excellent quality, grows very large if allowed to stand, and can be used at all stages after the roots have formed. We unhesitatingly recommend this sort as profitable for market gardeners and satisfactory for private uses. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

EXTRA EARLY SCARLET GLOBE. One of the finest for forcing or early sowing outside. The roots are slightly oval, of beautiful crimson color, finely shaped, and one of the most attractive in appearance. Tops small, few lateral roots, nice and clean. In many sections this is the most popular of all with market gardeners. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 50c.

WHITE STRASBURG. The most popular of all radishes in the West for outside, second early, or main summer crop. It grows large size, does not get pithy unless very old, of beautiful crystal white color, tender and sweet. Roots are tapering, about two inches thick and five inches long. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c, 5 lbs. at 45c per lb.

Early White Tipped Scarlet Turnip. Bright red, shading off to white at the tip. Splendid for earliest sowing outside. Flesh white and tender, roots very showy. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c, 5 lbs. at 45c per lb.

French Breakfast. An old popular early sort; roots oblong, bright red, shading to white at tip. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c.

New White Icicle Radish.

small, few lateral roots, nice and clean. In many sections this is the most popular of all with market gardeners. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 50c.

White Strasburg Radish.

RADISH—Continued

Early Red Turnip Radish.

Long White Naples. Longer and not so thick as White Strasburg. Very much liked by shippers, and splendid quality. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 45c.
Giant White Stuttgart. Produces large top, shaded white roots, sometimes four inches in diameter. Does not get pithy, hence valuable either for summer use or storing for winter. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c.
Golden Globe Summer. Round, russet-colored skin, with white flesh; of good size, valuable for summer, as it does not get pithy. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 40c.

ROSE CHINA WINTER. One of the best fall and winter varieties; half long shape; upper part bright crimson, shading to white. Flesh white, firm, tender, and of superior quality. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Round Black Spanish. Outer skin black, flesh white and tender. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Long Black Spanish. Long, black roots; flesh white and tender. Splendid for very late use. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Long White Spanish. Similar to above, except outer skin is white. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Salsify.

Culture.—Sow in a rich, light, deeply-worked soil, in rows 18 inches apart, and thin out to four or six inches. Cultivate often to keep down weeds. It is perfectly hardy, and may remain out all winter.

MAMMOTH SANDWICH ISLAND. A great improvement over the old sort, growing double the size. Quality excellent. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 35c, lb. \$1.00. 5 lbs. 85c per lb.

EARLY RED, or SCARLET TURNIP. Dark crimson color with white flesh. Splendid for general early use, as it does not get pithy as soon as most of the early sorts. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 40c.

Early White Turnip. Similar to the above, except that the skin is white. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 40c.

Mixed Turnip. A mixture of the various turnip-shaped varieties. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 40c.

Non Plus Ultra. Deep scarlet, globe-shaped, small top; desirable for frames or outside. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c.

Brightest Long Scarlet. Roots bright crimson, crisp and tender. Matures in twenty-five days; has a small top, and a very attractive and superior sort. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c, 5 lbs. 45c per lb.

Wood's Early Frame. Similar to the above, except that the roots are a little thicker. Tender, crisp, and fine quality. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 40c.

CHARTIER LONG SCARLET. Brilliant scarlet, shading to white at the tips. One of the best for summer and main crop, as it will grow to immense size without becoming pithy or strong. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 15c, lb. 50c.

Chartier Long Scarlet Radish.

RHUBARB OR PIE PLANT

One ounce sows 75 feet; about 6 lbs. to the acre. About 24 roots are sufficient for an ordinary garden. Plant roots in March or November. Sow seed in April.

Culture.—Sow in drills in a shady or moist situation, and when a few inches high thin out to 12 inches. The following fall transplant to a deep, well-manured soil, three by four feet apart, and protect with manure or leaves. It may be more quickly grown by setting out the roots, covering the crown every fall with coarse manure. Do not gather any the first season, and never allow it to go to seed.

MYATT'S VICTORIA. The best variety for the South. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 40c, lb. \$1.25.

RHUBARB ROOTS. 10c each; 75c per dozen. Price by the 100, \$4.50. If to be mailed, add 10c each for postage.

SALSIFY

One ounce sows 100 feet; three pounds per acre. Sow in March or April.

SPINACH

One ounce sows 100 feet of drill; 20 lbs. per acre in drill; 25 to 30 lbs. broadcast. $\frac{1}{2}$ lb. is sufficient for a medium garden. Sow in February, March, or April. For fall and early spring sow in September or October.

Culture.—Sow in drills one inch deep, eighteen inches to two feet between the rows, or it can be sown broadcast like kale. Requires but little or no cultivation.

New Victoria Spinach.

LONG SEASON. Fine for both fall and spring sowing. Leaves thick and fleshy; will stand long without running to seed. Oz. 5c, $\frac{1}{4}$ lb. 10c, lb. 20c, 10 lbs. and over 15c per lb.

NEW VICTORIA. An excellent sort which has very thick, dark green leaves, somewhat curled in center. It is one of the earliest of all varieties, and remains so much longer before going to seed, than most kinds, that it can not fail to please. Excellent either for market or private garden. Oz. 5c, $\frac{1}{4}$ lb. 10c, lb. 20c, 10 lbs. 15c per lb.

ROUND THICK LEAVED. The best variety for spring seeding; makes thick, dark green, crimped leaves of finest quality. Very slow in running to seed. Oz. 5c, $\frac{1}{4}$ lb. 10c, lb. 20c, 10 lbs. and over 15c per lb.

NORFOLK SAVOY, or BLOOMSDALE. Very early and hardy, with leaves curled and wrinkled like a Savoy cabbage. Best for fall sowing. Oz. 5c, $\frac{1}{4}$ lb. 10c, lb. 20c, 10 lbs. and over 15c per lb., 100 lbs. \$12.00.

SQUASH OR CYMLING

Summer Squash requires 1 oz. to 30 hills; winter sorts 1 oz. to 15 hills. Three to four lbs. per acre. Plant in May or June.

Culture.—After danger of frost is past, plant in a warm, well pulverized, rich soil, mixing a shovelful or two of well rotted manure with the soil, to the hill. Plant four or six seeds to the hill, the bush varieties four feet apart, the running sorts eight. When well grown thin out, leaving three of the strongest plants in each hill.

EARLIEST PROLIFIC. The earliest variety of summer squash, somewhat resembling Early Bush, but not quite as scalloped and a little thicker in shape. It is exceedingly productive, 3,600 squashes having been gathered from one thousand vines in a single week. The vines are of true bush form, about two feet high, and of vigorous growth. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 85c.

EARLY WHITE BUSH, or PATTY PAN CYMLING. This is more largely grown in the South than any other sort. It is very early, of a light cream color, productive, grows to a good size, and makes a fine shipper. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 50c, 5 lbs. 45c per lb.

Early White Bush Squash.

Golden Summer Crookneck Squash.

Mammoth White Bush. A selection from the early White Bush, and is larger and more uniform in shape than its parent. It is of a beautiful white color. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c, 5 lbs. at 50c per lb.

Golden Summer Crookneck. Early, productive, of a bright yellow color, excellent flavor. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c, 5 lbs. 50c per lb.

Boston Marrow. A standard sort for fall and winter use. The flesh is of a rich orange color and of finest flavor. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 20c, lb. 60c.

Hubbard. A splendid keeping squash with orange-colored flesh, very dry, and of richest flavor. Pkt. 5c, oz. 10c, $\frac{1}{4}$ lb. 25c, lb. 85c.

SELECTED TOMATO SEEDS

Earliest plants can be supplied by us to nearby customers. For late use, a short row can be sown in every garden, the plants transplanted when ready. Do not depend on one planting of tomato plants to extend the whole season through, as they should be planted both early and late for best results. Tomato as a field crop yields 300 to 500 bushels per acre.

One ounce produces about 2,000 plants, 2 ounces enough for an acre. For early crop sow in hot beds in January or February. For late crop in open beds in May.

Culture.—Sow in a hot bed in early spring, or the seed may be sown in shallow boxes and placed in a window when one does not wish to have the trouble of making a hot bed. Transplant in the open ground when all danger of frost is past, setting the plants three or four feet apart each way. Use Acme Brand Blood, Bone, and Potash Fertilizer or well-rotted manure in the hills. Some support should always be provided for the vines, to keep the fruit from touching the ground. Fruit may be had several weeks earlier by sowing seed quite early and transplanting to small pots. When these are filled with roots shift to a larger size and transplant to open ground when the weather is warm and settled. As the roots are not disturbed in taking plants from the pots, the plants suffer no check, but grow right on.

Packets, ounces, and $\frac{1}{4}$ lbs. mailed free at price. For bulk seed by mail add 5c per pound.

THE BEST EARLY TOMATOES

Blue Ribbon Gardeners' Special.

BLUE RIBBON GARDENERS' SPECIAL. An early purplish variety maturing as quickly as June Pink, but of much finer color and quality. The color is purplish crimson, similar to Livingston Beauty, but the fruits are more globe-shaped than this variety. It is of most excellent flavor with small seed cavity. The vines are vigorous, very productive and produce the majority of the crop early though it is a good yielding for main crop. We especially recommend this new sort to all market gardeners and believe it will prove one of the most profitable. Pkt. 5c, $\frac{1}{2}$ oz. 20c, oz. 40c, $\frac{1}{4}$ lb. \$1.25, lb. \$4.00.

BLUE RIBBON PIONEER. We have sold this excellent variety for the past five or six years, and it has given remarkably fine satisfaction with very early growers of tomatoes for market. The color is purplish crimson; it is as early as any of the unshapely extra early sorts, perfectly smooth and symmetrical and large fine fruits of somewhat flat shape. The flesh is firm, solid, and of the very finest quality; has very few seeds, and is an excellent variety for shipping or market. The fruits do not crack and rot, as is the case with most of the early sorts, and

we strongly recommend it for extended use among growers of early or main crop tomatoes for market. Pkt. 5c, $\frac{1}{2}$ oz. 15c, oz. 30c, 4 oz. \$1.00, lb. \$3.00.

JUNE PINK. One of the very earliest and most productive and best pink-fruited varieties in cultivation. The plants are of compact growth, produce more fruit for earliest picking, and continue to bear in good quantities throughout the season. We especially recommend it for light, loamy, quick soils for earliest crop. The fruits are smooth, good size and quality. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 75c, lb. \$2.50.

SPARKS' EARLIANA. The fruit is borne in clusters, and so very prolific as to be alone and unequalled in this respect, and combining as it does extreme earliness, very large, uniform size, handsome shape, and beautiful red color, it will be found not only extremely profitable for the grower for market, but one of the finest early varieties for family and garden. It is solid, good size, does not crack, and worthy of extended cultivation everywhere. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 65c, lb. \$2.25.

CHALK'S EARLY JEWEL. A splendid purplish-red variety of good size and very popular for market for early crop. Fruits are very attractive in color and shape, not inclined to crack easily, and ripen evenly. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 65c, lb. \$2.25.

DWARF CHAMPION. A purplish-red early variety which is very dwarf growing, and the vines so stiff and upright that they are self-supporting, even when laden with fruit. The branches are short, making a bushy plant growing about two feet high. Fruit smooth, medium size, purplish-pink color, fairly solid, with no hard core, and of good flavor. Quite popular and particularly suited to very rich land where other varieties would make too much vine, as they can be planted very much closer than other sorts. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

VARIETIES FOR MAIN CROP PLANTING

BEAUTY. One of the finest tomatoes for general purposes, whether home, garden, or market. The color is purplish-red, very solid, does not crack easily, grows to a large size and is very productive. It is moderately early. The fruits borne in clusters, very smooth, and of most excellent flavor. A splendid keeper, fine for shipping, and largely used for market as a main crop sort. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

Livingston's Beauty Tomato.

SELECTED TOMATO SEEDS—Continued
VARIETIES FOR MAIN CROP PLANTING—Continued

Ponderosa.

STONE. A large red tomato and one that can be recommended generally for all purposes, whether home use, market, or canning. It is especially desirable for late planting, or where red tomatoes are preferred to purple. As the name indicates, it is very solid and firm; large size, ripens evenly, and is a good keeper. Canners prefer Stone Tomato to almost any sort. Our stock of Stone Tomato is very select. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

PONDEROSA. Probably the largest of all tomatoes in cultivation, the fruit sometimes growing to such a size that a slice will cover the bottom of a dinner plate. It is inclined to be a little rough, but very solid, and has comparatively very few seeds, and a most excellent sort for private gardens or where very large tomatoes are wanted. Large tomatoes are not as prolific as smaller

fruit varieties, and in Ponderosa as well as other sorts of this class, there is a tendency to ripen unevenly. On account of its large size, very thick

meaty flesh, and extra fine flavor, it is most desirable for home use or selling on fancy fruit stands, and a fine sort for exhibition purposes at county fairs. Pkt. 5c, oz. 30c, $\frac{1}{4}$ lb. \$1.00, lb. \$3.50.

CRIMSON CUSHION. While not quite so large as Ponderosa and of different color, it is a little more prolific and especially desirable where red is preferred to the purple variety. It ripens evenly, is smooth in size, of uniform shape and of excellent quality. We consider the Stone a better yielding sort for general purposes, though Crimson Cushion grows larger size. Pkt. 5c, oz. 30c, $\frac{1}{4}$ lb. 90c, lb. \$3.00.

LIVINGSTON'S CORELESS. A globe-shaped scarlet variety of large size, full at the stem end, bright red, a strong grower and cropper. Outside walls are fleshy and thick, producing good, firm fruit. Very little seed cavity and comparatively no inner core. Splendid variety for slicing, but especially good for canning. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 75c, lb. \$2.50.

MATCHLESS. A splendid variety for main crop, producing large, red fruits, which ripen evenly and are very solid. It is a great favorite with private gardeners for main crop or late planting. Yields well and of good flavor. Excellent for canning. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

TRUCKER'S FAVORITE. A large, deep purple variety, producing uniform sized fruit, a little more oblong in shape than Beauty, being very deep from the stem to the bud ends. Largely used for main crop, producing enormous yields of large, smooth, solid fruits. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

BUCKEYE STATE. Color same as Beauty, being bright purplish-red, but producing larger size fruits. It is not so prolific, but on account of its large size is preferred by many growers. Very desirable for main crop or late planting. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 65c, lb. \$2.25.

DWARF STONE. The fruit resembles the Stone, being bright red in color, very smooth, solid, fine quality. The plant, however, is very much dwarfier, more stocky, growing like Dwarf-Champion, and requires very little staking. Splendid for early crop and forcing in green houses. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 60c, lb. \$2.00.

Acme. This has long been a favorite variety with truckers. The color is purplish-red, flesh fairly solid, with no core, and is a little earlier than Beauty. It has a tendency to crack sometimes after rain, but our stock of Acme is a selected strain, and will be comparatively free of this trouble. Fine for planting under glass, and a standard variety for early shipping. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

Improved Trophy. One of the first of the modern improved sorts, and one which has been popular for many years. Our strain of this is free from the rough ridges which were objectionable in the old Trophy, but still retains the characteristics which made this sort so popular. The fruits are very large, color rich, deep red, very solid, smooth, and of fine flavor. Pkt. 5c, oz. 15c, $\frac{1}{4}$ lb. 50c, lb. \$1.50.

Golden Queen, or Yellow Trophy. The best of the large yellow sorts, resembling the Improved Trophy in growth and shape, but of bright lemon yellow color. It ripens evenly, and is desirable for private use, forming a pretty contrast with the red sorts. Pkt. 5c, oz. 20c, $\frac{1}{4}$ lb. 50c, lb. \$1.75.

SMALL SORTS FOR PRESERVES AND PICKLES

Yellow Pear-shaped. A popular sort for preserving and pickling, probably the best sort for market for this purpose. Very prolific. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 75c, lb. \$2.50.

Yellow Plum. Not quite so large in size as Yellow Pear, producing oblong, plum-shaped fruits, ripening evenly, and most desirable for preserving. This is probably the largest yielding of all the small yellow sorts, and by many preferred to the pear-shaped variety. Pkt. 5c, oz. 25c, $\frac{1}{4}$ lb. 75c, lb. \$2.50.

TOMATO PLANTS in Season. Varieties: Dwarf Champion, Beauty, Ponderosa, and other sorts. Transplanted Plants, per dozen 20c to 25c. 100 and 1,000 prices quoted on application.

Turnip and Ruta-Baga Seeds

Improved Purple Top Globe Turnip.

One oz. will sow 400 feet of drill or 360 square feet (19x19). An acre requires 1½ lbs. in drill, 2 lbs. broadcast. For spring use sow in February or March. For fall and winter, from July to September.

For feeding to stock alone, the use of Turnips should be increased ten times as much as at present.

They cost so little to grow and make such a splendid and nutritious feed all through the winter that every farmer should provide a liberal supply for his stock. Our turnip seeds are noted for the fine roots produced. An acre of turnips yields 600 to 1,000 bushels per acre.

Culture.—Sow either broadcast or in drills two feet apart, thinning out to six inches and roll the ground after sowing. Ruta-bagas should be sown in July and early in August and earthed up as they grow. The salad turnips require three pounds per acre.

Ounces of all varieties, except Milan, each 5c, ¼ lb. 10c. By mail 12c ¼ lb.

If to be sent by mail add 8c per lb. postage.

WHITE FLESHED VARIETIES

EARLY RED OR PURPLE TOP (Strap-Leaved). Excellent for table or market. Per lb. 40c, 5 lbs. and over 35c per lb.

White Flat Dutch (Strap-Leaved). Similar to Red Top, except the top is white. Per lb. 40c, 5 lbs. and over 35c per lb.

WOOD, STUBBS & CO.'S IMP'D PURPLE TOP GLOBE. A greatly improved strain of the old Red Top Globe; small tops, very uniform and handsome roots. Per lb. 40c.

EXTRA EARLY RED TOP MILAN. The Milan Turnips unquestionably surpass any variety of turnips we have ever grown in flavor and table qualities. They are also remarkable for their quickness in growth, and are to be especially recommended as the best of the early turnips, either for the market or private garden. Oz. 10c, ¼ lb. 20c, lb. 60c.

LARGE WHITE NORFOLK. Largely grown for stock feeding, market, and salad. Lb. 35c, 5 lbs. and over 30c per lb.

White Egg. A pure white, rapid-growing, egg-shaped sort. Lb. 40c, 5 lbs. and over 35c per lb.

Long White Cowhorn. An excellent white table or stock feeding sort. Lb. 35c, 5 lbs. and over 30c per lb.

Southern Prize. Fine for stock or winter salad; hardy and needs no protection. Lb. 40c, 5 lbs. and over 35c per lb.

Seven Top. Grown only for winter salad. Very hardy. Lb. 40c, 5 lbs. and over 35c per lb.

Purple Top Yellow Aberdeen. A splendid stock feeding sort. Lb. 35c, 5 lbs. and over 30c per lb.

Large Amber or Yellow Globe. Excellent for general crop, stock or market. Lb. 35c, 5 lbs. and over 30c per lb.

RUTA-BAGA OR SWEDES

WOOD, STUBBS & CO.'S IMPROVED AMERICAN PURPLE TOP. For fine qualities and productiveness this can not be too highly recommended. The roots are finer and larger than the ordinary strains of ruta-bagas; the flesh is rich and sweet. Whether for table use or stock, it has no superior. Per lb. 40c, 5 lbs. and over 35c per lb.

SWEET POTATOES

Our seed is grown in Jefferson County, Ky. This county has a splendid reputation for producing the finest and best flavored sweet potatoes in the country.

Culture.—Put the potatoes into hot beds in April, covering with three inches of earth, and after they begin to grow, give plenty of air on sunny days and water regularly. In May or June set out in rows three feet apart and fifteen inches apart in the rows. The land should be plowed shallow in order to produce the short, chunky potato most largely in demand. Apply a fertilizer having only a small percentage of nitrogen and a large amount of potash, such as Acme Brand Potato Fertilizer.

We can supply the following varieties in April: Yellow Jersey, Nansemond, Southern Queens, White Yams, Bermuda, Red Jersey, and Red Nansemond.

Price of all varieties about 40c per peck; bushel and barrel prices quoted on application.

TOBACCO

Tobacco

KENTUCKY'S NOTED CROP

Our tobacco seed is carefully grown from the best types of the different varieties, is saved from crown shoots only, and will produce best results.

Culture.—Seed is sown in February in a plant bed which is protected with thin cotton cloth. About June 1st set in rich or highly-fertilized ground in rows three and a half by three feet. Cultivate often and worm and sucker as necessary.

One oz. sows 50 square yards, sufficient to set 2 to 3 acres.

Use Acme Brand Potato and Tobacco Fertilizer for this crop.

FINE BURLEY TOBACCO SEED. Carefully saved for us by one of the best growers in Kentucky, and of greatly improved type. Large, wide leaf, very porous, makes fine plug fillers and wrappers. Suitable for limestone soils.

White Burley. Pkt. 10c, oz. 30c, 4 ozs. \$1.00, lb. \$3.00.

Red Burley. Pkt. 10c, oz. 30c, 4 ozs. \$1.00, lb. \$3.00.

CIGAR TOBACCOS

Vuelta de Abajo. The finest, silkiest, and most highly flavored Havana. First crop seed carefully grown. Pkt. 10c, oz. 50c, ¼ lb. \$1.75.

Havana. A strain of Americanized Havana, good for cigars or smoking mixtures. Pkt. 10c, oz. 40c, ¼ lb. \$1.25.

Connecticut Seed Leaf. A quick maturing, stocky sort, leaves moderate length and of good width. Good for fillers. Pkt. 10c, oz. 25c, ¼ lb. 75c, lb. \$2.50.

SELECT VARIETIES

Pkt. 10c, oz. 25c, ¼ lb. 85c, lb. \$2.75.

Improved Yellow Pryor. Makes fine plug wrappers, cutters, fillers, and smoking tobacco. On rich land yields a heavy crop.

Improved Yellow Oronoko. Fine yellow wrappers and splendid for cutters or smoking.

Kentucky Yellow. A fine broad-leaf sort, suitable for strips, dark wrappers and fillers. Suitable for rich, alluvial soils.

Broad Leaf Gooch. A good variety for heavy mahogany wrappers as well as bright grades. Best suited to gray or sandy soils.

STANDARD VARIETIES

Pkt. 10c, oz. 25c, ¼ lb. 75c, lb. \$2.50.

One Sucker. A dark variety, leaves of fairly good breadth, long, good quality and color. Has few suckers and best suited for alluvial or red clay soils.

Big Oronoko. Broad, long leaf, of fine texture; dark color, good for fillers and strips for sun-cured tobacco.

Sweet Oronoko. One of the best for fillers, smoking, or home-spun twist. It cures a rich red; has a long narrow leaf.

Blue Pryor. A favorite heavy dark tobacco for black strips, wrappers, and fillers. Broad long leaves.

HERBS

AROMATIC, MEDICINAL AND POT

General Cultural Directions.—Sow in the early spring in rich, loamy soil and in shallow drills about 18 inches apart. Most of the seed should be sown in April and the larger growing varieties can be transplanted when large enough. Cut when in bloom, and let them wilt in the sun and thoroughly dry in the shade.

Packets of varieties, 5c each; 6 for 25c, 12 for 50c, postpaid.

Anise. Well known; has an agreeable aromatic odor and taste. Used for dyspepsia and colic, also garnishing. Thin out to three inches apart in a row. Pkt. 5c, oz. 10c.

Basil, sweet. Used for flavoring soups and sauce; has odor of cloves. Pkt. 5c, oz. 15c.

Dill. The seeds are aromatic and are used in soups, sauces, and pickles. Medicinally it is used for colic and flatulence. Added to pickled cucumbers it heightens their flavor and such pickles are known as "Dill Pickles." Pkt. 5c, oz. 10c, ¼ lb. 20c, lb. 65c.

Sage

Sweet Marjoram

Summer Savory

Thyme

Fennel. Leaves are largely used in soups, fish, sauces, and for salads. The seeds are sometimes used in confectionery. Pkt. 5c, oz. 10c, ¼ lb. 30c.

Lavender. Used to make lavender water, and when dry to perfume linen. Should be picked before becoming dry and hard, and dried quickly. Pkt. 5c, oz. 15c, ¼ lb. 40c.

Marjoram, Sweet. The tender tops used green or dry for flavoring and seasoning sausages and dressings. Thin out to ten inches apart. Pkt. 5c, oz. 15c, ¼ lb. 40c.

Sage. Broad-leaved English. Pkt. 5c, oz. 15c, ¼ lb. 40c, lb. \$1.25.

Summer Savory. Used extensively for dressing and soups. Pkt. 5c, oz. 10c, ¼ lb. 30c.

Thyme. Used both green and dry for soups, dressings, and sauces. Pkt. 5c, oz. 20c, ¼ lb. 60c.

GARDEN AND FARM CALENDAR

Information given here applies to Louisville and climate and location similar; for other sections allowances must be made according as they are early or later. Moon phases based on central time.

January | N. M. 7th 4.28 A. M. | 1st Q. 15th 10.02 A. M. | F. M. 22d 9.40 A. M. | L. Q. 29th 1.34 A. M.

Send order for seeds now, while stocks are full, so as to have them on hand as the sowing seasons come around. We can ship later if desired. Prepare hot beds, start in them early Cabbage, Lettuce, Radish, Beet, Cauliflower, Onion, and Pansy, and some other flower seeds which require transplanting. (See list under Flower Seeds.)

Outdoors.—As the weather will permit, prepare the ground for later crops. Top-dress Asparagus beds with manure and salt or kainit; mulch Strawberries with straw; prune trees and small bush fruits, haul leaves and compost them with manure. On late snows Clover and heavy Grass seeds can be sown on wheat or grass fields.

February | N. M. 5th 11.22 P. M. | 1st Q. 14th 2.34 A. M. | F. M. 20th 8.03 P. M. | L. Q. 27th 3.15 P. M.

If not already sown, start in hot beds or cold frames early Cabbage, Lettuce, Radish, Beet, Cauliflower, Onion, and flower seeds for transplanting; late in the month Egg Plants and Peppers. These require warmer beds than the other seeds mentioned.

Outdoors.—The last of the month, if favorable weather, sow early Peas, Spring Kale, Beets, Spinach, Carrots, Celery, Radish, and Parsley. Set Onion sets, Horseradish, Asparagus, and Rhubarb. Plant trees and bush fruits. Sow Blue Ribbon Evergreen Lawn Grass. Prepare and sow Tobacco beds. Towards the end of the month sow Canada Field Peas with Oats for early hay. Clover and Grass seeds can be sown this month, also Rape for grazing and soiling.

March | N. M. 7th 8.22 P. M. | 1st Q. 15th 2.58 P. M. | F. M. 22d 5.56 A. M. | L. Q. 29th 8.58 A. M.

Seeds for early plants can now be started in cold frames or window boxes instead of hot beds. Tender seeds, such as Egg Plants, Peppers, and tender flower seeds, require a little more heat.

Outdoors.—The sooner most hardy seeds are in, the better. We name them in the order in which they should be sown. Garden Peas in varieties for succession, Onion, Celery, Spinach, Leek, Parsley, Lettuce, Radish, Beet, Asparagus, Carrot, Parsnip, and Salsify. Plant Irish Potatoes, Asparagus, Rhubarb roots, and Onion sets if not already done. Set out Cauliflower, Cabbage, Onion, and Lettuce plants from hot beds after these have hardened by leaving the glass open at nights. Sow Herbs in a warm border. Sow Cabbage seed for summer crop. Sow the hardy kinds of flower seeds; also this is the proper month for sowing Lawn Grass.

For the Farm.—Winter and Spring Oats, Canada Field Peas, with Oats, Clover seeds, Grass seeds of all sorts, Tobacco seeds, should all be sown quickly. Plant Artichokes for hogs, sow Dwarf Essex Rape.

April | N. M. 6th 11.43 A. M. | 1st Q. 13th 11.39 P. M. | F. M. 20th 3.33 P. M. | L. Q. 28th 12.09 A. M.

Seeds that have not previously been put in as recommended in the preceding months can still be sown, except that instead of using hot beds for hardy sorts of plants, they can now be sown in beds in the open ground. Summer Cabbage, Lettuce, and Tomatoes should be sown for succession to follow the earliest sorts; likewise Beets, Radish, Peas. The first planting of Artichokes, Herbs, Corn, Snap Beans, and Okra can be made early this month, and Cucumber, Squash, Cantaloupe, and Watermelon the latter part, if the weather is favorable; otherwise defer until May. Cabbage, Lettuce, Cauliflower, Onion, and Beet plants, which have been started earlier, should be transplanted; also Strawberry plants set, as this is the best month. Sweet Potatoes can be put in hot beds previously used for Cabbage. Lawn Grass can still be sown, and all Clover and Grass seeds. Sow Mangel Wurtzel and Stock Beets. Plant Corn for early crop.

May | N. M. 6th 2.24 A. M. | 1st Q. 13th 5.45 A. M. | F. M. 20th 1.18 A. M. | L. Q. 27th 6.04 P. M.

This is the month for sowing most tender seeds out of doors, and all other seeds which were not sown previously can still be put in out of doors. If Cucumber, Cantaloupe, Watermelon, and Squash have not been planted, put them in as early as possible. Snap Beans for succession, Lima and Pole Beans, first planting should be made early. Cabbage seed for fall and winter use should be sown about the 15th; also Black-Eye Peas for winter use. Set out plants for Tomato, Pepper, Sweet Potatoes, and Egg Plant. Continue sowing flower seeds and plant bulbs.

For the Farm.—Sugar Beets and Mangel Wurtzel for winter feeding and stock can still be sown; also all Sorghums, Millet, Fodder Plants, Cow Peas, Soja, Navy, and Velvet Beans can be planted. Set out Tobacco plants latter part of the month. Keep down weeds and destroy the first crop of insects effectually.

June | N. M. 4th 1.57 P. M. | 1st Q. 11th 10.37 A. M. | F. M. 18th 11.54 A. M. | L. Q. 26th 11.41 A. M.

Set out Cabbage, Tomato, Egg Plant, Pepper, and Sweet Potato plants. Sow Tomato for late crop; likewise late Cabbage and Cauliflower for winter use. Plant Okra, Watermelon, Cantaloupe, Cucumber, Squash, and Pumpkin for late use, and Snap and Pole Beans and Sweet Corn for succession.

For the Farm.—Sow the Millets, Cow Peas, Sorghum, Soja Beans, Navy Beans, and plant late Corn. Mangel Wurtzel Beets can yet be sown for stock, but the seed should be soaked twenty-four hours before sowing.

July | N. M. 3rd 11.06 P. M. | 1st Q. 10th 3.37 P. M. | F. M. 18th 12.06 A. M. | L. Q. 26th 3.59 A. M.

Plant Snap Beans for succession and Sugar Corn for late roasting ears. Set out late Cabbage plants for winter use, likewise Celery plants. This is the best month to sow Ruta-baga, and they do best in rows. Plant Cucumbers for pickling and table, and late Potatoes for winter use.

For the Farm.—Sow German or Hungarian Millet for hay or fodder; likewise Corn in drills for ensilage or fodder. Buckwheat can be sown for bees as an improver of the soil, and for grain. Plant Navy Beans, Black, Black-eye, and Whippoorwill Peas. Sow Crimson Clover at the last working of Corn.

August | N. M. 2d 6.58 A. M. | 1st Q. 8th 10.03 P. M. | F. M. 16th 2.27 P. M. | L. Q. 24th 6.18 P. M.

Continue planting Snap Beans for the table and pickles. If any Cabbage plants remain unplanted, put out at once; likewise Celery plants. Trim off the tops of Celery before planting, if the plants are large. Sow Lettuce seed for fall use; likewise Endive. Sow Spinach and Kale. Finish sowing Ruta-baga seed. All kinds of Turnip seeds can be sown during this month. Crimson Clover is one of the best crops grown, and should be sown on every vacant place where crops have been cleared off; if it is not required for feed, it will improve the soil equal to manure when turned under.

For the Farm.—Buckwheat, Rye, and Barley should be sown for fall and winter grazing, and afterwards will make a crop of grain.

September | N. M. 29th 10.57 P. M. | 1st Q. 7th 7.06 A. M. | F. M. 15th 5.46 A. M. | L. Q. 23rd 6.30 A. M.

Our Fall Catalogue, issued about August 20th, gives full information about all seeds and bulbs for fall sowing; mailed free upon request. Sow Lettuce, put out Onion sets, sow Winter Radishes, Spinach, Turnips, Mustard, Corn Salad, and Kale. Dutch Bulbs, Hyacinths, Tulips, etc., can be planted toward the end of the month. Sow W. S. & Co.'s Evergreen Lawn Grass; nothing adds more to the attractiveness and beauty of a home than a nicely kept, green lawn.

For the Farm.—Sow Crimson Clover this month. Winter Oats will do well sown this month, as they will get well rooted before winter. Sow all kinds of Grass and Clover seeds and Winter and Sand Vetch. Continue to grow Barley and Rye, as they are useful for winter grazing as well as for grain.

October | N. M. 29th 8.29 A. M. | 1st Q. 6th 7.46 P. M. | F. M. 15th 12.07 A. M. | L. Q. 22d 4.53 P. M.

Put out Onion sets. Sow Turnips for salad, Kale, Mustard, Spinach, and Lettuce. Sow Lawn Grass seed. Fall seeding does better than spring seeding. Plant Hyacinths, Tulips, etc. Sow Pansy seed in cold frames for spring plants.

For the Farm.—All kinds of Grass and Clover seeds can be sown this month, but the earlier Clover seed is put in, the better. Sow Wheat, Oats, Rye, Barley, Vetches.

November | N. M. 27th 7.41 P. M. | 1st Q. 5th 12.34 P. M. | F. M. 13th 5.11 P. M. | L. Q. 21st 1.56 A. M.

Sow Lettuce and early varieties of Cabbage in cold frames, leaving the glass off at the time to harden them. Set out Cabbage and Lettuce plants. Lawn Grass seed can yet be sown, but the earlier it is put in, the better. All kinds of Flowering Bulbs set out in the fall can be put in this month.

For the Farm.—Wheat, Rye, Barley, Timothy, and Red Top seed can yet be sown, but the earlier they are put in, the better.

December | N. M. 27th 8.59 A. M. | 1st Q. 5th 8.59 h. M. | F. M. 13th 9.00 A. M. | L. Q. 20th 10.16 A. M.

The only seeding that can be done this month is in the hot bed or greenhouse. Cabbage and Lettuce can be sown towards the end of the month, and Beets, Radish, and Lettuce can be forced for winter use. The winter growing of Lettuce in hot beds usually proves very profitable and satisfactory.

Planting, Maturity, and Weight Table

This is for field planting, and where plants and roots are stated, it is necessary to have them ready beforehand. The third column indicates the distance that the plants should stand in the rows, and where seed is sown they should be thinned out to this distance. The fifth column indicates maturity from the time plants are planted in the field, or seed is sown in the field. Also note that the last column is the approximate weight of seeds and not products. Time of planting and maturity is for latitude of Louisville.

*Indicates that the crop can either be planted in the spring or fall; if in the spring, February to April; in the fall, August and September.

	Time to Sow or Plant	Distance of Rows Apart	Distance of Plants in Rows	Quantity per Acre	Ready to Use	Approximate Weight of Seeds per bu. in lbs.
Artichoke—Tubers	Mar. to Apr.	2½ ft.	2 ft.	6 to 8 bu.	Sept. to Oct.	50
Asparagus—Seeds	Mar. to Apr.	15 in.	4 to 6 in.	8 to 10 lbs.	3 years	60
Asparagus—Roots	Feb. to Mar.	6 to 8 ft.	12 to 18 in.	4,000 to 7,000	2 years	-----
Beans—Dwarf	Apr. to Aug.	2½ ft.	4 to 6 in.	1½ bu.	8 weeks	60
Beans—Navy	May to June	2½ ft.	6 in.	¾ to 1 bu.	Winter	60
Beans—Soja	May to June	Broadcast	Broadcast	1 to 1½ bu.	Fall and winter	60
Beans—Pole	May to June	4 ft.	3 ft.	½ to ¾ bu.	10 weeks	60
Beets—Table	Feb. to July	12 to 18 in.	4 in.	6 to 8 lbs.	1½ to 3 mo.	19½
Beets—Sugar	Apr. to June	2½ to 3 ft.	6 to 8 in.	5 to 6 lbs.	Fall and winter	19½
Buckwheat	June to Aug.	Broadcast	Broadcast	¾ to 1 bu.	Fall	50
Cabbage—Plants (early)	Mar. to Apr.	30 in.	15 to 20 in.	10,000 to 14,000	June and July	54
Cabbage—Plants (late)	July to Aug.	3 ft.	2 ft.	7,260	Fall and winter	54
Carrot	Mar. to June	1 to 2 ft.	3 to 4 in.	3 to 4 lbs.	45 to 70 days	28
Cauliflower—Plants	Mar. to Apr.	2½ ft.	2 ft.	8,000 to 10,000	3 months	54
Celery—Plants	June to Aug.	3 to 4 ft.	6 to 9 in.	15,000 to 30,000	4 to 5 mo.	37
Clover—Red and Sapling	*Feb. to Sept.	Broadcast	Broadcast	8 to 10 lbs.	Next year	60
Clover—Alsike	*Feb. to Sept.	Broadcast	Broadcast	5 to 8 lbs.	Next year	60
Alfalfa	*Mar. to Sept.	Broadcast	Broadcast	20 lbs.	Next year	60
Clover—Crimson	July to Sept.	Broadcast	Broadcast	12 to 15 lbs.	May 1	60
Corn—Garden	Apr. to July	3 to 3½ ft.	9 to 15 in.	4 to 6 qts.	2 to 3 mo.	44 to 50
Corn—Field (drills)	Apr. to July	3½ to 4 ft.	10 to 18 in.	6 to 8 qts.	3 to 4 mo.	56
Corn—Field (checked)	Apr. to July	3½ to 4 ft.	3½ to 4 ft.	4 qts.	3 to 4 mo.	56
Cucumber	Apr. to July	4 to 5 ft.	4 ft.	2 lbs.	2 to 2½ mo.	39
Egg Plant—(Plants)	May to June	3 ft.	2½ to 3 ft.	5,000 to 6,000	60 days	39
Endive	Aug.	18 in.	12 in.	4 to 5 lbs.	2 to 2½ mo.	26
Grass Seeds—(Light)	*Feb. to Oct.	Broadcast	Broadcast	1½ to 2 bu.	Next year	14
Grass Seeds—(Lawn)	*Feb. to Oct.	Broadcast	Broadcast	80 to 100 lbs.	8 to 10 weeks	20
Horseradish—Roots	Feb. to Mar.	2½ ft.	12 to 18 in.	12,000 to 15,000	6 to 8 mo.	-----
Kale—Spring	*Feb. to Sept.	Broadcast	Broadcast	6 to 8 lbs.	5 to 6 weeks	56
Kale—Winter	July to Sept.	Broadcast	Broadcast	3 to 4 lbs.	Fall to spring	54
Kohl Rabi—(Plants)	Mar. to Apr.	1½ to 2 ft.	10 to 12 in.	21,000 to 34,000	2½ to 3 mo.	56
Lettuce—Plants	*Mar. to Sept.	12 to 15 in.	6 to 8 in.	40,000 to 80,000	1½ to 2 mo.	35
Melon—Musk	May to July	4 to 6 ft.	4 to 6 ft.	2 lbs.	2½ to 3 mo.	32
Melon—Water	May to June	8 to 10 ft.	8 to 10 ft.	3 lbs.	3 months	35
Millet—German	May to July	Broadcast	Broadcast	1 bu.	6 to 7 weeks	50
Mustard	*Mar. to Sept.	Broadcast	Broadcast	4 to 5 lbs.	6 to 8 weeks	56
Oats—Spring	Mar. to Apr.	Broadcast	Broadcast	1½ to 2 bu.	July 1	32
Oats—Winter	*Feb. to Sept.	Broadcast	Broadcast	1½ to 2 bu.	June 20 to July 10	32
Okra	Apr. to May	2½ to 3 ft.	8 to 10 in.	8 to 10 lbs.	60 to 70 days	48
Onions—For large bulbs	Mar. to Apr.	12 to 14 in.	-----	4 to 5 lbs.	July to Aug.	39
Onions—For sets	Mar. to Apr.	10 to 12 in.	-----	40 to 50 lbs.	July	39
Onion Sets	Feb., Mar., Apr.	12 in.	4 in.	15 to 16 bu.	June	32
Parsley	Mar. to Apr.	12 in.	-----	15 lbs.	July	42
Parsnip	Mar. to Apr.	18 in.	4 to 6 in.	5 to 7 lbs.	Fall and winter	18
Peas—Smooth	Feb. to Mar.	2½ to 3 ft.	-----	1½ to 2 bu.	7 weeks	60
Peas—Wrinkled	Apr. to May	2½ to 3 ft.	-----	1½ to 2 bu.	7 to 9 weeks	56
Peas—Canada Field	Feb. to Apr.	Broadcast	Broadcast	1½ bu.	June 15	60
Peas—Cow	May to July	Broadcast	Broadcast	1½ bu.	3 months	60
Pepper—Plants	May 15	30 in.	15 to 18 in.	11,000 to 14,000	2 to 2½ mo.	28
Potatoes—(Early)	Mar. to Apr.	27 in.	10 to 12 in.	8 to 12 bu.	June to July	60
Potatoes—(Late)	July to Aug.	30 in.	15 to 18 in.	8 to 10 bu.	Oct. to Nov.	60
Sweet Potato—Plants	May 15	3 ft.	20 to 24 in.	7,000 to 8,000	Sept. to winter	45
Pumpkin	May	8 to 10 ft.	8 to 10 ft.	2 lbs.	Fall	24
Radish	Feb. to Aug.	10 to 15 in.	3 in.	8 to 10 lbs.	24 to 40 days	56
Rape	*Feb. to Sept.	Broadcast	Broadcast	6 to 8 lbs.	6 to 8 weeks	56
Rhubarb—Roots	Feb. to Apr.	4 ft.	2 to 3 ft.	5,000 to 7,000	Next year	-----
Rye	Aug. to Nov.	Broadcast	Broadcast	1 to 2 bu.	April 20	56
Salsify	Mar. to Apr.	1½ to 2 ft.	3 to 4 in.	6 to 8 lbs.	Fall and winter	18
Spinach—Early	*Feb. to Sept.	Broadcast	Broadcast	15 to 20 lbs.	8 weeks	48
Squash—Spring	May	4 ft.	3 ft.	3 lbs.	July	26
Squash—Winter	May to June	6 to 8 ft.	6 to 8 ft.	2 lbs.	Fall and winter	22
Teosinte	May to June	3 to 3½ ft.	8 to 10 in.	3 to 5 lbs.	Aug. to Oct.	46
Tobacco—Plants	May to June	3 to 3½ ft.	2½ to 3 ft.	4,800 to 5,000	Sept. to Oct.	35
Tomato—Plants	May to July	4 ft.	3 to 4 ft.	2,700 to 3,600	July until frost	20
Turnip	*Feb. to Sept.	Broadcast	Broadcast	1½ to 2 lbs.	1½ to 2 mo.	56
Vetch	Aug. to Oct.	Broadcast	Broadcast	50 lbs.	May	50
Wheat	Sept. to Oct.	Broadcast	Broadcast	1 to 1½ bu.	June 20	60

BLUE RIBBON FLOWER SEEDS

DISCOUNTS ON PACKETS. For 35c worth at packet rates remit 25c; 75c worth remit 50c; \$1.75 worth remit \$1.00. Prices per ounce and pound are NET, NO DISCOUNT.

Abbreviations and Cultural Information for Flower Seeds.

A—Annual. Lasts one year, producing flowers and seeds the first season. They sometimes come up year after year from self-sown seed. Among these are some of the most beautiful and showy flowers, and a selection of various sorts will give an uninterrupted succession and gorgeous display from early summer till frost.

B—Biennial. Lasts two years. Generally blooms the second season.

P—Perennial. Lasts three or more years, usually blooming the second season and continuing for years.

H—Hardy. Hardy annuals (H. A.) can be sown in open borders in March or April, thinning out or transplanting as necessary. Hardy Biennials (H. B.) and Perennials (H. P.) can also be sown at this time or later in the summer or fall. Started in the fall or very early in the spring they usually bloom the first season.

H. H.—Half-Hardy Annuals (H. H. A.), Biennials (H. H. B.), and Perennials (H. H. P.) require a rather longer time to establish themselves, and being more tender when young should, if wanted to bloom early, be started in the house or hot-bed. Out of doors they can be sown in the latter part of April or first of May. Most H. H. B. and H. H. P. started in the house bloom the first season.

T—Tender Annuals (T. A.), Biennials (T. B.), or Perennials (T. P.) require about the same treatment as H. H. Annuals, with more caution as to exposure, keeping in pots longer, and removing outside only when the weather is settled and warm.

Figures 1, 2, 3, are indicative of the seasons at which the plants usually bloom, viz.: 1, early in the summer; 2, about midsummer; 3, late in the summer and fall. Where the blooming season extends, two figures are used, viz.: 1-3, means from early in the summer till fall.

Ageratum Profuse blooming plants, bearing clusters of feathery blooms the whole summer. Excellent for cut flowers and fine for large beds in summer and as pot plants for winter. Height 2 feet. H. A.—2-3. Pkt.

Mexicanum. Light Blue. Per oz. 30c 5

Alyssum Well-known free flowering, pretty little plants for beds, edgings, or winter blooming. H. A.—1-3.

Sweet Alyssum. White, blooms in clusters. Oz. 25c 5

Amarantus A class of highly ornamental plants, many of which are grown exclusively for their handsome foliage, while others are equally desirable for their beautiful clusters of brilliant-colored flowers, which are very effective for autumn decoration. Transplant two feet apart in rather poor soil. H. H. A.—2-3.

Caudatus. (Love Lies Bleeding.) Long, drooping sprays of red flowers. Per oz. 20c 5

Tricolor. (Joseph's Coat.) Oz. 25c. Height 3 feet 5

Antirrhinum (Snap Dragon.) Well-known, showy, and useful border plants, producing flowers of a great variety of brilliant and handsome colors. Very effective in beds, succeeding in any good garden soil. Height 2 to 3 feet. H. P.—2 Blooms the first season.

Majus. Tall mixed. Per oz. 30c 5

Picturatum. Blotched and spotted, dwarf growing, mixed colors. Per oz. 40c 5

Antirrhinum.

Aquilegia (Columbine.) Useful early summer-blooming plants bearing odd and peculiar-shaped flowers. They grow 1 to 3 feet in height, the stems rising about 2 feet, and bearing fifty to eighty blossoms of various colors. H. P.—1-2. Pkt.

Double. Mixed colors. Per oz. 25c 5

Superb Asters Beautiful and popular annuals, desirable for beds, being in bloom when most other plants are nearly over. Very useful for cut flowers and bouquets. H. H. A.—2-3.

SEMPLE'S BRANCHING ASTERS. A beautiful strain of late flowering Aster, which bears on long stems perfectly formed double flowers 4 inches in diameter. 18 inches to 2 feet high.

Mixed Colors. ¼ oz. 25c, oz. 75c 05

Separate Colors. White, lavender, pink, crimson, and purple. ¼ oz. 30c, oz. 85c 10

VICTORIA ASTERS. For size, color, and profusion of bloom, this is probably the handsomest of all Asters. The colors include many delicate and some gorgeous shades; flowers double and 4 inches across, and 20 to 30 blooms to a single plant. 15 to 18 inches high.

All Colors Mixed. Per oz. \$2.00, ¼ oz. 40c 10

PEONY FLOWERED PERFECTION ASTERS. A splendid strain bearing large double flowers of perfect form. Splendid for bedding. Height 18 inches.

Mixed Colors. Per oz. \$1.25, ¼ oz. 35c 10

GERMAN QUILLED. (China Aster.) Many beautiful colors.

Choice Mixed. All the best colors. Oz. 40c 5

Semple's Branching Asters.

Marguerite Carnations.

Balsam (Touch Me Not, or Lady Slipper.) An old favorite, producing large masses of beautiful, brilliant-colored flowers in the greatest profusion. Rich soil is required for the finest blooms. H. A.—2-3.

Double Mixed. Finest strain, per oz. 50c..... 5
White Perfection. Double as a Camellia, $\frac{1}{4}$ oz. 40c, oz. 1.50..... 10

Calendula Showy free-flowering annuals of the Marigold family. Producing a fine effect in beds or mixed borders and bloom until frost. H. A.—2-3. Height 1 foot.

Mixed Colors. Yellow and orange. Oz. 20c..... 5

Calliopsis or Coreopsis Beautiful showy annuals, with large, bright flowers of golden yellow varied with rich brown. Excellent for cutting and decorations. Height 2 feet. H. A.—2-3.

Mixed Colors. Rich and showy. Oz. 20c..... 5

Lanceolata. Beautiful golden yellow perennial; unexcelled for borders; excellent for cutting. Oz. 75c..... 5

Candytuft Popular favorites, flowering profusely the whole summer. Very valuable for edgings and borders, fairly covered with masses of white and various colors. Height 1 foot.

Empress. A fine variety, bearing large trusses, pure white, fine for cutting or bedding. Oz. 25c..... 5
Mixed Colors. A splendid mixture. Oz. 20c..... 5

Mammoth Perfection Cosmos.

CARNATIONS

General favorites for their delicious clove fragrance and diversity of color. Excellent bloomers in the garden or for winter flowering. H. H. P.—1-2. Height 1 to 2 feet. Note.—To extend the life of carnation plants, keep blooms picked off.

Marguerite. Blooms four months after sowing. Flowers profusely. Colors range through various shades of red, pink, white, etc. $\frac{1}{4}$ oz. 40c..... 5
Mixed Colors. (German.) Oz. \$1.00..... 5

Canterbury Bells (Campanula.) Popular and beautiful hardy plants, bearing a great profusion of attractive bell-shaped flowers. Colors rose, blue, white, etc. H. B.—1-2. Height $2\frac{1}{2}$ feet.

Single Mixed. Oz. 30c..... 5

Celosia or Cockscomb Very showy plants bearing large ornamental, comb-like heads of various colors; excellent for beds or pot plants. H. A.—1-3.

Glasgow Prize. Dark foliage, immense showy dark crimson comb. One foot..... 10

Centaurea Cyanus

Centaurea Gymnocarpa. (Dusty Miller.) Silver foliage, delicately cut. Height, $1\frac{1}{2}$ feet. Excellent for vase or edgings of beds, etc. Oz. 60c..... 5

CENTAUREA CYANUS. Corn Flower—Ragged Robin. H. A.—1-2. A beautiful strain of the popular Corn Flower, comprising lovely shades of blue, rose, purple, and white flowers. Excellent for cutting.

Mixed Colors. Oz. 20c..... 5

Coleus Popular foliage plants for bedding, edgings, and ribbon gardening. Although perennials, they will attain perfection the first season from seed sown early in the house.

Mixed Colors...... 10

Cosmos Cosmos are of easy culture, and are almost indispensable for cutting and garden decorations, their lovely blossoms being produced in greatest profusion after most other flowers have succumbed to frost. H. A. Height 4 to 6 feet.

EARLY FLOWERING. This is a very desirable sort, which begins to bloom early in July, gradually increasing in number of flowers until the plant is a mass of bloom, and continuing till frost. The individual flowers are not as large as Mammoth Perfection.

Mixed Colors. Oz. 50c..... 10

MAMMOTH PERFECTION COSMOS. The flowers are double the size of the old, larger flowering Cosmos, measuring from three to four inches across. The petals are large, overlapping, forming perfectly round flowers, deeply ribbed, and of good substance.

Mixed Colors. Oz. 25c..... 5

Separate Colors. White, crimson, and pink. $\frac{1}{4}$ oz. 15c, oz. 40c..... 5

Delphinium (Perennial Larkspur.) Splendid, hardy plants, with beautiful graceful spikes of flowers of many exquisite shades. They are invaluable for permanent beds and borders, or in the corners or edges of the garden. Sow in the fall or early in the spring outdoors; they bloom in the succeeding summer. H. P.—2-3.

Elatum Hybridum, mixed colors; very showy. Oz. 40c..... 5

BLUE RIBBON FLOWER SEEDS—Continued

DISCOUNTS ON PACKETS. For 35c worth at packet rates remit 25c; 75c worth remit 50c; \$1.75 worth remit \$1.00. Prices per ounce and pound are NET, NO DISCOUNT.

Nasturtium.

Dianthus, or Pinks

Chinese fl. pl. Double China or Indian Pink. Our mixture of this strain is extra fine, and contains a large variety of colors. Oz. 30c.....	Pkt. 5
Heddewigii fl. pl. Double Japan Pink. The flowers are large and of the brightest colors. Mixed colors. Per oz. 50c.....	5
Heddewigii. Beautiful rich colors. One of the finest annuals for show and cutting. Per oz. 50c.....	5
Finest Single Mixed. Per oz. 50c.....	5
Eschscholtzia (California Poppy.) Showy, free-blooming plants for bedding. Flowers are of extremely rich and beautiful colors. Height 1 foot. H. A.—1-3. Mixed Colors. Per oz. 20c.....	5
Forget-me-not (Myosotis.) Popular; charming little plants, bearing delicate blue flowers. H. H. P.—1-2. Alpestris. A dwarf blue free-flowering sort. Oz. 65c....	5

Gaillardia.

Gaillardia

Desirable bedding plants and excellent for cutting. Flowers are of brilliant and showy colorings. H. A.—1-3. Mixed Colors. The most varied colors. Oz. 25c....	5

Globe Amaranth

(Bachelor's Buttons.) Well-known popular everlasting, which form bushy plants about two feet high, and bearing sometimes hundreds of flowers. Excellent as border plants, and very useful for winter decoration. H. H.—2-3.

Mixed Colors, white, purple, striped, etc. Oz. 25c.....	5
Heliotrope Well-known deliciously fragrant plants, useful for bedding or pot culture. They can be raised from seed easily, blooming the first season. T. P.—1-3. Height 3 feet. Mixed Colors. All shades; a pleasing mixture. Lemoine's Giant. A new strain, bearing immense flowers, often measuring 10 to 15 inches across.....	5
Hollyhock Stately and showy early blooming plants. Flowers of great variety of colors. Perfectly hardy, and blooming year after year when once planted. H. P. Sow in May or June. Double, Mixed Colors. Per oz. 75c.....	10
Lobelia Profuse blooming little plants, of great value for edgings, hanging baskets or vases. H. H. P., blooming first year. Should be started in boxes. Crystal Palace. Dark blue. Fine.....	10
Marvel of Peru (Four o'clock.) Well-known and popular flowers, open only in the evening or on cloudy days. H. H. B. Blooms first season. Mixed Colors. Oz. 15c.....	5

Marigold Easily grown and useful garden plant. The African are tall growing, and most striking in large beds, while the French varieties are dwarf and best adapted to small beds, or as a foreground to taller plants. H. A.—2-5. French Gold Striped. Rich maroon, striped with golden yellow. Very free flowering. Oz. 40c.....	Pkt. 5
Eldorado. Colors from pale yellow to deepest orange; very double and large. Oz. 40c.....	5
Mignonette A universal favorite on account of its delicate fragrance. Good for pots or garden. Sow the seed at intervals throughout the summer for a succession. Machel. Bears massive spikes of very fragrant red flowers. Oz. 40c.....	5
Sweet. Large flowering; fragrant. Oz. 20c.....	5

NASTURTIIUM

TALL SORTS

Large Dark Crimson. Showy flowers. Oz. 15c.....	5
Tall Mixed. ¼ lb. 35c, oz. 15c.....	5
DWARF, OR TOM THUMB VARIETIES	
Empress of India. Has dark tinted foliage, while the flowers are of the most brilliant crimson color. Per oz. 20c.....	5
Pearl. Pure white flowers, fine for contrast. Per oz. 20c.....	5
Golden King. Golden yellow flowers. Per oz. 20c.....	5
King of Tom Thumbs. Scarlet; dark foliage. Per oz. 20c.....	5
Spotted. Beautifully blotched. Per oz. 20c.....	5
Rose. Soft pink; very distinct. Per oz. 20c.....	5
Dwarf Mixed. ¼ lb. 35c, oz. 15c.....	5

Imperial Pansy.

Pansies Our pansy seeds are saved from plants selected for the beauty and quality of their blooms, and are unsurpassed. For best results sow in rich soil in a sheltered location, and water freely. Seeds sown early in the spring will produce blooms in the summer, but not as large as if sown in the fall. Wood, Stubbs & Co.'s Imperial. This strain is unequalled for its varied and beautiful colors. ¼ oz. \$1.00, oz. \$6.00.....	10
Large Flowering Mixed. Embrace most of the standard varieties; very showy. Per ¼ oz. 25c, oz. 75c.....	5
Petunia One of the best plants for bedding, the flowers being large, of brilliant colors, and borne in great profusion. H. H. A.—2-3. Height 1½ to 2 feet. Mixed Colors. A choice mixture, including many large flowering sorts. ¼ oz. 25c, oz. 75c.....	5
Phlox Drummondii One of the prettiest and most popular of garden annuals. Makes very attractive beds, and continues in bloom throughout the summer. Sow in April in open ground, or can be started earlier indoors. Star and Fringed. Dwarf growing varieties, bearing brilliant fringed and star-shaped flowers. Exceedingly pretty. Mixed colors.....	10
Large Flowering Mixed. Fine colors and shadings. Oz. 50c.....	5

BLUE RIBBON FLOWER SEEDS—Continued

DISCOUNTS ON PACKETS. For 35c worth at packet rates remit 25c; 75c worth remit 50c; \$1.75 worth remit \$1.00. Prices per ounce and pound are NET, NO DISCOUNT.

Poppies Hardly any class of plants afford the same brilliant colorings and showy display. Very easy culture, the seed being sown where they are to bloom.

PERENNIAL POPPIES H. P.

Oriental. One of the grandest of all poppies. A rich dark glowing crimson, the foliage very rich dark green. Magnificent.

Iceland Poppies. Flowers resemble crushed satin, and plants will continue to flower for three or four years after sown. Mixed colors.

SINGLE ANNUAL POPPIES

Tulip. Large, bright scarlet flowers, which are so dazzling in appearance as to remind one of a bed of scarlet Tulips.

Shirley. These beautiful Poppies are very free-flowering and remarkably brilliant colors from pale rose to deep crimson. Delicately edged and fringed. Mixed colors. Per oz. 25c.

DOUBLE ANNUAL POPPIES

Cardinal. The plants grow about 18 inches high, bearing large, very double flowers, of glowing scarlet, a striking contrast with the deeply cut dark green of the foliage.

Peony Flowered. Splendid, large and very double flowers in finest mixed colors. Per oz. 20c.

Portulaca (Moss Flowers.) Succeeds best in a sunny situation, and produces flowers of almost every color, in the greatest profusion. The double is especially beautiful and showy. T. A.—2-3. Height 6 inches.

Single Mixed. Per oz. 40c.

Double Mixed. Produces gorgeous masses of color.

Ricinus (Castor Oil Plant.) Luxuriant, rapid-growing annuals, with palm-like leaves. Excellent for background or centers of beds of foliage plants. H. H. A.

Zanzibariensis. Bears gigantic leaves, 2 to 2½ feet across, of various colors, green, coppery brown, purple, bronze, etc., the stems from pale green to various shades of red. Exceedingly handsome. All colors. Per oz. 20c.

Mixed Varieties. A mixture of the best sorts. Per oz. 15c.

Salvia Brilliant flowers are borne in profusion from early summer till frost. Excellent for cutting. Seed sown early, in the house, produces better plants than from cuttings. H. H. P.—1-3. Height 3 feet.

Splendens. (Scarlet Sage.) The brilliant scarlet variety so well known. Per ¼ oz. 50c, oz. \$1.50.

Scabiosa The old and well-known Sweet Scabious is not cultivated as much as it deserves. They bear large, perfectly double flowers of many beautiful colors, on long, graceful stems, and are excellent for cutting. H. A.—2-3. Height 1½ feet. Per oz. 30c.

SCARLET SAGE. See *Salvia Splendens*.

Zinnias.

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WILMORIN-ANDRIEU
1893

Ten Weeks Stock (Gilliflower.) Desirable for bedding or pot culture. They bear an immense quantity of fragrant blooms, each plant forming a perfect bouquet, and are splendid for cutting. H. H. A.—1-2.

Dwarf German Mixed. Per oz. \$1.00.

Sweet William A beautiful class of hardy, free-flowering plants of extreme richness and diversity of color. Produces a fine effect in beds or mixed flower borders. H. B.—2-3.

Single and Double Mixed. Many bright colors. Oz. 40c.

Sunflower Luxuriant growing plants for centers of beds or backgrounds for other plants. H. A.—2-3.

"Stella." A miniature Sunflower covered with hundreds of small, bright orange, single flowers. Of dwarf pyramidal growth. Fine for bedding and cutting. Oz. 50c.

Double Californian. Double yellow variety, growing 3 to 5 feet high. Per oz. 15c.

Mammoth Verbena.

Verbena Splendid for beds or massing. Flowers of most brilliant colors, blooming from early summer till late in the fall. Verbenas grown from seed are always thrifty and do not rust. Sow early in house, or out of doors in April. H. H. P.—1-3.

New Mammoth. This strain produces blooms of largest size and most brilliant colors. The trusses are uniform, bearing unusually large flowers in a wide range of colors. Per ¼ oz. 35c, oz. \$1.00.

Mixed Colors. A splendid mixture from named sorts, comprising rich, beautiful colors. ¼ oz. 35c, oz. \$1.00.

Separate Colors. White, pink, scarlet, and purple. ¼ oz. 40c, oz. \$1.25.

Vinca Splendid bedding plants withstanding heat and drought; have dark rich glossy green foliage. Bear large pink and white single flowers in greatest abundance. T. A.—2-3. Height 3 feet.

Mixed Colors. Per ¼ oz. 25c, oz. 85c.

VIOLETS. Favorite little plants, producing flowers of most delightful fragrance, popular with every one. Sow seed in March or April in beds and transplant.

Mixed Colors. Sweet scented.

WALLFLOWER. Well-known, hardy plants, producing fragrant flowers of various colors. Blooms early in the season. H. P.—1.

Single Mixed. Oz. 35c.

Zinnias For gorgeous summer and fall display the Zinnia is unsurpassed. The flowers are perfectly double, resembling Dahlias, and almost every shade of color. For bedding and massing, they are particularly suitable. H. A.—2-3.

Large Flowering Double Mixed. Oz. 40c.

SWEET PEAS

CROP SHORT

Postage 8c lb. extra.

Plant early in February, weather permitting, in a situation not too sunny, putting the seed 3 to 4 inches deep to insure good roots. Sowing may also be made in October, giving the plants slight protection during the winter.

Countess of Spencer Type

This new strain is very popular as they produce flowers usually from one-quarter to one-half again larger than the old type of sweet peas, besides the standards and wings are fluted and gracefully formed, thus the appropriate name of Orchid Flowered Sweet Peas. Our stocks are true selected type, and as they are not as free flowering as the old-fashioned sweet peas, are consequently higher in price.

NAMED SORTS. Prices, all varieties, pkt. 5c, oz. 15c, ¼ lb. 50c, lb. \$1.50.

ASTA OHN. Soft lavender, suffused mauve, flowers large size, very wavy and fluted.

KING EDWARD SPENCER. Bright crimson, very large, handsome and exceedingly free flowering.

OTHELLO. Deep glossy maroon, wavy and fluted, very handsome.

BURPEE'S PRIMROSE SPENCER. Cream-yellow shade very handsome.

MRS. A. IRELAND. Buff ground, suffused with rose, one of the finest.

CAPTAIN OF THE BLUES. Standard light maroon, wings light purple, fluted, large and handsome.

25 SELECT NAMED SWEET PEAS

Price, all Varieties, oz. 5c., 1-4 lb. 20c., lb. 60c.

If by mail add 5c. per lb.

Colors:

White—Blanche Burpee. Pure white, of largest expanded form and great substance. Free-flowering in clusters of three to four on long stems.

Emily Henderson. Fine white; not quite so large as the above, but a little earlier. Robust growth.

Yellow—Mrs. Eckford. A large, perfectly-formed flower of beautifully shaded primrose yellow.

White and Pink—Triumph. Large size, grand flowers, and most beautiful coloring. Color white, suffused with salmon pink and tinted with carmine at the base. Wings delicately veined with carmine.

Apple Blossom. Heavily shaded and edged with deep pink on silvery white ground.

Dainty. Beautifully formed large flower, when first opening are white, but change quickly to white with pink edge. A charming sort.

Rose Pink—Katherine Tracy. Splendid, large, open flower, good substance and color, a vigorous grower and free bloomer.

Venus. Rich delicate blending of rose, salmon, and buff; flowers medium size and finely formed. A very vigorous grower; blooming abundantly.

White, with Red and Rose Standards—Blanche Ferry. Deep pink standards, bluish white wings. Very profuse bloomer.

Extra Early Blanche Ferry. A selection of the above, being the earliest variety grown. Dwarf, compact habit, free-flowering.

Deep Pink—Prima Donna. A large, perfect flower, of elegantly hooded form and finely proportioned stems of three to four flowers.

Colors:

Lavender or Mauve—Celestial. Delicate lavender blue, wings silvery lavender. Finely formed shell-formed flowers. The best of this color.

Countess of Radnor. Bluish mauve shading to reddish tinge; vigorous in growth.

Admiration. Very light rosy lavender.

Lady Grisel Hamilton. Standard light lavender with azure blue wings. Pretty and dainty.

Heliotrope—Emily Eckford. Superb large flowers, standard rosy heliotrope, wings blue. The flowers assume darker shade with age.

Blue—Navy Blue. The richest and most distinct shade of blues. Vines vigorous and very productive.

Captain of the Blues. Standard purplish blue, wings light blue. Large expanded flowers, and the nearest approach to a true blue.

Orange Pink—Miss Willmott. Splendid rich orange-pink delicately shaded rose; wings also orange-pink.

Magenta—Captivation. A deep magenta, very pretty and good color.

Rosy Carmine—Prince of Wales. Deep rose tinted flowers, beautifully hooded. An improved "Her Majesty."

Scarlet—Mars. One of the best and largest scarlet flowers, of good substance and free-flowering.

Firefly. The richest and best of all scarlets. Bold, expanded flowers.

Scarlet Gem. Beautiful, bright, clear, dazzling scarlet.

Maroon—Othello. One of the best deep maroons.

Sweet Pea Mixtures

Wood, Stubbs & Co.'s Special Mixed. Composed of the best large flowering sorts and combining the best colors in proportions. Oz. 5c, ¼ lb. 20c, lb. 60c.

Countess Spencer Mixture. Composed of over 40 of this popular type in choicest mixture. Pkt. 5c, oz. 10c, ¼ lb. 25c, lb. 75c.

Good Mixed Sweet Peas. A good mixture of older varieties containing all colors. ¼ lb. 15c, lb. 40c.

GENERAL LIST OF CLIMBERS

This list comprises only varieties which attain perfection the first season. Some few of them require starting in the house, but the majority of them can be sown where they are to grow.

AT PACKET RATES, 35c worth for 25c; 75c worth for 50c; \$1.75 worth for \$1.00.

Balloon Vine (Love in a Puff.) Very pretty and rapid-growing climbers, with inflated seed pod shaped like a balloon. Has small, white flowers, produced in abundance, which makes it very attractive. Height 10 feet. H. H. A. Oz. 20c.. 5

Balsam Pear A very desirable climber, bearing large, prickly, pear-shaped yellow fruit, the flesh of which, when kept in whisky or alcohol, makes a most effective pain-killer and healer of cuts, bruises, etc. Height 10 feet. H. H. A. Oz. 40c ----- 5

Cobaea Scandens One of the finest of our summer climbers, with fine foliage and large, bell-shaped purple flowers. It grows very rapidly, often attaining a height of 20 to 30 feet, and spreading out correspondingly. In sowing, place the seed edgewise and cover lightly. Start in house and transplant in May. H. H. F. ----- 10

Cypress Vine One of the prettiest climbers in cultivation. To secure the best results sow the seed thickly so as to make a thick growth. Sow middle of April. Height 10 feet. Mixed Colors. White and scarlet. Oz. 25c ----- 5

Dolichos (Hyacinth Bean.) Annual climbers of rapid growth, bearing large clusters of purple and white flowers, which are followed by bright purple pods. Oz. 20c ----- 5

Gourds

Small Sorts Mixed. Oz. 25c ----- 5
Dipper. Oz. 25c ----- 5
Dishcloth. Oz. 35c ----- 5
Sugar Trough. Oz. 25c ----- 5

Evening Glory or Moon Flower

Beautiful rapid climbers, bearing large, white flowers, 4 to 6 inches in diameter, which open in the evening and on cloudy days. Start in the house and transplant when the weather is warm. Before planting, it is best to file a small hole in one end through the outer hull and soak for thirty-six hours in warm water.

Impomea Hybrida. This has all the luxuriance of the original Moonflower, and blooms quite as abundantly, but it has the further advantage of blooming much earlier. Vines grow 40 to 50 feet. Oz. 75c ----- 10

Japanese Morning Glories.

Morning Glories

Imperial Japanese Morning Glory. One of the grandest of all climbers. They are all shades, from pink to the most brilliant crimson and maroon; blue, from pale lavender to royal purple; also white, yellow, bronze, striped, blotched, and spotted. Sow in a warm, sunny situation, in good, rich soil, giving plenty of water in dry weather. Oz. 30c ----- 10

Brazilian Morning Glory. (Impomea Setosa.) A very vigorous and luxuriant annual. The vines grow 30 to 40 feet high. The flowers are from 3 to 4 inches across, and of a beautiful rose color. The plant is covered with short, reddish hairs, which, with its immense leaves and large clusters of curious seed pods, renders it very ornamental and of tropical aspect. T. P. ----- 10

Convolvulus Major. (Morning Glory.) Mixed colors. Oz. 15c, ¼ lb. 40c ----- 5

LIST OF HARDY CLIMBERS

These are perennials, and while most of them do not make much growth the first year, attain perfection in after years and last indefinitely.

AMPELOPSIS VEITCHII (Boston Ivy). One of the most satisfactory creeping vines for covering walls, trees, pillars, etc. It is a rapid grower, beautiful star-shaped foliage of light and dark green changing with the seasons. This vine clings to its support by throwing out small round feelers which flatten out to discs and hold tenaciously. Pkt. 10c, oz. 50c, lb. \$5.00.

CLEMATIS FLAMMULA (Virgin's Bower). A small leaved variety of the Clematis family which grows very quickly, and is covered with small star-shaped white blossoms which are very fragrant. Most excellent for trellises, bowers, summer houses, and very pleasing where loose hanging vines are desired. Pkt. 10c, oz. 30c, lb. \$3.00.

WISTARIA, CHINESE. A well-known quick-growing climber bearing large pendulous panicles of white and light blue flowers, which are very fragrant and sweet scented. Grows to immense height and excellent for porches or training up old trees. Pkt. 10c, oz. 75c, lb. \$6.00.

BLUE RIBBON *SUMMER FLOWERING* BULBS AND ROOTS

Gladiolus.

These are planted in April if warm enough, or in May in beds by themselves or with other flowering plants. In September or the first of October take up the bulbs, put in paper bags and store in a dry, cool place where they will not freeze. Then replant again the following season.

GLADIOLUS

One of the most attractive of all summer flowering bulbs. Excellent for mixed borders, but more gorgeous effects may be had by massing in large clumps. For a succession of bloom throughout the summer, plant at intervals from April to June.

If by mail add 10c per dozen for postage.

	Each	Per doz.	Per 100
Scarlet and Crimson.....	\$0 04	\$0 25	\$1 75
White and Light.....	04	30	2 00
Pink Shades.....	04	30	2 00
Striped and Variegated.....	04	35	2 50
Yellow.....	05	60	4 00
Superfine Mixed.....	04	25	1 75
All colors Mixed, 3 for 10c.....		20	1 50

MADERIA VINE ROOTS

On account of its very rapid growth and thick shade it affords, this is one of the most popular climbers. Will run twenty feet or more.

5c each, 25c per doz., \$1.75 per 100. If by mail add 10c per dozen for postage.

CALADIUM ESCULENTUM

(ELEPHANT'S EARS)

Caladiums are among the most striking of the ornamental foliage plants either for pot or lawn planting, of easy culture, and can be grown in any good garden soil. A full-grown plant will stand about 5 feet high. During the winter the roots should be packed away in dry sand.

Extra Large Bulbs 15c each, \$1.50 per dozen. First Size Bulbs 10c each, \$1.00 per dozen. If to be sent by mail add 8c each extra for postage.

TUBEROSE BULBS

Tuberose prefer a strong, rich, warm soil. If by mail add 10c per doz.

EXCELSIOR PEARL. A short, robust variety, producing immense spikes of perfectly double flowers. As we handle immense quantities of these we are able to make prices low.

Large Bulbs. 5c each, 30c doz., \$1.75 per 100.

Caladium Esculentum.

OUR CATALOGUE OF BULBS FOR FALL PLANTING, giving descriptions, methods of planting, etc., of Hyacinths, Tulips, Crocus, Narcissus, etc., is ready in August. If you desire a copy, kindly write us.

BLUE RIBBON RECLEANED GRASS AND CLOVER SEEDS

VALUE in grass seeds depends on three things, **Quality, Germination, and Purity.** Seeds may be clean but of inferior quality from immaturity or size, therefore a high purity test does not always mean good value. Purity can be readily determined by analysis; Germination by actual sprouting of the seeds, but Quality only judged by competent experts.

OUR FACILITIES

We are better equipped to supply high-grade Grass, Clover, and Field seeds at lower prices than any other firm in the United States. We do not state this egotistically, but state facts as follows:

Our central location in the grass-seed-producing sections enables us to purchase from first hands to the very best advantage, and our railroad warehouse containing space for 400 cars is amply equipped with labor-saving devices for unloading from cars, automatic weighing, sacking, loading, besides having the most complete recleaning plant in the United States.

We maintain in our buildings a complete laboratory, in charge of a graduated and competent Seed Analyst, for rigid and thorough testing for purity and germination, and our **Blue Ribbon Brands** are of finest quality, highest purity, and best germination.

Successful Grass Growing

PREPARATION. Too much stress can not be laid on thorough preparation of soil if the largest and most successful crops are to be produced. Foul land would be better if put in some grain crop or millet at first for smothering out weeds. Thorough plowing and repeated harrowing will pay handsomely, and no matter if it does take a little more expense, the results will justify in many times increased returns.

FERTILIZERS. Commercial fertilizers, either raw bone or mixed goods, provided they are of high analysis, give good results on grasses. Danger of weeds is eliminated and increased yield will be produced for years. Two hundred to 400 lbs. can be applied when seed is sown, harrowing in with the seed, and beneficial results will be obtained with a top dressing of 100 to 200 lbs. per acre on old meadows or pastures, for improving the yield.

SOWING. Sowing can be done either in spring or fall. If in the spring, February and March are best for the Middle States, and April for Northern latitudes, and sowing can be done in nearly all the summer months in extreme Northern States. Fall sowing in middle latitude is best in August and September, many farmers sowing in October, when fall grain is sown. In the Southern States grasses are sown in most of the winter months, and clovers after danger of freezing. The seed can be sown with a drill running shallow, or with a rotary seeder, wheelbarrow seeder, or by hand. Mark off the land in a width that can be conveniently sown, dividing the seed for such portion, sowing one half in going one way over the portion of the land, then returning the same way sowing the other half, so that it is spread uniformly all over the field. Cover grass seeds about one-half inch deep; clover and heavy seeds one inch. Always roll after covering.

CARE OF MEADOWS. After grass is well sown, usually no further care is necessary until cutting. If bare spots appear, a little more seed can be scattered over them, and in poorer spots in the field more fertilizer applied. A little watching in this respect will make an even, regular crop. Timothy meadows or mixtures should never be pastured. The tramping of cattle will kill this out very quickly, and where mixtures of Timothy and other grasses are used for hay, stock should not be allowed on it until thoroughly well established. It is far better to mow off the first crop where practicable and turn stock after the second growth has started well.

Renovation of old, worn-out pastures is sometimes practiced by harrowing over and sowing more seed and fertilizing. Sometimes, also, in hard-packed soils, deep furrows are plowed at an interval across the field to break up the hard soil underneath, and allow moisture to rise from the lower strata. As a general rule, it is better to break up any meadow or pasture which is not yielding as it should, cultivate thoroughly, sow in a grain crop or plant in corn, then thoroughly pulverize again and reseed, fertilizing heavily. If all of it can not be done at once, take part at a time, and when the new pasture is ready, one-fourth of the amount of the pasture properly sown will usually yield as much grass as the whole in its worn-out condition.

Greene County, Snow Hill, N. C., January 18, 1912.

We bought of you last year ten bushels of Winter Turf Oats, and sowed them here as late as December 28th beside of three other kinds, and will say your Winter Turf Oats doubled either of the other kind. We shall continue sowing your Winter oats.

T. TYNDALL & CO.

GENERAL LIST OF GRASS SEEDS

MARKET CHANGES. Prices on all grass seeds this season are very much lower than they have been for the past two or three years. Clover seed due to unfavorable season is again high and good qualities especially are hard to obtain. The prices given here are for January 1st and are subject to market fluctuations. We will take pleasure in quoting special prices at any time, and if orders are entrusted to us they will be filled by us at the lowest price on the day received.

ORCHARD GRASS (*Dactylis Glomerata*). Called **Cocksfoot** in Europe and **Dog's Foot** in some sections. This grass grows luxuriantly on upland, loamy, or moderately stiff soils, and it will do well on all soils not water-sogged. We have seen fine crops on low flat lands and equally luxuriant growth on hilltops. It starts very early in the spring, produces luxuriant growth, can be pastured until April, the cattle then being removed and hay crop cut, then immediately pastured again, or left for a second crop of hay. Grows 3 to 5 feet in height, ready to cut three weeks ahead of Timothy, and is not nearly so exhaustive to the soil. If cut in bloom it yields a large crop of very fine nutritious palatable hay, though if allowed to get a little old the stalks become hard and woody and much of its value is lost. Crops of five or six tons of fine hay, besides 11,000 to 12,000 pounds of green forage, have been frequently made.

Seed should be sown thickly for best results. Close cutting and hard pasturing seem beneficial, as it has a tendency to grow in clumps or stools. For this reason a mixture with other grasses, such as Tall Meadow Oat, Red Top, Kentucky Blue, are desirable, especially for pasture. When sown alone 2 to 3 bushels is best for hay, $1\frac{1}{2}$ to 2 bushels for pasture, and $\frac{3}{4}$ to 1 bushel for seed; 5 or 6 pounds of Red Clover is usually sown with it, for as the first year the clover increases the crop of hay, afterwards as this dies out the Orchard supersedes it. Present price, **Blue Ribbon Brand**, per lb. 15c, \$1.35 per bushel (14 lbs.); 5 bushels and over \$1.30 per bushel. Current prices on request.

Orchard Grass.

TALL OAT GRASS. (*Avena Elatior*). Also called **Evergreen** in some sections. This important grass is suitable to nearly all upland soils, growing well even where sandy, makes thick, luxuriant growth, splendid for grazing, and if cut at the proper time, yields large crop of good, nutritious hay. It grows 3 to 5 feet in height, ripens about the same time as Orchard Grass, has a large amount of leaf growth, and is fine for sowing in connection with it for hay or pasture. Tall Oat Grass does not have the tendency to grow in

clumps as does Orchard Grass, it makes an even stand of grass, and if used in combination with it fills in the spaces or bare spots which are sometimes produced in an Orchard Grass field not receiving proper attention. Tall Oat Grass has great power to withstand the heat and drought of midsummer as well as the cold weather of winter. Can be pastured very early in the spring, continues to give good grazing until late in fall, and for hay can be cut twice in the season, yielding considerably larger crops than Timothy. Its nutritive qualities are first class. Should be cut when in full bloom, as if it gets too old it becomes unpalatable to some extent. It should enter into a combination of hay or pasture in all mixtures for this purpose. If sown alone use 2 to 3 bushels per acre. A suitable mixture will be found in No. 1 and No. 2 Mixtures. Weight 11 lbs. per bushel. Present price, **Blue Ribbon Best Grade**, per pound 20c, \$1.65 per bu. (11 lbs.), 5 bushels and over at \$1.60 per bushel. Special market prices on request.

Tall Oat Grass.

KENTUCKY BLUE GRASS (*Poa Pratensis*). Also called **June Grass**, **Green Meadow Grass**, etc. This famous grass is well known in all sections and where the land is suitable is one of the most profitable of all for pasture. It generally grows well on any stiff or loamy soils in Central and Northern States where rich, moist though moderately well drained, and succeeds fairly well in some sections of the South where lime is present in the soil, being largely used with Bermuda Grass. Kentucky Blue Grass is at its best in the spring and fall months, but being rather sensitive to heat does not grow luxuriantly during summer. It takes a considerable time to get a good stand of this, as it grows very slowly at the start, but when once established forms a close, compact turf, making a fine pasture and is most excellent for lawns. It is better to use a combination of grasses than Kentucky Blue alone, as other grasses which grow more luxuriantly at first will

form the sod, but when Kentucky Blue is well established it will gradually spread over the entire plot, providing the land is at all suitable for it. It is, however, often sown alone at the rate of 2 to 3 bushels for pasture and 4 to 5 bushels for lawn purposes.

Our stock of Kentucky Blue Grass has been selected from seed which has not been heated, is of good germination and thoroughly cleaned. In purchasing Blue Grass be sure you are getting straight Kentucky seed if you want best results. Price, **Blue Ribbon Brand**, 15c per lb.; \$1.50 per bu. (14 lbs.); 5 bushels and over \$1.40 per bushel. Current prices on request.

GRASS SEEDS—Continued

Timothy.

TIMOTHY (*Phleum Pratense*). Called Herds Grass in sections of New York and New England. This standard grass is so well known that extended description is hardly necessary. There is nothing superior for hay, in fact, Timothy hay is standard; but it does not bear grazing well on account of the tramping of cattle, and in biting it off many of the bulbs from which it springs are pulled up by the roots, hence Timothy meadows when pastured are soon destroyed. Timothy in this section and the South is best suited to rich bottom lands and tenacious, rich soils, not too wet and not subject to standing water. Ordinarily should yield $1\frac{1}{2}$ to 2 tons of most nutritive hay, which should be cut in full bloom. By heavy fertilization and care Timothy can be made to yield 8 to 10 tons per acre. When intending to pasture Timothy it is always better to sow other grasses in connection with it, and we recommend Alsike Clover, Red Top, Meadow Fescue, and a few other grasses, as outlined in our No. 3 Mixture. Red Clover is not suited to Timothy, as it is ready to cut three weeks earlier. If sown alone, one-fourth to one-third bushel of Timothy is required. If sown with Red Top about one-fifth bushel of Timothy to four pounds of Fancy Cleaned Red Top. Our Blue Ribbon Brand of Timothy is specially selected of heavy, well-matured seed of good germination, and will produce the finest results.

Timothy Seed is much lower this year than it has been for the past two seasons. We advise customers to purchase a sufficient supply early as it may be that we will not see it as low again for several years.

Present price, **Blue Ribbon Brand**, 10c per lb., \$2.25 per bu. (45 lbs.), 5 bushels and over \$2.20 per bushel. Seamless bags 22c each extra. Current prices on request.

RED TOP OR HERDS GRASS (*Agrostis Vulgaris*). Probably the most useful and one of the most desirable grasses in cultivation, succeeding better on more soils than any other grass in all sections of the United States. The first year Red Top grows somewhat slowly. It improves with age, however, becomes very vigorous and spreads rapidly by means of its creeping root stocks. It is most suitable to stiff soils, but is very successful on hillsides and sandy soils. In low situations, even where subject to overflow, produces luxuriant growth and attains a height from 3 to $3\frac{1}{2}$ feet, and produces most excellent hay, for which purpose cut when in bloom. Furnishes excellent pasture throughout the spring, summer, and fall months, and ripens about the same time as Timothy. We strongly recommend Red Top for general use, as it is one of the cheapest priced seeds, especially for pasture. We offer two qualities: **Blue Ribbon Brand Fancy Recleaned** (sow 8 lbs. per acre), per lb. 15c, 25 lbs. 12c per lb., 100 lbs. \$11.00; bags 22c each extra. Choice unhulled (sow 12 lbs. per acre), per 100 lbs. \$6.00; bags included.

ENGLISH BLUE, MEADOW FESCUE, OR RANDALL GRASS (*Festuca Pratensis*).

Also called Evergreen Grass in some sections. We can not speak too highly of this valuable grass, and it has not received the general attention which it justly merits. It is exceedingly valuable for both hay and pasture, growing $2\frac{1}{2}$ to 3 feet in height, succeeding well on nearly all classes of soil, but particularly suitable to moist and wet lands, and does not seem to be injured by overflow. On upland soils it grows luxuriantly if the land is rich, and as the roots penetrate deeply it is able to stand considerable drought and adverse conditions. Produces good yields of nutritious hay, lasts for a long period of years, and furnishes excellent pasture nearly all season. Its name, Evergreen, has been given it from the fact that it remains green even when the snow is on the ground, and cattle will paw it off and find green, nutritious grass under it. If sown alone, $1\frac{1}{2}$ to 2 bushels per acre are required, and if used in mixture, a combination similar to our No. 2 or No. 3 Mixture is best. Present price, **Blue Ribbon Brand**, 15c per lb, \$2.50 per bu. (24 lbs.). Bags included. Current market prices on application.

Meadow Fescue.

ITALIAN RYE GRASS (*Lolium Italicum*). Particularly adaptable where quick growth of hay is wanted, and more suitable to moist land. It has been used to good advantage in the Southern States, even as far south as Louisiana, where in low river bottoms it affords good hay and pasture very early in the season. It starts extremely early, is of vigorous growth, and can be cut or grazed quicker than other grasses. Italian Rye Grass is a very vigorous grower and a gross feeder, hence for large crops should be on very rich soil or fertilized heavily. It is, however, short lived, and not recommended alone for permanent meadows or pastures, but is excellent in mixtures with other sorts. If sown alone or with Red Clover, use 2 to 3 bushels per acre; in mixtures, from $\frac{1}{2}$ to 1 bushel. Per lb. 15c, bushel (14 lbs.) \$1.10, 5 bushels and over \$1.00 per bushel. Bags included.

PERENNIAL RYE GRASS (*Lolium Perenne*). This is one of the standard grasses for hay and pasture in England and some sections of Europe, and has been used to very good advantage in various sections of the United States both for hay and pasture. It starts very early in the spring, is of vigorous growth, very succulent and nutritious, and especially valuable in mixtures both for hay and permanent pasture. If sown alone 2 to 3 bushels per acre; in mixtures, from 8 to 10 pounds. Per lb. 10c, bushel (14 lbs.) \$1.10, 5 bushels and over \$1.00 per bushel. Bags included.

WOOD, STUBBS & COMPANY, BLUE RIBBON SEEDS

GRASS SEEDS—Continued

HUNGARIAN, AWNLESS BROME GRASS OR SMOOTH BROME GRASS (*Bromus Inermis*). Introduced from Hungary, Europe, by the U. S. Dept. of Agriculture, and has been extensively sown in many sections. Particularly adapted to rather poor, dry soils which are not suitable to other grasses, and is useful for both grazing and hay, especially in mixture with other grasses. Sow from 2 to 3 bushels to the acre either in spring or fall. Per lb. 15c, bu. (14 lbs.) \$1.50.

Hungarian Brome Grass.

BERMUDA GRASS (*Cynodon Dactylon*). Becoming very popular and a great boon in the South for pasture, and when once established no amount of drought or hot weather will kill it out. On rich, loamy soil it will produce good hay, which is superior to Timothy in nutritive qualities. Bermuda Grass succeeds on nearly all soils, affording an abundance of leaves, furnishing constant growth of grass during the summer months, but becomes brown and bare in fall and winter. The dry leaf stalks, however, are very nutritive and readily eaten by stock, both green and dry. It can not be recommended too highly for pasture and general culture in the South, and is also excellent for summer lawns. In most sections on lands that are intended to be cultivated, Bermuda Grass is regarded as a pest, as when once established it is extremely hard to eradicate. On waste lands of the South, on hillsides and banks, in fact, in soils intended for permanent pasture, nothing is more suitable. Its strong, creeping roots will absolutely prevent wash; when once established it will stand more tramping than any other sort of grass, hence makes the finest firm pastures. It is largely used for golf courses on this account, but some other grasses will have to be sown each fall on the sod for winter greens. Bermuda Grass likes rich soil, and to get a good stand on poor soil it is better to give a good application of fertilizer or manure when first sown. **Crop Short**; per lb. 85c, postpaid 95c; 10 pounds and over at 80c per pound.

JOHNSON GRASS (*Sorghum Halapense*). A most prolific perennial hay and pasturage grass, eminently suitable to hot dry climate and soils. Much has been written for and against Johnson Grass, and while our own opinion is that in this section it should not be used, it is of immense value to the farmer in the extreme Southwestern States. It makes excellent hay and furnishes an enormous amount of grazing. No droughts, methods of culture, or application of chemicals to eradicate it will destroy it when once sown, therefore we do not recommend it to be sown on any land which is intended in future years for other crops. A small piece of root will soon so propagate itself so as to form a mat of Johnson Grass, and it propagates so easily that it will take possession of the soil and choke out other crops.

In the extreme Southern States where other grasses are not grown, Johnson Grass flourishes luxuriantly and yields two or three tons of excellent hay per acre on good soil, besides enormous amount of pasturage.

The best time for cutting is before the heads appear, as if allowed to ripen it becomes unfit for stock. Many farmers speak in most favorable terms of the quality of hay from this grass, and it is now being used very largely as one of the standard hay crops for the South. Large stock farmers are using Johnson and Bermuda Grass almost exclusively for pasture in the South. The best time to sow Johnson Grass is in the spring, March or April, and it should be sown at the rate of 1 to 1½ bushels per acre. Price, **Blue Ribbon Recleaned Quality**, per lb. 15c, bu. (25 lbs.) \$3.50, 5 bushels and over \$3.25 per bushel. Bags included.

CREeping BENT GRASS (*Agrostis Stolonifera*). Also called **Florin** and **Bent Grass**. This grass is highly esteemed in many sections for pasture, and is especially valuable where fine, close, thick turf is desired. The creeping stoloniferous roots render it exceedingly well adapted to tramping, hence it is highly esteemed for pastures, lawns, and putting greens of golf courses as well as for polo grounds, bowling greens, etc. If sown alone 2 to 4 bushels are required. Price, **Blue Ribbon Brand**, per lb. 30c, bu. (14 lbs.) \$3.50. Bags included.

SHEEP FESCUE (*Festuca Ovina*). Most valuable as a pasture grass for high and dry situations, affording good grazing where other varieties burn out. We especially recommend this grass in mixtures where long droughts are liable to injure other sorts. The foliage is very fine in texture, it has a tendency to grow in tufts, hence close grazing is desirable. If sown alone use 1 to 2 bushels per acre, or in mixtures 10 to 12 pounds per acre. Per lb. 20c, bu. (14 lbs.) \$2.25, 5 bushels and over \$2.15 per bushel. Bags included.

WOOD MEADOW GRASS (*Poa Nemoralis*). This belongs to the same family as Kentucky Blue Grass, and is more suitable to low loamy situations and for shady lawns and pastures. **Blue Ribbon Brand**, per lb. 50c, bu. (14 lbs.) \$5.00. Bags included.

ROUGH STALK MEADOW GRASS (*Poa Trivialis*). This is eminently suitable to the same use as Wood Meadow; is of considerable nutritive qualities, and is exceedingly relished by horses, cattle, and sheep. In moist soils in connection with other grasses it yields good crop of hay, while for pasture is excellent. Sown alone requires from 1 to 1½ bushels per acre; in mixtures 4 to 5 pounds. **Blue Ribbon Brand**, per lb. 40c, bu. (14 lbs.) \$4.00. Bags included.

CLOVER AND GRASS

SEED SOWERS

HOLMES' WIRE ROPE WHEELBARROW SEEDER. The best of all seeders, distributing quickly and evenly. **Plain Seeder** sows Clover, Timothy, Alfalfa, and heavy seeds. Price \$7.00. **Combined Seeder** sows heavy seeds as above, also Orchard Grass, Blue and other light seeds. Price, \$8.00.

CAHOON BROADCAST SEEDER. Sows Grain, Clover, Timothy, and heavy seeds. Price \$3.00.

PREMIER BROADCAST SEEDER. Sows Grain, Clover, Timothy, and heavy seeds. Price \$1.25.

CLOVER SEEDS

Red, Sapling, and Alsike Clovers are again high in price this season and good qualities are particularly scarce. Europe has a short crop and it may be that prices may be higher later than they are at this time. The prices given here are those ruling January 1st, but we will take pleasure in quoting special prices at any time. Orders entrusted to us will be supplied at market rates on day received. In ordering Clover Seed always remit for seamless bags holding $2\frac{1}{2}$ bu., 22c each extra.

All of our Clover Seeds are tested for purity and germination, and are free of dodder. Samples and analysis will be furnished when requested.

RED CLOVER (*Trifolium Pratense*). Well known and probably the most valuable of all crops for temperate latitudes for grazing, green forage and hay, and soil improving.

Clover can be sown in the spring, from February to April in this locality, varying earlier or later according to other latitudes. Excellent results can also be obtained from sowing it on late snows, as with the melting of these the seed soaks into the earth about the right distance. Light grass seeds, however, sown on snows, are apt to float away and not have sufficient coverage, hence not recommended. The summer and early fall sowing of clover is also giving most satisfactory results, and a full crop can be cut the succeeding year when this is done. Seed is usually sown from $\frac{1}{8}$ to $\frac{1}{6}$ bushel per acre alone, or in connection with other grasses 5 to 6 pounds. Price, **Blue Ribbon Brand**, per lb. 25c, bu. (60 lbs.) \$11.75, 5 bu. and over \$11.65 per bu. Bags 22c extra. Price fluctuates; current quotation on request.

SAPLING or MAMMOTH CLOVER. Also called **Pea Vine** or **English Clover**. Similar to above except of ranker growth and blossoms three weeks later, more valuable for soiling, and by many farmers preferred for medium or poor soils, but on rich land produces too rank a growth and usually contains too much seed for horses, though is good for cattle. The aftermath from Sapling Clover is fine for pasture. Use the same quantity and sow at the same time as Red Clover. Price, **Blue Ribbon Brand**, per lb. 25c, bu. (60 lbs.) \$12.00, 5 bu. and over \$11.90 per bu. Bags 22c extra. Current prices on request.

Red Clover.

ALSIKE CLOVER (*Trifolium Hybridum*). Also called **Swedish Clover**. This is being used very largely now in all sections mainly on account of the general trouble of getting a good stand of Red Clover. In growth it is similar to Red Clover, though not quite so large a plant nor quite as vigorous. It has a lighter colored blossom, ripens two or three weeks later, hence splendid in connection with Timothy or Red Top. Alsike Clover produces good hay, is fine for pasturing, grows better on low land than Red Clover, succeeds admirably on upland soils, and as it is a perennial, lasts much longer time. If alone use 5 to 8 pounds, or in mixtures of grasses, 3 to 4 pounds. Price, **Blue Ribbon Brand** per lb. 25c, bu. of 60 lbs. \$13.00, 5 bu. and over \$12.90 per bu. Bags 22c extra. Current prices on request.

JAPAN CLOVER (*Lespedeza Striata*). This is particularly suitable for waste lands, woodland pastures, grows fairly well on poor soils, and spreads rapidly, and when once established usurps wild growths, and will in many cases even subdue Broom Sedge. It is not, however, a pest, and can be gotten rid of by plowing it up, and is excellent as a fertilizer.

Japan Clover is particularly valuable for pasture on such soils as described, and where the soil is good yields a fair quantity of good hay. It is relished by cattle, is nutritious and fattening. To obtain a stand it is only necessary to scatter the seed broadcast in the spring during March and April at the rate of about 10 pounds per acre. Harrowing the land over before the seed is sown, when it can be done, is of course better, though this is not imperative to obtain a good stand. Price per lb. 25c, per bu. of 25 lbs. \$4.00. Bags 22c each extra.

Alsike Clover.

CLOVER SEEDS—Continued

ALFALFA OR LUCERN (*Medicago Sativa*)

There is no trick about getting a good stand of Alfalfa, and no doubt about securing good results under reasonably good conditions. The question of physical condition of the soil is of main importance. Loose or loamy soils, or soils with gravelly or sandy subsoils, are splendidly adapted to it, for the roots go down to great distances, therefore its immense value in hot, dry climates. Clay or very heavy soils are not suitable, but on loamy, sandy, or limestone soils it is very successful in this latitude and all sections of the South. In this section three or four crops per year are cut, and it succeeds admirably in loamy, sandy, or deep limestone soils.

Alfalfa.

Preparation and Sowing.—Clean land, preferably that which has been planted in cultivated crops, should be broken up as deeply as possible, subsoiling where not liable to wash. Then harrow thoroughly, getting the top soil just as fine as possible. Then roll with a heavy roller to make a firm seed bed. Then sow good seed twenty pounds per acre broadcast. Then cover with a spike-tooth harrow running shallow. Then roll again to press the soil firmly around the seed. A slight top dressing of well-rotted stable manure is most excellent, or an application of two hundred pounds good commercial fertilizer broadcast will be beneficial. The best time for seeding in this latitude is from the 15th of March to the 15th of April. Further South it can be sown earlier; in the Northern sections later. In the fall, seeding had better be done in August if possible in this section, and further South, later if desired.

Uses and Care.—Alfalfa yields four to eight cuttings per season, depending on section. It should not be grazed. When to be used for green feed, cut in the morning and let it wilt a little as too much green food is apt to injure stock. For hay, cut closely when in bloom, let it lay twenty-four hours, then rake in windrows and when dry stack in the field with straw covering or store under cover like clover, handling as little as possible to keep from shedding the leaves. An occasional top dressing of manure and with ordinary care an Alfalfa field will last for twenty years, and the best crops are usually produced when three or four years old.

Inoculation.—On most soils in this section we do not consider inoculation necessary, especially where there is an indigenous growth of Sweet Clover. Bur Clover sown the previous year is used quite extensively in the South to inoculate land for succeeding crops of Alfalfa. In sections where Sweet Clover or Bur Clover are not grown, inoculation will in most cases be of benefit, and we can supply inoculating material for applying to the seed before sowing. Circulars for further information on request.

Prices. Poor or old Alfalfa is not worth sowing. Always buy the best. We supply stocks of first-class grades, free of dodder, and high purity and germination.

Blue Ribbon Best Grade, per pound 20 cents, 10 pounds \$1.80, bushel (60 lbs.) \$8.25, 5 bushels \$8.15 per bushel. Bags 22c each extra. Ask for special prices.

Farmogerm. For inoculating Alfalfa. Trial bottle 50 cents, for one acre \$2.00, for five acres \$9.00.

Crimson or Scarlet Clover

Also known as Annual or German Clover

Crimson Clover.

Though this is for fall sowing only, we wish to impress on every farmer its value, and would recommend to all customers to be sure and sow plenty of Crimson Clover next fall, as it is the greatest summer and fall sown improving crop ever introduced. Eminently successful in this latitude, and the finest crop for fall, winter, and spring pasture, and for cutting to use as green food or hay, besides being ten times as valuable as Rye for soil improving.

Its superior characteristics are:

1st. There is no crop of such inestimable value for general soil improving for summer and fall sowing. It is the finest cover crop for tobacco, corn, or cotton, sown after the last working, enriching the soil for succeeding crops. Its value as a preliminary fertilizing crop for corn, second crop potatoes or any crop planted about May 1st, is inestimable. Its value as a fertilizer is superior to Red Clover, and a larger crop can be produced in eight months.

2nd. It affords from fall to late spring the best and most nutritious winter pasturage, besides producing the finest green food for cutting, or most excellent hay.

3rd. It costs less than any leguminous crop to sow per acre. Is easy to get a stand and yields more profit in less time than any one of this class of crop, not even excepting Cow Peas.

Crimson Clover can be sown 12 to 15 pounds per acre in June, July, August, and September, August usually being best. It is better to have a firm seed bed, and if recently broken, seed should be covered with a roller or board, rather than harrowed. Loamy lands plowed or cultivated a month or two previous can be harrowed over, and seed sown, then lightly harrowed and rolled. In other words, it is important that seed be covered lightly and firmly.

If sown early, the crop can be grazed in the fall and during all seasonable winter weather, extending till late in the spring. Crop is usually in full bloom about May 10th to 25th, depending on season and locality.

Present Price, Blue Ribbon Brand, Crimson Clover, per pound 15 cents, 10 pounds \$1.00, bushel (60 lbs.) \$5.00.

CLOVER SEEDS—Continued

BOKHARA or SWEET CLOVER. A variety of clover which, when young, resembles in growth Alfalfa, but on mature development grows from four to six feet in height. It is extremely vigorous and especially adapted to waste lands, though by many prominent farmers and stock raisers is used on good land for a crop forage. It is very vigorous growth, standing frost and drouth remarkably well, the tap roots penetrating the soil very deeply, and occasionally used as a drainage plant for wet soils. It will grow on almost any barren hillside, in bottoms, and is equally adapted to all good farming lands.

Sweet Clover is one of the most valuable of all crops for bees, being the main honey plant in many sections. We offer two kinds of seeds, white blossom and yellow blossom. The yellow blossom is hulled or clean seed and requires 6 to 8 pounds per acre; the white is unhulled and requires 12 to 15 pounds per acre. Can be sown either in spring or fall, preparing and sowing as you would for Red Clover.

Unhulled White, per lb. 15c, 100 lbs. and over 13c per lb.

Hulled Yellow, per lb. 15c, 100 lbs. and over 13c per lb., bags, 22c extra.

WHITE CLOVER (Trifolium Repens). Well known, indigenous in nearly all temperate latitudes. It forms a thick, close turf, is excellent to sow for pastures, especially on sandy soils, and should enter into the composition of all lawn mixtures. Alone it requires 4 to 6 pounds per acre; in mixture 1 to 2 pounds. Blue Ribbon Best Grade 50c per lb., 5 lbs. and over 45c per lb., bushel prices quoted on request.

W. S. & Co.'s Blue Ribbon Grass and Clover
Seed Mixtures

For Hay and Permanent Pastures for Various Soils

Prices based on market quotations at the time this catalogue was published (January 1st). When large quantities are desired we will quote special prices.

In making these mixtures we have selected varieties that are suitable for sowing together, and they are combined in proper proportions to afford the very best results, both for hay and pasturage. The yield of hay is very largely increased when the proper combination of grasses is used, the aftermath is much better, affording very much better pasturage. In all of our Grass Seed Mixtures we use the very best seeds only, the quality and purity of the seeds being our first consideration.

MIXTURE No. 1.

For Light Sandy or Loamy Soils.

Creeping Bent Grass,	Tall Oat Grass,
Orchard Grass,	Hungarian Brome,
Fancy Red Top,	Sheep Fescue,
White Clover,	Red Clover.

Sow 20 pounds per acre.

Price, per lb. 25c, 20 lbs. \$3.50, 100 lbs. \$17.00.

MIXTURE No. 2.

For Limestone, Stiff or Loamy Upland Soils.

Orchard Grass,	Tall Oat Grass,
Kentucky Blue Grass,	Red Top, Fancy,
Perennial Rye Grass,	Red Clover.

Sow 25 pounds per acre.

Price, per lb. 20c, 25 lbs. \$3.50, 100 lbs. \$13.50.

MIXTURE No. 5.

Especially for the South on any good Soil, withstanding hot, dry weather.

Bermuda Grass,	Fancy Red Top,	English Blue,	Tall Oat Grass.
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Sow 15 pounds per acre.

Price, per lb. 35c, 15 lbs. \$3.40, 100 lbs. \$22.00.

MIXTURE No. 3.

For Heavy Loam or Clay, or Bottom Lands.

Timothy,	Meadow Fescue,
Red Top, Fancy,	Alsike Clover,
Mammoth Clover.	

Sow 18 pounds per acre.

Price, per lb. 15c, 18 lbs. \$2.00, 100 lbs. \$11.75.

MIXTURE No. 4.

For Wet Bottom Land, Subject to Overflow.

English Blue,	Italian Rye Grass,
Red Top, Fancy,	Rough Stalked Meadow,
Mammoth Clover.	

Sow 25 pounds per acre.

Price, per lb. 20c, 25 lbs. \$3.50, 100 lbs. \$13.50.

Roots of Sweet Clover
Over 4 feet long.

WOOD, STUBBS & CO.'S SPECIAL PASTURE MIXTURE

This is a special mixture for affording a quick growing and lasting pasture for stock and poultry. and can be used advantageously on side lots or in fields where a sod of somewhat rough turf is desired. It is suitable either for high or low ground, and will afford grazing from early spring until late autumn, but can not be cut for hay.

It is offered at a very reasonable price, and will give good satisfaction. Sow 16 pounds per acre.

Price, 16 lbs. \$1.60, 100 lbs. \$8.50, bags included.

BLUE RIBBON SELECTED FARM SEEDS.

SELECTED SEED CORN

IMPROVED BOONE COUNTY WHITE BLUE RIBBON STOCK

Improved Boone County White.

This is all carefully selected of high-bred true type corn from the very largest yielding crops. It contains a high per cent of protein, ears 8 to 11 inches long, $7\frac{1}{2}$ to 8 inches in circumference, 18 to 24 rows, and averaging in weight from 12 to 18 ounces. The cob is medium grain long pure white, and fills out remarkably well both tips and butts. Boone County White Corn has been extensively grown in many sections, and with general satisfaction. Some farmers claim that it is of light weight, but this is usually due to deteriorated stock. In sections where our experts have visited this year, we have selected Boone County out of the largest crops of corn that has been highly bred, so that the yield can be depended upon as being thoroughly satisfactory. Corn matures about medium. We have sold this fine corn generally throughout Kentucky, Indiana, and other sections, and many customers have reported that our stock of Blue Ribbon Boone County has been the largest yielding corn in their neighborhood. We unhesitatingly believe it to be the best stock that can be offered.

Price—Qt. 10c, postpaid 20c; pk. 50c; bu. \$1.60; 5 bus. and over \$1.50. Sacks 12c each extra.
On Ears—One ear, postpaid, 15c; bu. in crates \$2.00; 5 bus. and over \$1.85, crates included.

JOHNSON COUNTY WHITE DENT

One of the favorites of all white corns in the Indiana and Illinois corn belt, receiving numerous first and second prizes wherever in competitive trials. The ears average slightly longer than Boone County White, but are about the same in diameter. Grains unusually long, set close on white cobs, indented, but the ears are not so rough as Boone County and most of the other white sorts. It shells 85 to 88 per cent corn, thereby indicating small cob, well filled. We unhesitatingly recommend this fine sort for general main crop planting. It matures in 120 days, has good root growth, and withstands storms better than most other sorts. Another most important feature of this fine corn is its abundant foliage, which renders it superior to most sorts for ensilage purposes.

Our stock of Johnson County Dent is from the best selected high-bred corn.

Price—Qt. 10c, postpaid 20c; pk. 50c; bu. \$1.60; 5 bus. and over, \$1.50. Bags each 12c extra.

On Ears—Bushel in crate \$2.00; 5 bus. and over \$1.85.

Johnson County White Dent Corn.

Other Varieties of White Corn

BATT'S PROLIFIC. This famous Prolific Corn has produced as high as 217 bushels per acre, in favorable season with intensive cultivation and on good ground. This startling result has been published in every section of the United States and caused much wonder. For large crops we do not recommend this or any other prolific corn, as we think Boone County, Johnson County, and similar sorts are best for the Central States.

Batt's Prolific Corn, however, is the finest of all corns for ensilage because it matures early, has from three to five ears to the stalk, and makes an enormous amount of fodder. The ears are of fair size, grain not very deep, but the fact that it produces such a large number of ears to the stalk makes it desirable especially for ensilage and early maturing white corn. Qt. 15c, postpaid 25c; pk. 60c; bu. \$2.00; 5 bus. and over \$1.85. Bags 12c each extra.

Hickory King Corn.

IOWA SILVER MINE. One of the best early white corns which matures in this locality in 85 days. It is pure white, grain is solid, dented, and produces finest meal. Ears are of good length, symmetrical, well filled; grains are deep, narrow, averaging 18 to 20 rows solidly packed on the cob. Stalks 7 to 8 feet high, usually producing two good ears, which are set low on the stalk. This corn is very popular as a main field crop in the North and West, and is the principal sort grown by many of the largest farmers. Our stock is Iowa grown.

Price—Qt. 10c, postpaid 20c; pk. 50c; bu. \$1.60; 5 bushels and over \$1.50 per bushel. Bags 12c each extra.

MAMMOTH RED COB WHITE DENT. One of the best all round white sorts for rich land, producing largest crops of finest quality corn. The ears average about 10 inches in length, of uniform size and great depth of grain, rows 18 to 34 on red cobs, well filled. The grains are pure white, solid, very deep, producing the finest milling white corn. The yield of this superior corn is very large, sometimes as much as 90 bushels per acre. We unhesitatingly recommend it both for yield of grain or using for ensilage.

Price—Qt. 10c, postpaid 20c; pk. 50c; bu. \$1.60; 5 bushels and over at \$1.50 per bushel. Bags 12c each extra.

HICKORY KING. An old favorite sort well known in this locality. Ears are rather small, but usually 2 or 3 on the stalk, and it is a good yielder. The cobs of this variety are small, a single grain of corn sometimes being large enough to cover cross-sections of the cob. The grains are very large, flinty, and of the finest quality for milling or feeding. This corn is particularly good for the early crop, and will give satisfactory results. Qt. 10c, postpaid 20c; pk. 50c; bu. \$1.60; 5 bushels and over at \$1.50 per bushel. Sacks 12c each extra.

EARLY NORTHERN WHITE FIELD. This is a particularly valuable variety for very early planting or for very late. In fact, when too late for other sorts to mature, this will still make good yield of very fine, well-filled ears. The ears are of moderate size, grain medium length, usually produces two good ears to the stalk, and a remarkably good producing sort considering its earliness in maturing. By far the most popular sort in this neighborhood for late roasting ears, and by many gardeners used as their dependence for a crop. Qt. 15c, postpaid 20c; pk. 65c; bu. \$2.00. Sacks 12c each extra. Special prices in large lots:

Gold Standard Leaming Corn.

Yellow Varieties of Seed Corn

We have used the same care in the selection of our Yellow Corns as in the White, and our stocks of Johnson County Yellow Dent, Gate Post, and Gold Standard Leaming are particularly fine qualities. Reid's Yellow Dent has made somewhat smaller ears this year than usual, but is very good stock, highly bred.

Don't forget we will be pleased to send samples of all our Seed Corns on request, and where ordered from us, all varieties will be guaranteed as stated before, and money refunded if not satisfactory.

GOLD STANDARD LEAMING. An ideal feeders' corn, of light golden color, ears slightly tapering and cylindrical. The ears range from 8 to 11 inches long, 7 to 8 inches in circumference, and are well filled, butts and tips. The ears have from 16 to 24 rows, little or no space between them, cob is red, medium size, and the percentage of corn as compared to the cob varies from 86 to 90 per cent. The per cent of protein which these grains contain is more than any other corn which we know, and four bushels of Gold Standard Leaming will put as much fat on a hog or steer as five bushels of ordinary corn. The fact that the ears are moderate size, mature early, and splendid yielding, has made this one of the most popular of all yellow sorts. Price: Qt. 10c, postpaid 20c, pk. 50c, bu. \$1.60; 5 bushels and over \$1.50.

On Ears, bu. crates \$2.00; 5 bus. and over \$1.85 per bu.

YELLOW SEED CORN—Continued

GATE POST. This is one of the finest varieties of Yellow Corn we have ever seen for general purposes. While the ears do not grow quite as long as Gold Standard Leaming, the depth of grain is marvelous, and we believe for shelling contest it will yield more grain than any Yellow in existence.

The stalks are medium height, bearing one and two nice growth ears 9 to 11 inches long. Color rich golden yellow, shading lighter at the tip; grains very solid, exceedingly long, and 16 to 18 rows on the cob. Most desirable for feeding on ears, splendid yielding, early maturing, and altogether one of the best for general cultivation, and especially on only moderately rich soils.

Price, qt. 15c, postpaid 30c; pk. 50c, bu. \$1.60, 5 bu. and over \$1.50. Bags extra.

JOHNSON COUNTY YELLOW DENT. A very fine yellow corn of rich deep yellow color requiring 110 days to mature. It has won many premiums with strongest competition, and is extremely popular in Central and Northern Indiana. The grains are deep, narrow, slightly dented, small cob, and an extremely fine early variety for feeding, and produces a larger crop on moderately rich soil with white varieties. We especially recommend this, and our stock is particularly fine quality. Qt. 10c, postpaid 25c; pk. 50c, bu. \$1.60, 5 bu. and over \$1.50. Bags extra.

On Ears, bushel in crates, \$2.00, 5 bushels and over \$1.85.

REID'S YELLOW DENT. A medium early yellow variety producing well-filled ears of good length and filling out remarkably well even under adverse conditions. Stalks of good height, producing one to two good ears which average 10 to 11 inches long, 14 to 16 rows. Grains flinty, deep, slightly dented, rich color, and fine feeding quality. This is one of the most popular early varieties of Yellow Corn and particularly well liked by stock raisers. In Illinois it is probably the most popular of all, and many of our largest breeders in Kentucky plant it extensively. Our stock of this has been awarded first premiums at corn shows, State and county fairs, and we believe is unsurpassed quality. Qt. 10c, postpaid 25c; pk. 50c, bu. \$1.60, 5 bu. at \$1.50 per bu.

Gate Post Corn.

Reid's Yellow Dent Corn.

2-HORSE CORN PLANTERS

BLACK HAWK. The best and most improved edge drop planter offered. Drops accurately 2, 3, or 4 grains and can be changed without stopping the team. Change from check row to drilling in half a minute and no wrench required. Price, plain check row, \$40.00; check row with fertilizer, \$50.00.

HAND CORN PLANTERS

We supply these in four styles, any of which are good, but superior according to price. Cyclone 75c, Victor 85c, Rotary \$1.00, Segment \$1.25.

SCYTHES, CORN AND HAY KNIVES

SCYTHES, with Handles. Complete, best quality. Blade two feet long; each \$1.45.

GRASS HOOKS. Best quality steel, blade 16 inch. Each 35c.

CORN KNIVES. Best quality. Each 35c.

HAY KNIVES. "Pine Knot." Finest quality. Each 75c.

MACHINE OIL AND OIL CANS

The finest quality for farm machinery, per qt. 20c, cans extra 10c. Gallon 40c, cans extra 15c, 5-gals. \$2.00, cans extra 25c.

OILING CANS. Well made. One pt. each 10c, one qt., with side handles, each 35c.

SEED OATS

Burt Oats.

BURT OR NINETY-DAY OATS. One of the most popular of the early varieties of oats which are largely used in Tennessee and the Southern States, both for hay crop as well as grain. The outside husk is of a reddish tinge, something like Red Rust Proof, and quite frequently Red Rust Proof are sold for Burt Oats. The true stock of Burt Oats, however, are not quite as large as Rust Proof, but mature fully a week earlier. The oats are usually free from rust, healthy, clean, make a vigorous growth of straw besides a good yield of grain. It is especially valuable for the extremely Southern States where ordinary spring oats are not successful, and is the best crop for Kentucky where a quick crop of oats is desired. Owing to the inclement season, all of the Burt Oats were slightly weathered the past season. Our oats have been selected from the best crops and carefully recleaned by us, and we believe will give good satisfaction. Bushel 65c, 10 bu. and over 60c per bu., 25 bu. and over 58c per bu., sacks included.

WHITE SENSATION OATS. A new variety producing the largest, plumpest, and heaviest oats, with a plump kernel and thin hull. It has branching head, straw coarse, very strong and stands up better than any other sort we have ever seen. Wonderfully productive, producing in good season as much as 90 to 100 bushels per acre; in fact in some exceptional years has made as much as 123 bushels. Our stock is from a most careful grower in Northern Ohio, and has been thoroughly recleaned in our own improved cleaning mills.

Price—Bushel 65c, 5 bushels and over 60c, sacks included.

WHITE SPRING OATS. Our best recleaned stock of these are choice northern-grown, all heavy oat, which have been recleaned by us. **W. S. & Co.'s Best**, per bu. 45c, 10 bu. and over at 43c per bu., sacks included.

BLACK SPRING OATS. Usually preferred for thin land, growing taller and producing heavier yield of oats. They make more forage than White Spring Oats, therefore are better to cut when green. **W. S. & Co.'s Best**, recleaned choice stock, per bu. 45c, 10 bu. and over 42c per bu., sacks included.

RED RUST PROOF OATS. Highly esteemed in the Southern States, maturing quickly and producing large yields especially on rich soil. Most excellent for hay and sheaf oats. **W. S. & Co.'s Best**, bu. 65c, 5 bu. and over 60c, sacks included.

DWARF ESSEX RAPE

One of the most satisfactory, quick-growing crops for cattle, sheep, and hogs, affording in from six to eight weeks from sowing excellent pasture, besides being a splendid soil improver. Rape has a high feeding value. It is excellent for fattening sheep and swine, produces an abundant flow of milk in cows, and is the ideal pasture for weaning lambs. Its value as sheep pasture has been demonstrated in every State in the Union, and it is recommended by authorities everywhere as of superior value for hogs, furnishing the finest pasturage, or can be fed after cutting. Rape grows on any kind of soil and has strong growing roots which penetrate the ground for a considerable depth. A rich, loamy soil is preferable, but it does well on sandy or stiff clays, and is excellent for sowing after a crop of wheat has been taken off or when corn has been worked the last time. On account of its quick growth, splendid feeding qualities, and being a fine soil improver it should be largely used in this section and throughout the South, and considering the small expense of seeding and its satisfactory yield there is no farm which should be without it.

Dwarf Essex Rape

Sowing. Rape can be sown broadcast in the spring at the rate of 6 to 8 pounds per acre, or in the fall 4 to 5 pounds. If sown between corn 3 to 4 pounds is sufficient. Spring seeding is possibly the best as it grows luxuriantly all summer, affording pasture from spring until winter, going to seed the following spring. If sown after wheat or oats the ground should be disced and the seed lightly harrowed in.

Price per lb. 10c, 10 lbs. at 8c per lb., 25 lbs. at 7c per lb., 100 lbs. and over at 6½c per lb.

COW PEAS

THE GREAT SOIL IMPROVERS

Makes Poor Land Rich. Makes Good Land More Productive. Also Makes a Splendid and Nutritious Green Forage or Hay Crop, Enriching the Soil even when the Crop is cut off.

Reports on the crop of Cow Peas this season are very much mixed, and it is hard to estimate at this time at what the price will rule when the season is on. In some of the principal seed-growing localities, the crops are reported to be shorter than last year, while in most sections, especially where grown for hay and forage, the crops have turned out very well. In consideration of the low price of grass seeds and grain generally, we

do not anticipate very high prices will rule and will be glad to quote current market prices at any time. We can book orders for Cow Peas for late shipment if desired, without charge for storage, provided the order is paid for when it is booked. Free storage will be given until May 1st on future deliveries.

Prices given here are approximate only and are subject to market changes.

Cow Peas should be sown in May, June, and July at the rate of 1 and 1½ bushels either broadcast or in wheat drills. It is better not to sow too early as the ground should be warm before they are put in. There is no surer or more economical method of improving a soil, and considering the demand, they will pay well as a crop or for seed purposes. For hay and ensilage they are superior to any quick-growing summer leguminous crop.

NEW ERA. The peas are dull lead colored not quite as large as the Whippoorwill, but the vine is somewhat longer. The fact that it produces as large a growth in quicker time than the Whippoorwill, and also its crop of peas two or three weeks sooner, has been the cause of it being very popular in sections through the North and West, where the season for the production of this crop is shorter. Price about \$2.20 per bu. Small quantities: Pkt. 10c, postpaid; qt. 15c, pk. 70c.

WHIPPOORWILL. A favorite early bunch-growing variety, has brown speckled seed, which are more easily gathered than from the vine-growing sorts. This variety is a prime favorite in the Middle West on account of its early maturity and habit of growth. Price fluctuates. Price about \$2.25 per bu. In small quantities: Pkt. 10c, postpaid; qt. 15c, pk. 70c.

BLACK COW PEAS. This variety, while a little later than Whippoorwill, produces more growth of foliage and is consequently better for cutting and as a soil improver. It makes large yield of peas and is popular in the latitude of Kentucky. We consider Black Cow Peas the best sort for general soiling or hay purposes which can be used in this latitude. Price about \$2.25 per bu. In small quantities: Pkt. 10c, postpaid; qt. 15c, pk. 70c.

MIXED COW PEAS. A mixture of Clays, Whippoorwills, Blacks, and some other sorts, which are offered at a low price. These can be profitably used for soiling or hay. Price, bu. about \$2.15. Price fluctuates. In small quantities: Pkt. 10c, postpaid; qt. 10c, pk. 65c.

BLACK-EYE PEAS. Large Black-Eye Peas make a profitable crop for picking the dry peas for sale in our markets during the winter; at the same time make an excellent soil improver, being similar in growth of vine and action of roots upon the soil to the other Cow Peas. While, of course, allowing the peas to fully mature and harvesting the dried peas detracts somewhat from their value as an improver, still, where parties desire to make a money crop, and at the same time improve the soil, these are especially desirable.

Large Black Eye. Pkt. 10c postpaid; qt. 20c, postpaid 35c; pk. \$1.00; bu. about \$3.00. Price fluctuates.

For Other Varieties of Cow Peas, ask for Prices.

Canada Field Peas

These Field Peas are entirely different from the Cow Pea, requiring to be sown early in the spring, making their crop ready for cutting in May or June. They are increasing in popularity every year, making a most satisfactory and large-yielding early forage crop. They can be sown in open weather during February and March, and make large yields of most nutritious food, which can be used either green or cured for hay. They can be sown alone at the rate of 1½ to 2 bushels to the acre, but a light seeding of oats will increase the yield and help to support the pea vines when the crop comes to maturity. Price fluctuates. Price January 1st, pk. 75c, bu. \$2.65. Special price quoted on large lots. Cotton bags holding 2½ bushels each, 22c extra.

Canada Field Peas

SOY OR SOJA BEANS

A Great Drought-Resisting Forage Crop, Producing Immense Quantities of Nutritious Feed, besides being an Excellent Soil Improver.

Soy Beans.

SOY BEANS have been grown successfully in all sections of this country, and by many farmers are preferred to Cow Peas, both for their larger yield of beans, and the fact that they are easier to gather.

Comparatively few farmers in this section have had experience with Soy Beans, though nearly all of them have used Cow Peas. To give a little more fully the relative value of the two, we give the following extracts:

Soy Beans maintain an upright habit of growth, while most Cow Peas make a tangled growth, difficult to harvest. Soy Beans can be planted both earlier and later than Cow Peas, as they stand more cold, furnishing 4 to 6 weeks earlier pasture and later feed.

Mammoth Yellow Soy Beans planted June 17th yielded 28.4 bushels per acre; on June 29th, 26.6 bushels per acre. Whippoorwill Peas planted same date yielded 27.7 and 18.8 bushels respectively.

In wet seasons Cow Peas make almost all vine and few peas, while Soy Beans are more reliable under all circumstances.

Soy Bean seed is exceptionally rich in both protein and oil. Comparisons with other feeds are as follows:

Soy Beans.....	protein, 35.40 per cent; oil, 20.35 per cent.
Cow Peas.....	protein, 25.28 per cent; oil, 1.72 per cent.
Cottonseed Meal.....	protein, 44.48 per cent; oil, 16.88 per cent.
Corn and Cob Meal.....	protein, 5.24 per cent; oil, 4.09 per cent.

This seed is not attacked by weevils or other insects, as is the case with Cow Peas, and they can be threshed with common wheat thresher, adjusted, while Cow Peas require special machinery.

Soy Beans ripen together, so when cut with a mower nearly the total yield is obtained by threshing, but Cow Peas ripen unevenly, and the total yield can be obtained only by expensive hand-picking.

Quantities to the Acre. Soy Beans for planting in rows 2½ feet apart, 1½ bushel per acre, or for drilling broadcast, 1½ bushels per acre. Cow Peas for rows, ½ bushel per acre; drilling or broadcast, 1 to 1½ bushels. Sow in May, June, or July, moderately early planting on Soy Beans being better.

Present Prices (January 1st) subject to change.

MEDIUM SOY BEANS. Earlier in maturing and the best for this latitude for a yield of beans. Qt. 15c, pk. 60c, bu. about \$2.00.

MAMMOTH SOY BEANS. Produces the largest amount of forage, and in more southern latitudes a larger yield of beans. Qt. 15c, pk. 60c, bu. about \$2.00.

VELVET BEANS A Famous New Forage and Soil-Improving Plant. Velvet Beans are pronounced by experienced agriculturists of greatest value; the vines and beans make the most nutritious feed, and as they make a most rapid growth, are destined to become universally popular. The vines and roots are rich in nitrogen, making a most valuable soil-improving crop, and they produce enormous crops for forage or soil improving. They do not mature seeds, except in extreme southern latitudes. Plant in May or June at the rate of 1½ pecks to the acre, in drills five feet apart. They soon make a healthy growth, completely covering the ground with a mass of vines. Pkt. 10c, postpaid; qt. 15c, postpaid 30c; pk. \$1.00; bu. about \$3.50. Special prices in large lots.

WHITE NAVY BEANS Planted in June or July usually make a very profitable crop to grow as shelled white beans for market. Planted in rows three feet apart, dropping two or three beans together a foot apart in the rows. Cultivate early, as they grow rapidly, but do not work them while the dew is on the foliage. Do not cultivate after they begin to blossom. Qt. 15c, pk. 85c, about \$3.25 per bu. Special price on large lots.

Giant Beggar Weed or Florida Clover

(Desmodium Molle)

A crop of immense value for restoring fertility to worn-out or depleted soils. On sandy lands of the Southern States it is probably the most valuable forage plant which can be sown, besides being of immense benefit to the soil. Its growth is immense, sometimes attaining a height of seven feet; is densely covered with leaves; yields both hay and pasture abundantly, and is of high nutritive value, many farmers estimating its feeding value equal to clover. Sow any time after frost and as late as the middle of June; if in drills three feet apart three to four pounds per acre, or broadcast ten to twelve pounds per acre, covering one to two inches. If cut when two feet high, either for hay or green food, it will branch out from the roots, producing successive crops. Can be easily eradicated, and is in no sense a pest. Per lb. 50c, 10 lbs. and over at 45c per lb.

Quick Growing Hay and Fodder Plants

MILLETS

Prices given here are those ruling January 1st.

PEARL OR CAT TAIL MILLET

Also called Pencillaria.

Makes a Splendid Continuous Cutting Forage Crop, either for Green Food or Hay. Farmers in the far South largely depend on Pearl Millet for green food and fodder for all kinds of stock. The enormous yields, which are continuously cut four or five times during the season, are used for both green and dry feeding, and as it yields so largely, it is very highly prized. It grows ten to twelve feet high, but cutting should commence when a height of $2\frac{1}{2}$ to 3 feet is attained. After being cut it will stool out enormously, becoming much thicker; makes a rapid growth, and will afford three or four large cuttings during the season. It is very nutritious and is relished by all kinds of stock. It should not be sown until about May. If sown broadcast 20 to 30 pounds should be used, but quicker growth and more frequent cuttings will be obtained if sown 5 pounds per acre in drills 3 feet apart and cultivated occasionally. Price per lb. 15c, 10 lbs. and over 10c per lb., 50 lbs. 8c per lb., 100 lbs. 7c per lb. Bags 22c extra.

German Millet.

GERMAN MILLET (Choice Southern Grown). False impressions regarding many crops sometimes become prevalent, and one or two erroneous ideas are fairly general about German Millet. It is supposed to be particularly hard on land. As a matter of fact if cut when in bloom and before the seed forms, it is not as soil-exhausting as a crop of oats. Then, its value as hay is questioned. If cut as stated and properly cured it is equally as digestible and contains as much flesh- and muscle-producing principles as Timothy, besides being more generally preferred to Timothy by horses. True Southern German Millet sown in May, June, or July produces a fine crop of the best hay in six to eight weeks time, and on good land yields two to two and a half tons per acre. It is of special importance, however, to secure the very best Southern-grown True German Millet. If common seed is used, or if German Millet is mixed with common millet, the yield is greatly lessened and rendering the hay of less value, because common millet grows very much smaller, has very little leaf growth, goes to seed quicker, thus interspersing with the hay woody fiber and more or less seed, both of which are extremely objectionable, besides greatly curtailing the crop. True German Millet produces a large and luxuriant growth of foliage, has very large heads which ripen evenly, and if cut when in bloom is extremely palatable. Sow broadcast, one bushel per acre. Two crops can be seeded and grown during the summer on the same land. Price (January 1st), True Southern Grown German Millet, pk. 40c, bu. \$1.35. Bags 22c extra.

HUNGARIAN (Panicum Germanicum). For good low grounds on rich soil, this makes even a more valuable crop than German Millet. It is considered equal in nutritious qualities to Timothy Hay. It is very important, in procuring Hungarian Millet, to get the true seed, as common millet resembles it very closely and is frequently found mixed with Hungarian. This lessens both the yield and the value of the crop. Sow from the first of May to the end of July at the rate of one bushel per acre. Price about 35c a pk., \$1.20 per bu. Bags 22c extra. Write for current prices.

SORGHUM OR CANE

Bags 10c each Extra

HONEY DEW. One of the best sorghums ever used for making sorghum molasses. Makes a clear fine syrup of rich amber color, which contains very much more saccharine matter than syrups from other cane. Foliage is abundant, strong growing, large size stalks, and good yielder. We strongly recommend this sort for forage, but more especially for the best syrup-producing sorghum that can be planted. Pound 15c, postpaid 25c; pk. 50c; bu. \$1.75.

EARLY AMBER SORGHUM. Furnishes a large yield of most nutritious forage, which can be fed either green or cured, and will yield two or three cuttings a year, stooling out thicker each time it is cut. The saccharine matter is of the first quality, and it also produces a fine sugar or syrup. It grows ten to twelve feet high. This is the favorite sort in Northern and many Western States. Sow at the rate of one peck per acre in drills $3\frac{1}{2}$ to 4 feet apart. Pound 10c, postpaid 20c; pk. 35c; bu. about \$1.25.

RED TOP SORGHUM. This is one of the best varieties of sorghum, whether for syrup or feeding green or cured for stock. It grows luxuriantly, is as tall as Early Amber, a heavy cropper, and the seed produced in a closed head, making it easily gathered. It is largely planted in this section, and is a favorite sort among Kentucky farmers. Pound 10c, postpaid 20c; pk. 35c; bu. (50 lbs.) about \$1.30.

EARLY ORANGE SORGHUM. This variety is a favorite wherever grown. It is similar in growth to Early Amber, but is preferred in Tennessee and Southern States, as it produces a heavier crop. Pound 10c, pk. 35c, bu. \$1.25.

BUCKWHEAT

A valuable crop for soil improving, production of grain, and largely used for sowing for bees. The yield of grain is 15 to 25 bushels per acre, and can be used for grinding for buckwheat flour, or the whole grain is splendid for poultry and hog feed, being very fattening. It is best not to sow before June, though July and August are better months in this latitude.

JAPANESE. One of the best sorts, with large grain, and produces much larger yields than the common buckwheat. Pk. 40c, bu. about \$1.35. Bags 22c extra.

SILVER HULL. An improved sort. Grain about the size of the common buckwheat, but much better filled and larger yielding. Pk. 40c, bu. about \$1.35. Bags 22c extra.

BROOM CORN

Broom Corn is a very profitable crop, and can be grown in Kentucky remarkably well. The price ranges from \$80.00 to \$100.00 per ton. It is comparatively easily cultivated, will grow on any land that is suitable for corn, and there is unlimited demand for any amount. Usually produces at the rate of a ton to three or four acres of land. The seed is useful for feeding stock, being nutritious and fattening.

Buckwheat.

Culture.—Sow the seed in drills three feet apart at the rate of from three to five pounds per acre, thinning out to about three inches apart, so as to leave seventy stalks to the rod. Cultivate same as for corn. If the land is rich the seed should be sown thicker and the stalks left closer together than on the medium or poor land. To make the best selling corn it should be cut when seed is in the milk state, as if allowed to ripen it changes from its bright green color and takes on a reddish tinge which does not bring as good prices. It can be used, however, even when overripe, but will pay much better prices if cut at the proper time. When marketed, the stalk and brush should not exceed over sixteen inches in length, and there is no necessity of leaving long stalks as this will only depreciate the price. For shipment it can be baled or bundled; baling, however, is best.

OKLAHOMA DWARF. The principal variety used in Oklahoma on account of its earliness, dwarf habit, robust growth, extreme productiveness, long well-fibered brush, and above all, its ability to resist drought. It averages about five feet high, which makes it convenient to pull the brush. It is a great yielder, in some instances making one ton to three acres of fine long brush. Seed can be allowed to ripen without damage to the brush, which does away with much of the danger of heating when seed is stripped too green. The stalks make excellent fodder and are relished by stock. Our seed is Oklahoma grown, good quality. Price per lb. 15c, postpaid 25c, 5 lbs. 50c, bushel (45 lbs.) \$3.00.

IMPROVED EVERGREEN. An excellent variety of good length; has fine, straight straws and of greenish appearance after being cut. This variety commands the highest market price. Pkt. 10c, postpaid; lb. 15c; 5 lbs. 45c; bushel (45 lbs.) \$2.50.

MAMMOTH RUSSIAN SUNFLOWER. Usually a very profitable field crop, the seeds of which are used for bird and poultry foods, and required in enormous quantities. Sunflowers are planted and cultivated about the same as corn. Besides being very ornamental, Sunflowers are useful for planting around edges of gardens and other spots, and will yield a profitable crop of grain for the winter feeding of poultry. Pkt. 5c, lb. 10c, 5 lbs. 40c, 100 lbs. and over at 5c per lb.

HAIRY or SAND VETCH (*Vicia Villosa*). Recommended for fall seeding at the rate of 1 to 1¼ bushels per acre with Barley or Winter Oats. Yields enormously, and can be used either green or dry, similar to clover for hay. This crop has given perfect satisfaction wherever sown. Price, lb. 15c, 100 lbs. at 12c per lb.; bags extra.

KAFFIR CORN. The grain makes most nutritious feed, and can be used for both stock and poultry. Kaffir Corn is of vigorous growth, can be cut twice during the season if desired for fodder, and will be found most nutritious and very fattening. When used by itself, use from three-quarters to one bushel per acre broadcast. It can be sown in connection with Cow Peas, broadcast, at the rate of a peck of Kaffir Corn to a bushel of Cow Peas to the acre, and if these are used together, the Kaffir Corn helps to hold the Cow Peas off the ground and causes a larger growth. Both can be cut together; they are easily cured and make an enormous yield of the finest quality feed. **White Kaffir Corn**, lb. 10c, pk. 35c, bu. (50 lbs.) about \$1.00. Current prices on request. Bags 10c each extra.

Mammoth Russian Sunflower.

FERTILIZERS

ACME BRAND FERTILIZERS

The Cheapest, Quality Considered
Finest Mechanical Condition

The Most Available Plant Food
The Most Satisfactory Results

By purchasing direct from us you save an agent's commission and get the Highest Grade Fertilizers at the Lowest Price. Prices given below are Net Cash f. o. b. Louisville. Car loads quoted delivered to any point on request. Half a ton sold at ton rates.

ACME BRAND

POTATO AND TOBACCO FERTILIZER

Per bag (125 lbs.) \$1.90 Per ton \$28.50

GUARANTEED ANALYSIS.

Ammonia.....	3 to 4	per cent.
Phosphoric Acid, available.....	8 to 10	per cent.
Potash, actual.....	6 to 7	per cent.

(Potash in this brand all from high-grade sulphate.)

Especially prepared for Irish and Sweet Potatoes, Tobacco, and other crops requiring a good percentage of potash. On Irish Potatoes it will make large crops of smooth, good keeping and cooking quality potatoes. Use 800 to 1,000 pounds broadcast, or 500 pounds per acre in drills. If used with stable manure, broadcast the manure and use 400 pounds of fertilizer in the row. For Sweet Potatoes 200 to 400 pounds per acre will give good results, producing a large quantity of smooth, good keeping roots.

On Beets, Radishes, Salsify, Parsnips, Carrots, Strawberries, and all small fruits, use 400 to 600 pounds per acre, mixing with the soil. For Tobacco 200 to 400 pounds per acre.

ACME BRAND

PURE RAW BONE MEAL

Per bag (125 lbs.) \$2.25 Per ton \$33.00

GUARANTEED ANALYSIS.

Ammonia.....	4 to 5	per cent.
Phosphoric Acid, available.....	22 to 25	per cent.
Equal to Bone Phosphate.....	48 to 50	per cent.

This is the finest Pure Raw Bone Meal, made especially for us by one of the largest packing-houses in the country of pure, untreated green bone. It is in fine mechanical condition, and equal to any bone offered anywhere. Use 200 to 300 pounds broadcast.

ACME BRAND

SPECIAL TRUCKERS' FERTILIZER

Per bag (125 lbs.) \$1.80 Per ton \$27.00

GUARANTEED ANALYSIS.

Ammonia.....	3 to 4	per cent.
Phosphoric Acid, available.....	8 to 10	per cent.
Potash.....	2 to 3	per cent.

Made from a fine animal bone basis and prepared especially for quick-growing crops, such as Peas, Beans, Early Corn, Melons, etc., and will give fine results on any garden crop, and we unhesitatingly recommend it for general use. 300 to 400 pounds in hills or drills, 600 to 800 pounds broadcast.

ACME BRAND

HIGH GRADE VEGETABLE FERTILIZER

Per bag (125 lbs.) \$2.00 Per ton \$31.00

GUARANTEED ANALYSIS.

Ammonia.....	4 to 5	per cent.
Phosphoric Acid, available.....	8 to 10	per cent.
Potash, actual.....	4 to 5	per cent.

This fertilizer is especially prepared and recommended for all vegetable crops. It gives most excellent results on Cabbage, Lettuce, Onions, and all crops requiring a large percentage of Ammonia and Potash. Use 300 to 400 pounds per acre in hills or drills, or 600 to 800 pounds per acre broadcast, mixing it a little with the soil. It is a good substitute for stable manure, or can be used in connection with it.

ACME BRAND B. B. P.

BLOOD, BONE, AND POTASH FERTILIZER

Per bag (125 lbs.) \$1.60 Per ton \$25.00

GUARANTEED ANALYSIS.

Ammonia.....	2 to 3	per cent.
Phosphoric Acid, available.....	10 to 12	per cent.
Potash, actual.....	2 to 3	per cent.

A good fertilizer for general use, either on farm or garden crops, and can be used with or without manure. It will give excellent results to Peas, Beans, Melons, Cucumbers, Tomatoes, early Roasting Ears, and Sugar Corn. Use 200 to 400 pounds per acre in hills or drills. For Millet and quick growing fodder crops use 300 to 400 pounds per acre broadcast.

ACME BRAND

WHEAT AND CORN FERTILIZER

Per bag (125 lbs.) \$1.50 Per ton \$23.50

GUARANTEED ANALYSIS.

Ammonia.....	1 to 2	per cent.
Phosphoric Acid, available.....	10 to 12	per cent.
Potash, actual.....	2 to 3	per cent.

This fertilizer not only largely increases the yield of Corn, Wheat, Oats, and other grain crops, but gives splendid after-results on Grass and Clover. It is of permanent improvement to soil and leaves the land in better condition for any other crop that may follow the grain crop. Use 200 to 400 pounds per acre in hills or drills, and when broadcasted use 400 to 500 pounds per acre, harrowed in. For Corn, if applied in the hill, use one handful to two or three hills, scattering it somewhat so as not to let the seed come in direct contact with the fertilizer.

GROUND PHOSPHATE ROCK

This is coming into general use by progressive farmers in all sections, as it supplies Phosphoric Acid cheaper than from any other source. The Phosphate Rock is dried and finely ground so as to render the Phosphoric Acid as quickly available as possible. So finely is this product pulverized that 70 per cent of it will go through a two-hundred mesh screen, and unless it is finely ground, it is so insoluble that it is not desirable to use. We consequently advise all farmers using Ground Phosphate Rock to have it in as finely ground condition as possible. Due to the extreme fineness of our Phosphate Rock, 7 per cent of it is almost immediately available, and the balance will become available by the action of the acids in the soil. We recommend Phosphate Rock to be applied at the rate of from 500 pounds to one ton per acre, a larger quantity being preferable. It will produce most remarkable improvement on grain and grass crops, and besides affording Phosphoric Acid to the crop, corrects acidity in the soil, which is due to continued action of decaying vegetable matter and the constant use of acid fertilizers. Phosphate Rock is going to be used in enormous quantities in years to come, and the sooner the farmers take up the use of it the better condition their soils will be put in, and the larger will be the increased returns.

Price per ton \$9.00, 5 tons and over \$8.50, car loads quoted on application; freight paid to any point.

PERUVIAN GUANO

The best and most complete natural complete fertilizer. It is the result of accumulation of droppings from birds for thousands of years, and has been used in enormous quantities in all parts of the world. Applied to truck crops it gives quick as well as lasting results, and nothing is as generally satisfactory in the garden. It is excellent for applying as a top dressing to lawns, giving a quick, wonderful, luxuriant rich growth. 5 pounds 40 cents, 25 pounds \$1.00, bag (200 lbs.) \$6.00, ton \$55.00.

PULVERIZED SHEEP MANURE

Especially desirable for applying to putting greens and fine lawns. Supplied in 100-lb. bags only. Price per 100 lbs. \$1.75, 1,000 lbs. \$13.00, ton \$25.00.

Fertilizer Materials and Special Fertilizers

POTASH

There is a large demand for potash for farm and garden crops, and with the demand for Lime, we have arranged for carrying a complete line of Potash Salts offered by the German Kali Works. Booklets on "Potash in Agriculture" mailed free on request. Prices of Potash are subject to market changes and net cash with the order only.

MURIATE OF POTASH. The cheapest and best form for nearly all farm and garden crops except potatoes and tobacco. It contains 50 to 55 per cent actual potash, K₂O; is of crystalline form, and has to be mashed up and screened before using. Bags (200 lbs.) \$5.25; ton \$48.00; 5 tons and over \$46.00 per ton.

SULPHATE OF POTASH. Finely ground and the best form for tobacco and potatoes, 50 per cent actual potash. Bags (200 lbs.) \$5.75; ton \$55.00; 5 tons and over \$53.75 per ton.

KAINIT. A low grade of Potash and Sodium in the form of Sulphate. Recommended for cereal or grass crops and for use with stable manure for composting. About 12 per cent actual potash. Bags (200 lbs.) \$2.00; per ton \$17.00; 5 tons at \$16.50 per ton. Car lots quoted on request.

NITRATE OF SODA (Chilian Nitrate)

Analysis: 15.65 Nitrogen.

The quickest and most available source for applying Nitrogen to crops, producing quick growth on all garden crops as well as being most beneficial on farm crops where Nitrogen is deficient. Booklet on the use of Nitrate of Soda on request. Bag (200 lbs.) \$6.00. Per ton \$55.00, f. o. b. Louisville. Prices subject to change. Special prices in quantity.

ACID PHOSPHATE OR DISSOLVED SOUTH CAROLINA ROCK

The main ingredient for supplying Phosphoric Acid in commercial fertilizers. It is quickly available, and will give good results on all crops requiring this.

14 per cent available; bag (125 lbs.) \$1.50, ton \$16.00; 16 per cent available, bag (125 lbs.) \$1.65, ton \$18.00.

Poultry Supplies, Foods, Bird Seeds, etc.

PURINA CHICK FOOD. A complete food for young chicks, combining all elements for growth and development. Combined from corn, wheat, Kaffir corn, oats, millet, bone, and charcoal. 10 lbs. 35c, 50 lbs. \$1.25, 100-lb. bag \$2.00.

PURINA SCRATCH FOOD. A very superior food for general feeding, combining diversity of grains without grit, shell, or cheap ingredients. Combined from corn, wheat, barley, oats, and Kaffir corn. 50 lbs. \$1.00, 100-lb. bag \$1.75.

SHORT CUT ALFALFA. A standard green food invaluable for egg production. Can be fed either with mashed food, used in the trough by itself, and is excellent to scatter in brooders, or where young chicks run. 50 lbs. 85c, 100 lbs. \$1.50.

CHARCOAL. Absolutely indispensable as an aid to digestion, and promotes health of both young chicks and fowls. A little goes a long way. Pound 10c, 3 lbs. 25c, 10 lbs. 50c, 50 lbs. \$2.00.

CRUSHED OYSTER SHELL. Every raiser of poultry, whether large or small, should have a supply of Shells and use it freely either in poultry yards or where fowls run, as it is absolutely necessary to the development of both bone and for egg production. 5-lb. pkg. 10c, 25-lb. pkg. 30c, 100-lb. sack 70c, 1,000 lbs. \$6.50, ton \$12.00.

MICA CRYSTAL GRIT. One of the most valuable grits that has ever been introduced, improving the condition of all kinds of poultry, keeping them in healthy condition, and entering into the formation of the component parts of the shells and yolks of eggs. This is the standard grit of America; recognized by breeders as the best. Price, 5 lbs. 10c, 25 lbs. 35c, 100 lbs. 70c, ton \$12.00.

CRYS-CO. This is a shell producer and grit in one. Contains 99 per cent pure carbonate of lime, makes hard

egg shells and increases hen's laying power. It is flinty and grinds food as ordinary grit, consequently in using Crys-co it takes the place of both Oyster Shell and Grit. Fine, medium, and coarse, for various fowls. 5 lbs. 10c, 25 lbs. 35c, 100-lb. bags 70c, ton \$12.00.

CRUSHED OR GRANULATED BONE supplies the lime for shells and other ingredients necessary in the composition of eggs. Scatter about the poultry yard. 5 lbs. 20c, 25 lbs. 75c, 100 lbs. \$2.25.

FINE BONE MEAL. Excellent to aid in increasing egg production, and a splendid feed for young chicks. Should be fed wet, mixed with cornmeal or bran. 5 lbs. 25c, 25 lbs. 75c, 100 lbs. \$2.50.

GROUND BEEF SCRAPS. To be mixed with wet feed. Fine for keeping poultry in healthy, thriving condition and to aid in increasing egg production. 5 lbs. 25c, 25 lbs. \$1.00, 100 lbs. \$3.25.

WOOD, STUBBS & CO.'S FINE MIXED BIRD SEED. A combination of the best and highest quality seeds in proper proportions. Cuttlefish with each pound. Lb. 10c, 4 lbs. 25c, 10 lbs. 60c.

CANARY. (Recleaned Sicily.) Lb. 10c, 4 lbs. 25c, 10 lbs. 60c.

HEMP. (Imported Russian.) For parrots, pigeons, etc. Lb. 10c, 4 lbs. 25c, 10 lbs. 50c.

RAPE. (Imported.) Not the common article usually sold. Lb. 10c, 3 lbs. 25c, 10 lbs. 60c.

SUNFLOWER. (Mammoth Russian.) For parrots, pigeons, etc. Lb. 10c, 4 lbs. 25c, 20 lbs. \$1.00.

CANADA PEAS. For pigeons. Pkt. 70c, bu. \$2.60.

MILLET. For young chicks and song birds. Lb. 5c, 10 lbs. 30c.

BUCKWHEAT. For poultry, pigeons, etc. Pk. 35c, bu. \$1.25.

Booklet on Poultry Diseases, Remedies, etc., Mailed Free on Application.

INCUBATORS, BROODERS, ETC.

We carry a complete line of the best make and will send on request Complete Illustrated Catalogue with prices. We also carry full stocks of Drinking Fonts, Food Hoppers, Shell Boxes, Thermometers, Egg Testers, etc.

WRITE FOR SPECIAL CATALOGUE. Mailed free.

Poultry Remedies, Egg Producers, etc.

RUST'S EGG PRODUCER. One of the best and most satisfactory preparations we have ever sold for feeding to poultry to increase egg production. Largely increases the quantity of eggs and improves the appearance of the poultry and keeps them in a healthy condition. Price, 1b. pkg. 25c, by mail 45c; 2½-lb. pkg. 50c, 6-lb. pkg. \$1.00, 10-lb. box \$1.50.

CLIMAX CONDITION POWDERS. See below.

ROUP PILLS. An almost sure cure for roup; give according to directions. We have known almost hopeless cases cured by it. Per box of 50 pills 25c. Mailed on receipt of price.

INTERNATIONAL POULTRY FOOD. A medicated poultry food which gives the most remarkable results ever known, and is the largest seller. It prevents disease, cures chicken cholera, and greatly increases egg production, making the chickens grow more rapidly. The small size contains 1,200 feeds. Regular size, price 25c. Large box, contains 2,500 feeds, price 50c.

PRATT'S POULTRY FOOD. A well-known preparation which has been favorably used all over the country. 26-oz. pkg. 25c, large pkg. 50c, 12-lb. pail \$1.35.

INTERNATIONAL LICE KILLER. One of the best preparations for this purpose, put up in packages holding one pound, with perforated top, so that it can be dusted on the fowl or in the nest. Pkg. 25c.

LEE'S LICE KILLER. The oldest liquid on the market and one of the best. Directions for use on each package. Qt. 35c, ½ gal. 60c, gal. \$1.00.

PRATT'S LICE POWDER. An effective remedy for use on fowls and in poultry houses. In packages with perforated tops. Price 25c.

PRATT'S ROUP POWDER. An effective and sure cure for roup or colds. Pkg. 25c.

RUST'S LICE KILLER, for applying in poultry houses and on perches and in nests. Directions on can. Qt. can 35c, ½ gal. can 65c.

KNOX'S NEST EGGS. Medicated, keeping the fowls free from vermin, and takes the place of the ordinary nest eggs. Each 10c, 3 for 25c, per doz. 75c.

CONKEY'S REMEDIES

CONKEY'S LAYING TONIC. One of the best medicines for toning the fowls and promoting egg production. For hens, turkeys, ducks, and geese. Price, small size 25c, large size 50c.

CONKEY'S ROUP REMEDY. A standard remedy for roup, canker, colds and similar troubles that affect poultry in the winter, spring and fall months. It is a preventative and cure. Price, small size 25c, large size 50c.

CONKEY'S WHITE DIARRHOEA REMEDY. To prevent and cure diarrhoea, especially for small chicks. Price 25c.

CONKEY'S POULTRY TONIC. Especially valuable in the moulting season or at any time when the fowls are run down by disease. Price 25c.

CONKEY'S SCALY LEG REMEDY. A sure remedy for scaly legs on all fowls. Price 25c.

CONKEY'S HEAD LICE OINTMENT. Easier applied than other remedies and very effective for killing lice on all kinds of fowls, especially chicks. Price 25c.

CONKEY'S LICE LIQUID. An excellent disinfectant and germicide, which can be sprayed in poultry houses or on the fowl. Price 35c.

CONKEY'S LICE POWDER. For body lice on poultry or domestic animals. Very valuable. Price 25c.

CONKEY'S NOX-I-CIDE. A soluble disinfectant, deodorizer and germ killer for spraying in poultry houses, roosts, nests and other places that fowls frequent. Price 35c.

Complete catalogue of Conkey's Remedies, giving full information on fowl diseases, on request.

Stock Foods and Remedies FOR DISEASES, INSECT PESTS, ETC.

INTERNATIONAL STOCK FOOD. This is one of the most popular of all stock foods, and has possibly the largest sale of any preparation on the market. It is valuable for horses, cattle, sheep, hogs, and all other animals, cures and prevents diseases, and saves in feed by aiding digestion and assimilation, purifies the blood, causes new life and strength and makes stock fat, sleek, and healthy. 1½-lb. pkg. 25c, 3-lb. pkg. 50c, 7-lb. pkg. \$1.00, 25-lb. bucket \$3.00. Costs one-third of a cent a feed.

CLIMAX CONDITION POWDERS. A first-class preparation for all kinds of poultry and cattle. A splendid cure for cholera and other diseases. It tones up the system and greatly improves the plumage after the trying moulting season. It is also a good medicine for hogs, cattle, and horses, and gives splendid satisfaction to our customers who use it. Price, 13-oz. box 25c, if sent by mail 40c; 32-oz. box 50c, if sent by mail 85c; 5-lb. box \$1.00, 8-lb. box \$1.50.

PRATT'S STOCK FOOD. 7-lb. pkg. 50c, 12-lb. sack 75c.

PRATT'S ANIMAL REGULATOR. For horses, cattle, hogs, and sheep. 28-oz. pkg. 25c, large pkg. 50c, 25-lb. bucket \$3.00.

CONKEY'S SALTEM. One of the best saline preparations for horses, cattle, sheep, or hogs. It prevents worms, tones up the animal and keeps them from maladies and diseases, improves the appetite and builds up the system. 10 lbs. 75c, 20 lbs. \$1.25.

INTERNATIONAL COLIC CURE. Per bottle 50c.

INTERNATIONAL HOOF OINTMENT. Keeps the hoof soft, elastic, and at the same time induces a tough, smooth hoof. In tin pails, 1½ lbs. \$1.00.

We carry complete stocks of most of the International Food Co.'s preparations.

INTERNATIONAL GALL CURE. Splendid remedy. Per tin 25c.

INTERNATIONAL WORM POWDER for horses. Pkg. 50c.

INTERNATIONAL DISTEMPER CURE. Pkg. 50c.

PRATT'S GALL CURE. Pkg. 25c.

HAMMOND'S CATTLE COMFORT. One of the greatest boons to domestic animals for prevention of the annoying attacks of flies, gnats, and other insects which are troublesome to cattle. An application of "Cattle Comfort" will relieve cattle, horses, dogs, and fowls from the noxious effects of insects and parasites, and is healing to sores. "Cattle Comfort" is not an irritant to the skin, heals sores and scabs, will bring out dead hair, and is soothing and comforting. Circular giving further information on application. 1-qt. cans 40c, 2-qt. cans 70c, gal. \$1.25.

DAIRY SUPPLIES

We carry full line of these, including Cream Separators, Butter Carriers, Workers, and Moulds, Dog Powders, Separator Rings, Brushes, Tubes, etc., and will be pleased to send catalogue on application.

BUTTER PAPER. Best quality, put up in boxes containing 500 sheets.

Size 12x12, per box-----75c
Size 9x12, per box-----60c
Size 10x10, per box-----50c

CHURNS

DAVIS SWING. Special catalogue on request.

Size.	Will Churn.	Cap.	Wt.	
No. 1.	4 gal. or less,	8 gal.	55 lbs.	\$7 00
No. 2.	5 gal. or less,	10 gal.	59 lbs.	8 00
No. 3.	8 gal. or less,	16 gal.	73 lbs.	10 00
No. 4.	10 gal. or less,	20 gal.	85 lbs.	12 00
No. 5.	13 gal. or less,	26 gal.	98 lbs.	15 00
No. 6.	17 gal. or less,	34 gal.	112 lbs.	18 00

Grass, Clover, and Grain Seeders

Holmes' Wire-Rope Wheelbarrow, Grass and Clover Seed Sower.

Distributes evenly, accurately, more quickly and better than other styles of Seed Sowers.

HOLMES' WIRE-ROPE WHEELBARROW SEEDER. The most accurate machines for sowing Clover, Timothy, and light grass seeds. They run easily and sow evenly in windy weather, the seeds being dropped through small holes underneath the trough, which is 14 feet long. Quantity is easily gauged and machine can be quickly thrown out of gear. This new seeder is constructed on up-to-date principles, with wire-rope feed working on metal and wood to avoid wearing. It does not injure or bunch the seed, and is far ahead of other wheelbarrow seeders. Weight 40 to 50 pounds.

Plain Seeder. Sows small seeds like Clover, Timothy, and other heavy seeds. Price \$7.00.

Combined Seeder. Sows small seeds like Clover and Timothy, as well as light seeds such as Orchard Grass, Blue Grass, etc. Price \$8.00.

Cyclone Seeder.

CYCLONE BROADCAST SEEDER. Similar to Premier except that the bottom of the seeder is wood and the distributing wheel heavy-coated iron. Thousands of these are in use with perfect success. Adapted to all kinds of grain and heavy grass and clover seeds. Price \$1.25.

Cahoon Broadcast Seeder.

CAHOON BROADCAST SEEDER. The standard broadcast seeder and one of the best manufactured. Sows all kinds of grain, Clover, Timothy, and heavy seeds. Very simple in operation and sows 4 to 6 acres an hour at a common walking gait. Distributes seeds uniformly in one-fifth the time required by hand. Circular on request. Price \$3.00.

Premier Seeder.

PREMIER BROADCAST SEEDER. A strongly-made, neat, compact broadcast seeder which is very easy-running and not liable to get out of order, as all of the working parts are malleable castings. Does excellent work and guaranteed to give satisfaction. Capacity not quite as large as the Cahoon. Price \$1.25.

VEHICLE UMBRELLA

An extra heavy and well-made Umbrella of the most improved pattern, strong and serviceable. The ends are all inserted in metal pockets to prevent wear. The ribs are heavy steel and strongly put together.

We have two styles of these Umbrellas. Both equally well made, and heavy duck cloth used. One in orange and white with our advertisement printed on, price \$1.00; plain blue Umbrella without advertisement, price \$2.00.

LAWN ACCESSORIES

Water Weight Roller.

DUNHAM LAWN ROLLERS

To have a good lawn it is absolutely necessary to use a lawn roller at least once a week in the spring, to smooth down the ground which has been spewed up by the winter freezing and thawing and the wash of heavy rains. It is also necessary where moles and insects make uneven places, and which cause the grass to die out.

Dunham Rollers are ball bearing and run 44 per cent easier than other makes. It is as easy to pull a 650 lb. Dunham Roller as a 350 lb. Roller of another make, on level ground. We list below two styles. The Water Weight Rollers are coming in to more general use because they are cheaper and can be transported more easily. The Standard Lawn Rollers are weighted without additional material. Space will not allow full listing of all the styles of lawn rollers which we can supply, but we will mail on request a complete catalogue, giving full illustrations and descriptions, besides information on the **Proper Care of Lawns**, on request. This is a valuable booklet. Mailed free.

DUNHAM "WATER WEIGHT" ROLLER

Complete in one section without counter-balancing handle weights.

No.	Diameter. Inches.	Length. Inches.	Sections.	Weight. Empty.	Filled with Water.	Filled with Sand.	Price.
WB3	14	20	1	60	200	300	\$7 50
WB5	18	24	1	75	300	500	9 75
WB7	24	24	1	125	500	800	12 75
WB9	24	32	1	140	650	1,000	14 25

These can be supplied, if wanted, in two sections, and with counter-balancing weights where so desired.
Prices on request.

PRICES OF STANDARD DUNHAM ROLLERS

No.	Diameter. Inches.	Length. Inches.	Sections.	Face. Inches.	Weight. Pounds.	Price.
401	15	16	2	8	150	\$7 50
407	20	24	2	12	300	14 80
408	20	30	3	10	350	17 20
409	24	24	2	10	400	19 60

For other sizes we will quote prices on request.

HORSE LAWN BOOTS

For use on golf links, tennis courts, and fine lawns to keep the animals from making tracks and rough places in the sod. It is fastened to the horse's foot, not to the ankle, giving free action and no chafing, constructed entirely of rivets and no stitching whatever.

Price, \$9.00 per set of four. In ordering give extreme width of horse's shoe.

Tobacco Plant Bed Seeder

The old way of sowing tobacco seeds by hand is and has always been very unsatisfactory. No matter if mixed with ashes or other material, it is absolutely impossible to sow by hand so that the plants will come up evenly all over the bed. In every case there will be barren spots which come up with weeds; in other parts of the bed they will come up thickly and grow too spindling from being crowded, then when setting time arrives some plants will be strong and vigorous, while others will be weak and lifeless.

With this machine, sowing can be done at any time when the ground is dry enough, and no matter about the weather the seed will be sown evenly, so that all plants will come up practically alike, and the whole bed will be even and filled with good, strong, lusty plants. **Price, \$10.00.**

Tobacco Plant Bed Seeder,
sows accurately Tobacco
Seed in plant beds.

Price, - - - \$10.00

Spray Calendar and Formulas

We give below, in short, concise form, the principal diseases and remedies for various trees, fruits, and shrubs. The information is necessarily limited, but we can send catalogue more complete on request.

Insects are both biting and sucking. The first eat leaves and plants and can be generally controlled by poisons such as Arsenicals. Sucking Insects can only be destroyed through oils, etc., which close the breathing pores.

BITING INSECTS best controlled with 2 lbs. Arsenate of Lead paste to 50 gallons water. Asparagus Beetles, Bean Leaf Beetles, Spring Canker Worms, Caterpillars, Codling Moth, Curculio, Flea Beetles, Cherry Fruit Fly, Currant Worms, Locusts, Grasshoppers, Tomato Worms.

BITING INSECTS best controlled with Paris Green either dry or sprayed. Potato Bugs, Tobacco Worms.

SUCKING INSECTS. Kerosene Emulsion or Fish Oil Soap sprayed 20 to 50 parts water is effective on Aphids, Some Scale Insects, Cabbage Flea Beetles, Chinch Bugs, Bark Lice.

ANTS. Make holes by driving a stake down six inches deep, then pour in about a tablespoonful of Bisulphide of Carbon. Ants on rose bushes and chrysanthemums are not doing any harm to the plant. They are usually going after Aphids, which they milk. The Aphids should be destroyed.

APPLE. San Jose Scale, Oyster Shell Scale. Use Lime Sulphur Solution one gallon to ten gallons of water in the fall or winter, preferably in the fall; if badly infested apply twice. Apple Scab, Bud Moth, Curculio and Canker Worms. Spray with Lime Sulphur one gallon to 40 gallons of water, and add two to three pounds of Arsenate of Lead to each 50 gallons. Apply when the color shows in the bloom but before the bloom opens. For Codling Moth spray just after the bloom has fallen with Lime Sulphur one gallon to 40 gallons of water, and add two pounds of Arsenate of Lead to each 50 gallons. The worms enter the apple at the blossom end and each cup must be filled with spray. Do the work thoroughly. Spray again in 40 to 50 days for the second brood of Codling Moths, which appear at this time. If Bitter Rot or Black Rot should show in the orchard spray with Lime Sulphur one to 40 or with Bordeaux Mixture 8 to 12 pounds in 50 gallons of water.

BLACKBERRIES. Anthracnose and Rust. Cut out and burn any diseased canes. Spray with Lime Sulphur one to 40 or with Bordeaux Mixture.

CHERRY. Forbes or Cherry Scale. Spray with Lime Sulphur in the fall and winter. For Brown Rot spray with Lime Sulphur one gallon to 40 gallons of water, and add two to three pounds of Arsenate of Lead to poison the Curculios. Spray again about ten days after the fruit has set. Slugs often eat the surface of the leaves early in June, spray the trees with Paris Green or Arsenate of Lead.

CHRYSANTHEMUM. Aphids. Use Tobacco Dust or spray with Tobacco Tea very dilute. For Blight use Bordeaux.

CURRENT. Leaf-blight. Apply Sulphate of Copper Solution when injury first appears. After fruit is harvested apply Bordeaux Mixture. Green Currant Worm. Use Hellebore or Arsenate of Lead. Borers. Cut out and burn infested stems early in the spring.

GOOSEBERRY. Mildew. Before buds break, Bordeaux Mixture. For Worms, dust with Hellebore.

GRAPES. In the spring gather and burn all dead wood and dried fruit of the previous season. Spray with Bordeaux Mixture as the buds are swelling. About ten days later spray with Bordeaux. Spray again after the fruit has set and every two weeks until fruit is nearly full grown.

MAPLE. Caterpillars. Collect and burn egg rings in fall and winter. If practical, spray Arsenate of Lead after first leaves appear. Borers. Insert wire in holes and kill, or inject Bisulphide of Carbon in the hole and close with putty or sticky clay.

SHADE TREES. For Scale Insects spray in fall or winter with Lime Sulphur one gallon to 10 gallons of water. For Fungous diseases use Lime Sulphur or Bordeaux Mixture; add Arsenate of Lead for leaf-eating caterpillars. For Borers use a wire and pole through burrows, or pour Bisulphide of Carbon in the holes and stop up with mud or putty to keep in the fumes.

HARDY SHRUBS. Where affected with blight, use Bordeaux Mixture two or three times in the spring. For leaf-eating insects, Bordeaux Mixture and Arsenate of Lead. Scale. Lime-Sulphur Solution in fall or winter.

ONION. Maggot. Destroy the young plants affected as soon as noticed, digging up maggots with the roots. Rotate the Onions. Smut, 1 pint Formaldehyde to 25 to 33 gallons water, apply 500 to 700 gallons per acre with a sprinkler.

PEACH, APRICOT AND PLUM. For Peach-Leaf Curl spray in the spring before the buds open with Lime Sulphur one gallon to fifteen gallons of water. For Brown Rot and Peach Scab spray with one gallon of Lime Sulphur to 75 gallons. Spray before bloom opens and again about ten days after it has fallen. Spray again in 30 days with the Lime Sulphur one to 75.

PEAR. Blight. Cut out and burn all affected branches and twigs as soon as the blight appears, if possible cut about six inches below blighted part. For Pear Scab and Codling Moth spray as recommended for the apple.

QUINCE. If twigs blight, cut out and burn all those affected. Spray with Lime Sulphur and Arsenate of Lead as for apple after bloom has fallen.

ROSES. Leaf-curl and blight. Bordeaux Mixture, apply twice. For green-fly or aphids. Arsenate of Lead before buds form; afterwards Lemon Oil Insecticide or Tobacco Solution. For Slugs, Arsenate of Lead.

STRAWBERRIES. Leaf-blight, Mildew. When growth begins in spring, Bordeaux Mixture. When first fruits are set, repeat. After fruit is harvested, repeat every two weeks.

TOMATO. Leaf-blight. As soon as disease is discovered, Bordeaux Mixture; repeat every week or ten days. Rot. Train the vines, giving as much sunlight as possible. Sow seed at different times, so as to have two or three plantings. Pick infested fruit.

SAN JOSE SCALE. This pest is becoming so serious that it behooves every farmer whether he be a fruit grower or not to help destroy it. The insect unfortunately is little understood and hardly noticeable until the trees are practically killed. On young twigs and veins of the leaves of trees thickly infested, small spots of a reddish discoloration appear around the scales. On the trunk and branches there is a rough grayish appearance as if it had been coated with dark ashes. These insects multiply so rapidly that it has been estimated at Washington, D. C., that the progeny of a single female would number 3,216,080,400 by fall if all were to survive. They are transferred from tree to tree by wind, crawling on the feet of birds and in other ways. At first they seemed to confine their efforts in temperate latitudes to stone fruits, but have spread to apple, pear and other fruit trees, besides oak, maple and various shade trees, shrubs, and small fruits. When first born the females move around freely from twelve to thirty-six hours, then thrust their beaks into the bark or fruit of the tree and do not move again. The scaly filaments form over it and they procreate about every thirty days in summer, the last brood living over until spring. It is imperative that all farmers take up the question of the San Jose Scale. They can be controlled by spraying Lime Sulphur Solution in the fall, winter and early spring months while the tree is dormant, one gallon to ten gallons water, and it is best to spray twice. In the summer this strong solution cannot be used on account of injury to foliage and fruit, but even weaker solution 1 gallon to 30 or 40 gallons of water seems to have beneficial effect.

Insecticides and Fungicides

FOR PLANTS, TREES, WEEDS, ETC.

Lime-Sulphur Solution. This is the standard remedy adopted and recommended by practically all of the experiment stations for destroying San Jose and Oyster Shell Scale. It is to be diluted 1 to 10, and sprayed or applied to trees while they are dormant in fall or winter. It is also highly recommended as an insecticide and fungicide, killing spores of fungi, and, as an insecticide, acts as a constant poison for sucking insects and mites.

KIBLER'S LIME-SULPHUR SOLUTION is a clear cherry red solution free from sediment and cannot clog the nozzles. It is guaranteed to contain 33% of lime and sulphur which will test 32% to 33% Baume. The value of Lime Sulphur as an insecticide and fungicide is due entirely to the sulphur in combination with lime existing as Poly-Sulphides. Owing to the great care and improved methods of manufacture Kibler's Lime-Sulphur contains the maximum amount of Sulphur in the Poly-Sulphide form. Practically all of the experiment stations recommend Lime-Sulphur as the best spray for destroying scale insects and also recommend its use in place of Bordeaux for summer spray.

Lime-Sulphur Solution is being largely used as a summer spray now, especially in mixtures with Arsenate of Lead. When used for a summer spray, one pound to 30 gallons of water are about the proportions. Quart 25c, ½ gallon 40c, 1 gallon 60c 5 gallons \$1.75, 25 gallons \$5.00, barrel (about 50 gallons) \$8.50. Special prices in large lots.

PARIS GREEN. A strong and effective poison for potato bugs and other leaf-eating insects. Can be applied either dry or in a solution of water; if dry use Leggett's Dry Powder Gun or Beetle Duster (see implements); if diluted use one pound of Green to 100 gallons of water. For tender foliage or trees double the quantity of water. Paris Green acts a little quicker than Arsenate of Lead, but washes off more easily. It is better to use on garden crops or tobacco and Arsenate of Lead is best for trees. Paris Green and Bordeaux Mixture give excellent results on potatoes, the Green killing the bugs and the Bordeaux preventing blight. Price fluctuates. Present price ½ lb. 15c, lb. 20c, 5 lbs. at 18c, 100 lbs. about 15c per lb.

ARSENATE OF LEAD. One of the best and most effective poisonous insecticides for leaf-eating insects, and more especially adapted to trees and shrubs, as it adheres to the foliage better, is not so liable to be washed off by rains, and does not burn. We can supply Arsenate of Lead either in paste form to be diluted with water, 3 lbs. to 50 gallons, or in dry form for dusting or dissolving. The dry form is about twice as strong as the paste and sells at higher price. For tender plants use a weaker solution than mentioned above.

Prices, Paste form Arsenate of Lead, 1 lb. 20c, 5 lbs. 15c per lb., 25 lbs. 13c per lb., 100 lbs. and over 10c per lb.

Dry Arsenate of Lead, 1 lb. 30c, 5 lbs. 25c per lb., 25 lbs. 20c per lb., 100 lbs. 18c per lb.

Arsenate of Lead and Bordeaux Mixture is made by using one pound of Arsenate of Lead (paste) to six to ten pounds of Bordeaux Mixture.

BORDEAUX MIXTURE. For blight, mildew, and all fungous diseases. Can be used alone or in connection with Paris Green or Arsenate of Lead. For hardy foliage such as apple, pear, potato, tomato, egg plant, use 8 to 12 lbs. in 50 gallons of water. For tender foliage such as peach, cherry and cucumber, 6 to 8 lbs. in 50 gallons of water.

Bordeaux Mixture Paste. Per lb. 20c, 5 lbs. 60c, 12½ lbs. \$1.25, 25 lbs. \$2.25, 100 lbs. \$6.50.

Bordeaux Mixture Dry. Per lb. 25c, 6 lbs. 60c, 10 lbs. 90c, 100 lbs. \$7.00.

Weed-Bane. For destroying weeds and grasses in roads, walks, railroad tracks, fence rows, ditch banks, tennis courts, etc., and weeds in pastures, meadows, corn, etc. A chemical compound to be dissolved in water using various strengths according to the work to be done. Sprayed on plant growth it penetrates leaves and stems and destroys the plants, leaves, top, and roots in three or four days after application. It does not injure grasses as much as weeds because their fine spear-like leaves rapidly shed solutions, while the leaves of weeds being broader accumulate it and lead it to their stems from whence it penetrates down to the roots. Hence when grass and weeds are both to be killed much stronger solutions are required. Does not injure or stain clothing. Is not dangerous to mix or spray and very effective. For road beds and paths use 1 lb. to from 4 to 8 gallons water. Fence rows, ditch banks and for tough perennial weeds 1 lb. to from 16 to 24 gallons. For meadows 1 lb. to from 32 to 50 gallons. Price 1 lb. 40c, 5 lbs. \$1.75, 50 lbs. \$15.00. Descriptive circular on application.

HAMMOND'S SLUG SHOT. One of the best vegetable insecticides in use. Specially recommended for destroying the Cabbage worm, Potato bug, Tobacco worm, and other insects that prey on vegetation. Gardeners need have no fear about applying this, as it is not dangerous to handle like Paris Green, etc. Non-poisonous to human life. Price, 1-lb. canisters, 15c, 5-lb. pkgs. 30c, 10-lb. pkgs. 60c, 100-lb. lots at 5½c per lb., bbl. lots in bulk at 5c per lb. Pamphlet containing full information mailed free.

KEROSENE EMULSION. For Cabbage worms, scale on trees, cut-worms, lice, rose-bugs and green fly and all sucking insects, either on plants or animals. Ready for use by simply adding water, 25 to 50 parts to one of Emulsion. Qt. 40c, gal. \$1.00, 5 gal. \$4.50.

LEMON OIL CO.'S STANDARD INSECTICIDE. The very best remedy for house plants, effectually destroying Green Fly, Red Spider, Scale, Mealy Bug, Mildew, etc. It has no bad odor, is easy to handle, being soluble in water, and can be applied to plants of most delicate foliage without danger. The "Lemon Oil" is a capital wash for dogs; it cures mange, destroys insects, and removes impurities from the hide. Will also destroy lice and insects by spraying in hen pens and poultry houses. Directions for use on each can. Price, ½-pt. tins 25c, by mail 35c; pt. 40c, by mail 60c; qt. 75c, ½-gal. \$1.25, gal. \$2.00.

FISH OIL SOAP. The best and safest remedy for destroying the San Jose Scale and other scale insects, plant lice on vegetables, shrubs, and trees. Kills aphids, thrip, melon lice, and bugs and all insects sucking the juices from plants. This is the best brand made from caustic potash and pure fish oil, quality guaranteed. 1-lb. can 20c, 5-lb. cans 75c, 50-lb. cases \$3.50, 100-lb. cases \$6.00, 400-lb. bbl. \$20.00.

TOBACCO DUST. One of the cheapest and most effective remedies for destroying lice and worms on Cabbage, striped bug on Melons, Cucumbers, and Squashes, and other insects. It is best to dust on young plants when the dew is on, as it will stick better. Lb. 10c, 10 lbs. 50c, 25 lbs. \$1.00, 50 lbs. \$1.50, 100 lbs. \$2.50.

TOBACCO STEMS. For fumigating or use as a mulch, preventing green fly and other parasites. Per bale (about 400 lbs.) \$6.00, ton \$25.00.

NICOFUME. A tobacco paper strongly saturated with pure nicofume. Made in strips which are suspended when lighted. One sheet sufficient for 2,000 cubic feet or more. Put up in cans. 2 doz. sheets 75c, 12 doz. sheets \$3.50, 24 doz. sheets \$6.50.

PERSIAN INSECT POWDER. A most effective non-poisonous impalpable powder for worms, flies aphids and almost all kinds of insects. Very effectual, suffocating and poisoning by filling up the breathing pores. ½ lb. 25c, 1 lb. 40c, 5 lbs. \$1.75.

SULPHUR. For Mildew on Roses, Lettuce, and other plants. Also valuable for poultry, insects, etc. Lb. 10c, 10 lbs. 50c.

WHITE HELLEBORE. A non-poisonous powder for destroying Cabbage worms, bugs, and lice on vegetables. ¼ lb. 10c, ½ lb. 15c, 1 lb. 25c; postage at the rate of 16c per lb.

SULPHATE OF COPPER. (Blue Stone or Vitriol.) Used in making Bordeaux Mixture in combination with lime, the proportions being 4 lbs. Blue Stone, 4 lbs. Lime, 50 gallons of water. Place the Blue Stone in a canvas sack, immerse in water until it dissolves; dissolve the lime in water, strain and mix. Use as quickly as possible after making.

Price 1 lb. 10c, 25 lbs. \$1.75, 100 lbs. \$6.00; in barrels 5½c per lb. Price subject to change.

SPRAYERS—Compressed Air and Knapsack

THE AUTO-SPRAY

A Self-Operating Automatic Sprayer

Auto-Spray.

This machine is one of the strongest and most simple in its parts. The pump is locked by means of sliding cam, which prevents wear, gives long service, and renders all parts instantly accessible. Reservoir holds 4 gallons but should not be over two-thirds full of solution when ready for spraying. About two pumpings will empty the tank, and the operator has only to direct the spray. It can be used in the garden, for small trees and shrubs, spraying weeds, spraying cattle, or whitewashing. Cylinders are made of both galvanized iron and brass, with locked seams. It can be carried in the hand or used as a knapsack sprayer. Two nozzles are supplied with each machine, which will throw fine and coarse spray. Equipment consists of two feet ½-inch hose, fine spray nozzle, solid stream cap and stopcock for shutting off. If coarse whitewashing nozzle is wanted, or turned nozzle for spraying low-growing plants, we will quote on request. Other equipments are given below. Full directions, with repair list and spray calendar, accompany each machine. Weight packed 15 pounds.

AUTO-SPRAY No. 1-C. Galvanized Steel Tank	\$4 50
AUTO-SPRAY No. 1-A. Brass Tank	6 75
AUTO-POP ATTACHMENT, for instantly shutting off the spray, worked with the thumb, and usually very desirable ..	75
EXTENSION PIPES. 2-foot lengths for spraying tall shrubs and trees, solid brass, each	45
BRASS STRAINER. For straining lumpy liquid, each ..	90

LOWELL GLASS TANK SPRAYER. Similar in construction and operation to the "Cyclone," except that it has a glass reservoir instead of metal. Will hold corrosive liquids and the reservoir will not rust. The glass reservoir consists of a Mason fruit jar, hence if broken can be easily replaced. Price 50 cents.

LOWELL DRY POWDER SPRAYER. This is constructed on the same principle as the liquid atomizers, having a reservoir and a plunger similar to "Cyclone," which forces insecticide out, scattering it in a fine impalpable powder. It is the most economic arrangement we have ever seen, and thoroughly satisfactory for small gardens and areas. Price 75 cents.

CYCLONE SPRAYER. This is the most satisfactory of all the small hand sprayers we have ever seen. It is more easily operated, throws a better spray, and very useful for all classes of small spraying, whether for vegetable garden, flower garden, cattle, or household uses. Reservoir holds one quart and can be filled to capacity. No. 1, all tin, 50 cents; No. 4, all brass, \$1.00.

Cyclone Sprayer.

BRASS SPRAY PUMPS

We carry other lines of spray pumps in various sizes for spraying, whitewashing, vehicle washing, etc., and will send on request **Illustrated Catalogue Free**. This catalogue contains full directions of **How, When, and Why to Spray**, giving formulas for use of various insecticides and fungicides. Prices given below are net and much lower than the manufacturers' list prices.

MYERS' BARREL SPRAY PUMP No. 305-B. One of the best spray pumps for a moderate size orchard, works easily and has extension for 15 feet. Thoroughly satisfactory for moderate spraying and whitewashing; has graduating, vermored nozzle. Price \$8.50.

MYERS' IMPROVED BARREL SPRAY PUMP No. 318-B. An improvement over No. 305-B, with practically the same equipment and a little larger capacity. This pump attaches to the top of the barrel instead of the side of the barrel, which is a decided advantage. Has 15 feet of rubber hose, graduating vermored nozzle. Price \$9.50.

MYERS' O. K. BARREL SPRAY PUMP No. 308-B. Of large capacity and will generate 200 lbs. pressure, spraying any material, hot or cold. Has mechanical agitator, solid brass ram plunger, ground bevel valve and seat. Clamp is adjustable for any size barrel. Price \$14.00.

O. K. Barrel Spray Pump No. 308-B.

MYERS' LEVER BUCKET SPRAY PUMP No. 324. New pattern with 1¼ inch cylinder. Can be used in bucket or attached to top of barrel; has vermored nozzle throwing fine or coarse spray, and single stream patent agitator. Price, complete, \$4.50.

MYERS' PERFECT SPRAY PUMP No. 315. Works without lever, straight lift and push. Has 2-inch air chamber and spray can be continued several minutes; produces continuous spray, fine, coarse, or solid stream; agitator attachment. Price, complete, \$4.50.

MYERS' IMPERIAL SPRAY PUMP No. 325. With patent agitator fitted with malleable foot-rest, graduating vermored nozzle, and return overflow cap. Will throw a solid stream 50 feet. Useful for spraying, sprinkling, whitewashing, etc. Price \$3.50.

Eight-foot IRON PIPE EXTENSION for above pumps, each 50 cents.

EXTRA BORDEAUX NOZZLES, each 75 cents.

Lever Bucket Spray Pump No. 324.

Dry Powder and Insecticide Distributers

CHAMPION DRY POWDER GUNS

An Invaluable Distributer of Insecticides and Fungicides in the Orchard, Vineyard, Garden or Field

The Champion Gun has received unqualified endorsement and given universal satisfaction wherever used. It distributes without adulteration, dry Paris Green, London Purple, Hellebore, Lime, dry Bordeaux Mixture, Tobacco Dust, and other insecticides evenly and with only one-tenth of the labor, time, and cost required by other devices and any other methods, and with far greater efficiency. It will cover one or two rows at once as fast as a man walks, can be regulated easily for quantities and will do as much work in a day as a horse-power sprayer. Champion Guns have been used extensively in potato and tobacco sections and have always given perfect satisfaction. They are adaptable to any and all purposes and do efficient work on potatoes, cabbage, tomatoes, etc., in fact all garden and field crops. Extension tubes enable the gun to be used on fruit and shade trees or in the vineyard.

Among potato and tobacco growers they have become almost indispensable, performing their work in an effective and rapid manner without waste of material, and by far the most economical instrument ever offered for applying remedies for insects. Circulars giving further information on application. Price, with all attachments, \$8.00.

Little Giant Duster

This is made on the same principle as the Champion Dry Powder Gun, but there are slight differences in the construction, and it is offered to supply a demand for a lower priced implement. The principle of its operation is about the same as the Champion Gun, though there is a difference in the gearing. It does about the same work as the Champion Gun, though for general work we would recommend the Champion Gun. Price, \$6.00 each.

The 'Beetle' Four Row Horse Power Potato Duster

"Beetle" Four Row Horse Power Potato Duster.

This is constructed on the same principle as the Champion Paris Green Gun which has been in such general use. Four rows may be dusted at once as fast as a horse walks, covering 20 to 40 acres per day. Everything is in favor of the dry process. A man with one horse can accomplish more with a Beetle Duster than with two horses spraying. Instead of hauling 50 gallons water solution Paris Green, the same amount of Green dry can be spread over twice as much ground if advantage is taken of the wind, for the dust is blown through the vines, sometimes covering twelve to sixteen rows at a time and the plant is covered all over both underneath as well as the upper surface of the leaves. Price, complete, \$70.00.

ACME POWDER BELLOWS. A simple and practical implement for applying all powdered insecticides, such as Paris Green, Hellebore, Insect Powder, Slug Shot, etc. It is very effective in the destruction of potato bugs, currant worms, melon bugs, tobacco worms, cabbage worms, and other insects that affect plants. It will apply powder at the top sides or underneath the leaves of plants. Acme Powder Guns are well made, with solid hardwood head block, hardwood handles, best leather for the bellows, and an extra elbow is furnished to tilt the funnel for getting under the leaves of the plants and shrubs. It is easy to operate, light, serviceable, and the most useful to farm or garden. Every farmer should have one. Single Acme Bellows, each \$1.00; Double Acme Bellows, each \$1.75.

Acme Single Bellows.

ACME SIFTERS. Sheet iron cans, with rigid handles. Bottom perforated; has agitator working to keep the material moving. Used for dusting plants with dry powders, such as Slug Shot, Tobacco Dust, Paris Green mixed with plaster, etc. Each 35 cents.

COLUMBIA GARDEN PLANTER

Price, complete, \$10.00

This machine has been very much improved in the last year and will do much superior work. Speed of machine can be changed on the same principle as an old-fashioned one-horse Corn Planter and without any trouble. It sows accurately all kinds of seeds from the smallest to the largest either in drills or hills, and it is the only planter which will drop seed accurately in hills. It has a positive force feed consisting of removable cylinders, each designed to accommodate various kinds of seeds to be sown. Thus, in beets, it is adapted to put one or two seeds four inches apart; in dwarf beans two beans ten inches apart, the various cells being made of different sizes to accommodate different seeds.

The machine is equipped with seven extra cylinders, two delivery plates, and a marker, which can be removed from the machine when not used. An auxiliary hopper is supplied, so that the machine holds three quarts of seed.

One of the strongest advantages of this planter is that no matter whether the machine is moved slow or fast, it always sows the same amount of seed to the foot; therefore can be used by inexperienced laborers to a much better advantage than other sorts of seeders. Complete catalogue on application. Price \$10.00.

Made with a double layer of glass enclosing $\frac{3}{8}$ inch air space between the two layers. Lets in the light always. Never has to be covered or uncovered; no boards or mats needed. Retains the heat; excludes the cold; glass slips in; no putty; can not work loose; easily repaired.

No good gardeners can afford to waste time and labor on the old single layer sash that must be covered and uncovered daily, and they fall far short of the Sunlight Double-glass Sash in results.

Farmers, suburbanites, city folks with little yard-gardens will also find the Sunlight Sash ideal for profit or for pleasure.

Tobacco growers once supplied with Sunlight Double-glass Sash will year after year have far the best and earliest plants. Plant-beds in the woods are out of date now.

CATALOGUE ON APPLICATION. SASH PRICES.

3 x 6 sash, open, unpainted, each \$2.35.

Unpainted, with the glass in boxes, \$4.00.

Painted two coats and glazed, ready to use \$4.60.

FREIGHT ALLOWANCE. In lots of five, freight prepaid distances 500 miles; other points freight equalized. Write for definite information.

FRAMES FOR BEDS. Made with corner-pieces nailed on, and can be easily put together.

For two 3 x 6 sashes \$6.75; for three 3 x 6 sashes \$8.50; for five 3 x 6 sashes \$12.00.

TROWELS, DIBBLES, ETC.

FORGED STEEL TROWELS, blade and shank made of one piece of steel, finely polished, strong and stout, 5-inch, each 35c; 6-inch 40c each.

SOLID STEEL TROWELS, 6-inch, each 20c.

Solid Steel Trowel.

ORDINARY GARDEN TROWELS, 6-inch, each 10c.
SWEET POTATO TROWELS. A fine mason's trowel with point cut off, rounded, and sharpened. Blade 5½ inches long by 4 inches wide. Very popular with all gardeners in this neighborhood for planting all kinds of plants. Price 60c each.

IRON DIBBLES, with wooden handles, each 35c.

PAINTED POT LABELS

3½ x ½ inch	-----	\$0 65
4 x ¾ inch	-----	70
4½ x ¾ inch	-----	75
5 x ¾ inch	-----	85
6 x ¾ inch	-----	1 00
8 x ¾ inch, per 100	25c	1 75
10 x ¾ inch, per 100	30c	2 50
12 x 1½ inch, per 100	50c	4 00
3½ inch Tree Labels, wired	-----	80

Samples on application.

MISCELLANEOUS

GLAZING POINTS. Van Reyper's Easily Applied; no rights and lefts. Per 1,000 75c; 5,000 and over at 60c per 1,000.

SCOLLY'S PUTTY BULB. For applying liquid putty on sash or greenhouses. Each \$1.00.

ROPE AND TWINE

PLOW LINE, cotton rope, $\frac{3}{8}$ inch, per foot 1c.

GARDEN LINE, balls about 150 feet, 35c.

BUNCHING TWINE, three ply, per bag (5 lbs.), \$1.25.

BUNCHING TWINE, four ply, per bag (5 lbs.), \$1.25.

BINDER TWINE (Sisal), 5 lb. balls 50c, 50 lbs. and over at 9c per lb. Subject to market changes.

RAFFIA, the best material for tying soft-wooded and vegetable plants, largely used for basket and mat making. Per lb. 20c, 5 lbs. and over at 15c per lb.

SPLIT BASKETS, with two handles hold one bushel, \$1.10 per dozen. Special price on large quantities.

GROUND LIME

A great deal of interest is being manifested in the use of Lime, especially for Clover and Alfalfa fields all over this section.

We have made arrangements to supply a high grade Ground Lime which is made from rock analyzing approximately 98 per cent Carbonate of Lime. This is in fine condition for applying, ranging from powdered up to small granulated particles, and will supply the needed lime to ground for a number of years with one application.

There is not the danger in the use of this Ground Lime that there is in the use of Slaked Lime. It can be applied at the rate of 1,000 to 2,000 pounds per acre with excellent results.

Price, per ton \$5.00, bags included; 5 tons at \$4.50 per ton, bags included; car load lots \$4.00 per ton, sacks included. Special prices quoted to any point, freight paid on request.

PLANET, JR., TOOLS

Complete Illustrated Catalogue Free on Request

PLANET JR. No. 4
Combined Hill and Drill Seeder
 Price, complete, \$12.00
 Without Rakes, \$11.00
 As Drill only, \$9.00

No. 21. Combined Hill and Drill Seeder and Fertilizer Drill. Sows seeds in hills and drills and fertilizer in drills at the same time. Price-----\$19 00

PLANET JR. WHEEL HOES

No. 11. Double Wheel Hoe, has 14 cultivating and weeding tools. Price-----\$9 00
 No. 12. Double Wheel Hoe, has 8 cultivating and weeding tools. Price-----7 00
 No. 12A. Double Wheel Hoe, without plows or leaf guards. Price-----6 00
 No. 13. Double Wheel Hoe, with 2 weeding hoes only. Our net price-----4 75
 No. 14. Double Wheel Disc Hoe. Has 2 gangs of 3 discs, two 3-prong cultivator teeth and 2 plows. Price-----8 00
 No. 16. Single Wheel Hoe, has 7 cultivating and weeding tools and garden plow-----5 85
 No. 17. Single Wheel Hoe, with 6 weeding and cultivating tools. Price-----5 00
 No. 17½. With hoes, cultivator teeth, and leaf lifter. Price-----4 50
 No. 18. Single Wheel Hoe, with hoes only-----3 50
 No. 36. Single Wheel Hoe. Has 2 scrapers, 3 cultivator teeth, 1 plow. Price-----6 25
 No. 38. Single Wheel Disc Hoe. Has 2 gangs of 3 discs each, two 3-prong cultivator teeth, and 1 plow. Price-----7 00
 Firefly Garden Plow. A splendid tool for small gardens; opens and throws a furrow 4 to 6 inches wide. Price-----2 75
 Farmer's No. 19. Has 6 tools for cultivating (see cut). Price-----3 75

FARMER'S No. 19

Single Wheel Hoe Cultivator and Plow

Our
 Net Price
 \$3.75

HILL AND DRILL SEEDERS

No. 6. (New). Hill and Drill Seeder and Single Wheel Hoe. Net price-----\$13 50
 No. 6. Hill and Drill Seeder, without cultivating attachments-----11 00
 No. 25. Combined Hill and Drill Seeder, with 8 weeding and cultivating tools; hopper holds 2½ quarts. Net price-----13 50
 No. 4. Combined Hill and Drill Seeder, with tools for cultivating; hopper holds 3 pints. Without rakes. Net price-----11 00
 No. 4. As above, with rakes-----12 00
 No. 4. As a seeder only, without tools-----12 00
 No. 3. Hill and Drill Seeder, without cultivating tools; hopper holds 3 quarts-----10 50
 No. 5. Hill and Drill Seeder. Larger size than No. 3, and especially made for market gardeners; hopper holds 5 quarts. Price-----13 00

PLANET JR. No. 12
Double Wheel,
Hoe has Eight
Tools. Price
7.00; without
Plows, \$6.00

PLANET JR. HORSE TOOLS

No. 10. Horse Hoe Cultivator, Hiller and Vine Turner. With four cultivator teeth, one sweep and vine turner, without lever wheel, a fine implement for working tobacco or any crop close up, moving leaves to one side without injury; very heavy construction. Price-----\$7 50

PLANET JR. No. 10
Horse Hoe Cultivator,
Hiller, and Vine
Turner

No. 8. Horse Hoe and Cultivator, with 4 cultivator teeth, 2 side hoes, and one 7-in. shovel. Price-----\$9 00
 No. 9. Horse Hoe and Cultivator, with all attachments complete. Price, with wheel-----7 75
 Without wheel. Price-----7 00
 No. 9. Plain Cultivator, expanding lever five teeth fitted with 1¼ inch steels. Without wheel. Price-----5 75
 No. 4. Plain Cultivator, five teeth, 1¼ inch steels, without wheel. Price-----5 00
 12 Tooth Harrow, with expanding lever, pulverizer, and wheel, complete. Price-----9 00
 12 Tooth Harrow, with wheel, without pulverizer. Price-----7 50
 12 Tooth Harrow, without pulverizer or wheel. Price-----6 00
 12 Tooth Harrow, without wheel and pulverizer, and with No. 12 expander. Price-----5 00

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Planet Jr. Pivot Axle Riding Cultivators

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