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STUMPP & WALTER CO.'S MID-SUMMER CATALOGUE 1918

Stumpp & Walter Co.
30-52 BARCLAY STREET
NEW YORK

POT-GROWN STRAWBERRY PLANTS

PLANT OUT THIS SUMMER

Brief Directions for Culture

Strawberries require rich, well-tilled soil; the plants should be set 15 inches apart, in rows 2 feet apart; 100 plants will plant 4 rows, 30 feet long; an acre requires 14,520 plants if set at the above distance, but for horse cultivation they should be set 2 feet apart, in rows 3 feet apart, requiring 7,260 plants for an acre. Firm the plants well in the soil, keep thoroughly cultivated and cut off all runners. In the middle of December cover the beds to a depth of 3 inches with salt-meadow hay, straw or leaves. In April as soon as the plants show an indication of growth, push the covering away from the plants to allow them to come up through. This "mulching" protects the plants from the cold in winter and the heat in summer, keeps the fruit clean, and prevents the growth of weeds.

Staminate or Perfect Flowering

Pistillate or Imperfect Flowering

Perfect- vs. Imperfect-Flowering Strawberries

The blossoms of Strawberries are either staminate (perfect-flowering) or are destitute of stamens and are termed pistillate (imperfect-flowering). Pistillate varieties must have a row of some perfect-flowered sort flowering at the same time planted every nine or twelve feet apart among them, or, better yet, every third or fourth plant in the row, to pollinize their blossoms. When properly pollinized the pistillate varieties are usually the most prolific.

Stump & Walter Co.'s Pot-grown Strawberry Plant

Pot-Grown Strawberry Plants

Will produce a large crop of Strawberries, if planted this summer. They are much superior to the layer plants usually sold in the spring, as they do not suffer the loss of roots, when taken up, and therefore travel much better.

The plants which we offer are strong and well rooted. They were planted in pots at our own grounds early in the spring, and should not be confused with the so-called "pot plants" which are offered by some dealers. These are really rooted runners made in the field and frequently, when the season is a dry one, plants so grown have very small roots. These do not ship well and frequently are slow to start growing, after being transplanted.

Fall-Bearing Strawberries

They are really a new thing in the Strawberry world and have come to stay.

Under ordinary conditions they would bear a scattering crop of berries from June until November. Ordinary frosts have little effect on them.

In order to get the best-paying results from them, we advise picking or pinching the blossoms off until within three weeks of the time when fruit is wanted. The rule is to stop pinching the blossoms about August 1, then ripe fruit may be expected about the last week in August.

From five hundred Fall-bearing Strawberry plants set out May 1, there were picked on the 23d of the following August four quarts of berries, and they continued to yield until November 11, when the last three quarts were gathered. During the week of September 12 to 17, there were gathered nearly one hundred quarts.

A half-dozen berry experts have been working over them since they were discovered ten or twelve years ago. Now for the first time the Fall-bearers are out of the freak class. Now is the time for all lovers of Strawberries to go into this new discovery in earnest. It is a new industry. Every household that raises its own berries or has room for a berry patch can and should have Fall-bearers. They are almost as easily grown as the "June-only" kinds.

Potted Plants of the following two varieties, \$1.25 per doz., \$8 per 100

Progressive. During the past two years we have shipped Progressive to every state in the Union and to a great many different places in each state. Many of those who have bought plants have reported their success; from these reports we unhesitatingly recommend Progressive as the best of all the everbearing varieties yet introduced. There are a few places where Superb seems to have a little the best of it and, where such places are known by the grower, we would advise planting Superb. The vast majority, however, have found Progressive unequalled and we advise everyone who has not tried out the everbearers, to try them out now and plant Progressive. The blossoms should be kept off until the middle of July, and from the first of August until freezing weather Progressive will bear abundantly. The berries are of medium size, possibly not quite so large as the Superb, but they are produced in such great abundance and are of such high quality that they take the lead among the everbearers.

Superb. Next to Progressive, we consider Superb the most valuable of the everbearing varieties. Superb will grow well, but it will not produce fruit like the Progressive. The Superb and Progressive are about equal in plant-growth. Superb produces fruit that is somewhat larger than the Progressive, but it does not produce anything like the amount the Progressive does, and the Superb berries are not quite so good in quality.

HOW TO TREAT INSECT AND FUNGOUS DISEASES

What to Spray! When to Spray! What to Use!

The great difference between insects, their habits, food and methods of attack, makes it imperative that you study insect troubles before you try to remedy them. There is no success for the "guess" or "hit or miss" fellow in fighting insects. You must apply the right stuff at the right time, right, and anyone not willing to inform himself sufficiently to do this will not be sure of success.

Don't save on quality or quantity when buying insect killers and remedies. The best is good enough. Buy reliable goods and apply them according to directions.

External Eating Insects are insects that bite or chew part of the plant they attack. The Potato Bug, Browntail Moth, Rose Bug, Cabbage Worm, Canker Worm, Coddling Moth, Curculio, Gypsy Moth, Tent Caterpillar, Tomato Worm, etc., belong to this family and we give on the other side of this sheet some insecticides used as remedies which we can highly recommend.

External Sucking Insects get their sustenance by extracting the juice or sap from the plant through a sucking beak. To this class belongs San Jose Scale, all Aphis or Plant Lice, Oyster Shell Scale, Red Spider, etc. There are many hundreds of species of this insect, attacking underside of leaves on most all plants. In the process of feeding they will roll or curl the leaves.

Fungous Diseases caused by parasites, producing a diseased condition on the plant. Do not wait until your plants are infected but try to prevent rather than attempt to cure these particular diseases—(Scab, Black Knot, Mildew, Rot, Leafspot, Oat Smut Blight, Canker.)

30-32 BARCLAY STREET,
NEW YORK

Stumpp & Walter Co

(see other side)

SPRAYING CALENDAR

PLANTS	DISEASE	WHAT TO USE	WHEN TO USE IT
PEACH.....	{ Fungous.....	Bordeaux.....	When leaf appears.....
PEAR.....	{ Chewing Insects.....	Arsenate of Lead.....	After blossoms fall.....
PLUM.....	{ Sucking Insects.....	Pyrox.....	When leaf appears.....
POTATOES.....	{ Fungous.....	Bordeaux.....	Spring.....
	{ Chewing Insects.....	Pyrox.....	When beetles appear.....
	{ Sucking Insects.....	Pyrox.....	Spring.....
ROSES.....	{ Fungous.....	Bordeaux.....	Spring repeat.....
	{ Chewing Insects.....	Nicoteen.....	Spring repeat.....
	{ Sucking Insects.....	Kerosene Emulsion.....	Spring repeat.....
	{ Rose Bug.....	Hellebore, Nicoteen, Pyrox.....	Repeat all Summer.....
STRAWBERRY.....	{ Fungous.....	Bordeaux.....	Spring repeat.....
	{ Chewing Insects.....	Arsenate of Lead, Pyrox.....	Spring repeat.....
	{ Sucking Insects.....	Kerosene Emulsion.....	Spring repeat.....
TOMATO.....	{ Fungous.....	Bordeaux.....	Spring repeat.....
CABBAGE.....	{ Chewing Insects.....	Hellebore, Arsenate of Lead.....	Spring repeat.....
CAULIFLOWER; ETC.....	{ Sucking Insects.....	Bordeaux.....	Spring repeat.....
	{ Cutworm.....	Cutworm Killer.....	While planting.....
CELERY.....	{ Blight.....	Bordeaux.....	Before transplanting.....
CUCUMBER.....	{ Fungous.....	Bordeaux.....	Every ten days during Summer
SQUASH, ETC.....	{ Chewing Insects.....	Hellebore, Arsenate of Lead.....	Spring repeat.....
	{ Sucking Insects.....	Pyrox.....	Spring repeat.....
CURRENT.....	{ Fungous.....	Bordeaux.....	Spring repeat.....
GOOSEBERRY.....	{ Chewing Insects.....	Hellebore.....	Continuous during Spring.....
BUSH-FRUIT.....	{ Sucking Insects.....	Pyrox.....	Spring repeat.....
GRAPE.....	{ Fungous.....	Bordeaux.....	Spring repeat.....
	{ Chewing Insects.....	Arsenate of Lead.....	Spring repeat.....
	{ Sucking Insects.....	Pyrox.....	Spring repeat.....
SHRUBS.....	{ Fungous.....	Bordeaux.....	Spring repeat.....
	{ Chewing Insects.....	Arsenate of Lead.....	Spring repeat.....
	{ Sucking Insects.....	Pyrox.....	Spring repeat.....

General List of Strawberry Plants

POT-GROWN STRAWBERRY PLANTS FOR DELIVERY from July 15 to September 15. 75 cts. per doz., \$6 per 100.
\$14 for 250, \$50 per 1,000

EARLY VARIETIES

EARLY OZARK. We consider this one of the best large, early, market berries we have. It is a seedling of Excelsior crossed with Aroma and it has made a great record wherever it has been grown. Growers in many sections are very enthusiastic about it. The plant is one of the healthiest we have ever seen. The growth is luxuriant and thrifty, the foliage stands up erect, and the leaves are thick and leathery with a healthy, vigorous appearance. The berries are of large size, good quality, a beautiful dark red in color. Ozark is a perfect variety, strong in pollen, and, in addition to being very productive, it is a strong pollinizer of imperfect varieties. You will like Early Ozark.

Early Jersey Giant.

This is the best of a number of hybrids produced by Dr. Walter Van Fleet, of New Jersey. It ripens medium early. The berries are large, brilliant crimson, conical with pointed tips. They ripen evenly all over, have a delightful aroma, and are most excellent in quality. The fruit is uniformly large and has large green caps which make it very showy and attractive. The blossoms are large and perfect. The plant is a strong grower and heavy yielder. It is firm enough to ship well and with its handsome appearance and good qualities it will bring the very highest prices on any market. We confidently recommend this as one of the very best medium-early fancy berries that will give satisfaction wherever grown.

KLONDYKE. A very good grower and adapted to a wide variety of soils. It is especially popular in the middle and southern states. Many large associations in the South are planting Klondyke for their main crop, due to the fact that it is a good shipper. At nearby shipping stations we have seen buyers go over load after load of berries and pay more for the Klondyke than for any other variety of its season.

LONGFELLOW. Like Senator Dunlap, Longfellow is a good, safe, reliable variety to plant. The fruit ripens medium early; the berries are large and conical in shape, highly colored, and of excellent quality. Longfellow is one of the most productive varieties we have ever seen, although the ground must be very rich and highly fertilized or the plants simply cannot mature the great quantities of fruit which is set. Plant Longfellow in rich ground, cultivate them properly, and you will be amply repaid at fruiting time.

PREMIER. We fruited Premier last year for the first time and we want to say that it is one of the very best very early varieties that we have ever seen. It is productive and the fruit is good enough for home use and firm enough to ship. The introducer says of it: "Premier is distinctly in a class by itself. In productiveness it is a wonder. The berries are mammoth in size, beautifully formed, bright, rich, red through and through, delicious in flavor; and it is a splendid shipper. In one word, every berry is a show-berry and a prize-winner."

Senator Dunlap

Senator Dunlap. This is a variety for the amateur and for the more experienced in Strawberry-growing. It is adapted to any type of soil and does well in all sections where it is grown. The plants are rather small, but they have long fibrous roots, which make them good drought-resisters. They make a vigorous growth and should be kept thinned out in order to get the best results. The fruit is bright red, with a glossy finish, shading to a deep scarlet on the under

Early Jersey Giant

side. The plants produce a heavy crop of fruit and the berries hold up well in size clear to the end of the season. Senator Dunlap has perfect blossoms, which produce an enormous amount of pollen, making it very valuable for pollinizing imperfect-flowering varieties, all the more so because it commences to bloom medium early and lasts through a long season. Growers throughout the country know the Senator Dunlap and we always count on a heavy demand for it. It is one of the surest varieties to produce a crop and the crop it produces is very large, the quality is good, and it is a fairly good shipping berry.

ST. LOUIS. For the home table or local market St. Louis is great. It is a native of Arkansas and, as grown here, it makes a strong, healthy plant, which is very productive of large berries.

Success. This early-fruited Strawberry is one of the most beautiful as well as one of the best medium-early large berries we know of, and although early it holds out well through the Strawberry season, bringing every berry to perfection, the last berries coming in with the later varieties, and almost as large as the first borne. The berries are of large, globular form, slightly conical, and of a light, bright scarlet; the flavor is always fine, mild, sweet and rich. A vigorous, strong grower, free from rust and very productive. We unreservedly recommend it for the home-garden.

MIDSEASON VARIETIES

BIG JOE (Joe Johnson; Joe). One of the most valuable new varieties that have been introduced for a long time. It is a strong, healthy grower that makes plenty of plants for a good fruiting bed. In sections where it has been grown, it has shown such a vigorous growth and such a wonderful productiveness of large, handsome berries that bring top prices on the market that everyone who has seen it is wanting plants. It does well in practically all sections where it has been grown.

HERITAGE. Heritage is a strictly fancy variety which some growers use for their fanciest trade. The berries are uniformly large with a splendid color and delicious flavor. It is firm and quite productive. Our trade on Heritage is largely with those who know the variety best, and it will increase as other growers learn how good it is. Blossoms are perfect.

MIDSEASON STRAWBERRIES, continued

Glen Mary.

Originated in Pennsylvania twenty years ago. Since then it has become very popular throughout New England and the northern half of the United States. Many growers consider it the most profitable of all varieties to grow on account of its great productiveness. Some of our customers have reported more than 10,000 quarts per acre from this variety. The berry is firm enough for distant shipment; it is of handsome appearance and good quality. For this reason it is popular both as a fancy local-market berry and as a shipper. The fruit is of large size, dark red in color, with prominent seeds of bright yellow. The meat is rich and juicy and of such high flavor that when once eaten more is wanted. Glen Mary is a strong grower which makes large, healthy plants

Glen Mary

with an abundance of dark green foliage. The blossoms are about half-perfect but carry enough pollen to fruit their own berries.

Marshall.

Beyond doubt one of the largest berries yet introduced; the plants are the rankest growers, way ahead of all others in this respect. In shape conical, very regular, each berry like the other; color a dark red-crimson; flesh is solid and dark red; flavor is the very finest. It is possible to ship this berry hundreds of miles. It ripens with the early berries, and continues in fruit until very late in the season. As to productiveness it will not yield so many berries as some varieties, but when measured in quarts it will be above the average. On account of its large, luxuriant foliage it will stand the severest drought and protect its flowers from late frosts.

NEW YORK. This is the Strawberry, a seedling of Bubach and Jessie raised by a New York lady, that captured the prize of \$100 in gold offered for the best and largest new variety. The plant is an unusually robust grower, making but few runners, throwing its strength and vigor into the magnificent berries. In form they are very handsome and regular, of a rounding, conical shape. Color, crimson-scarlet, dark, rich and inviting, coloring all over, leaving no green tips. The flavor is deliciously rich and melting. For a family Strawberry the New York is eminently adapted; but its large size and delicate texture would possibly prevent the berries from arriving in good condition in distant markets.

WARREN. Originated by Mr. S. H. Warren, of Auburndale, Massachusetts. Mr. Warren was a veteran berry-grower and after growing the best varieties for fifty-eight years, he considered Warren the best he had ever seen. After having fruited this variety and having received much favorable comment on it from our customers, we are prepared to recommend it very highly. It does best on loamy soil, not being so well adapted to the lighter types. Plants are exceedingly vigorous, with a dark green leathery foliage, and produce a splendid crop of large, high-quality, high-colored berries, which have taken first prize at the Massachusetts Horticultural Show. For the North and West, we consider Warren one of the most valuable varieties on the market.

MIDSEASON TO LATE

Brandywine.

The berries are very large, handsome and attractive to the eye; the fruit is large and of fine quality, firm and shapely foliage; of the thriftiest; in general, it is heart-shaped; flesh red, firm and solid for so large a berry. Vines exceedingly prolific, continuing a long time in fruit; a very profitable variety.

Chesapeake.

Many of the largest growers in the country are using Chesapeake for their main crop and they are amply justified in doing so. The foliage is very strong and healthy; we do not remember ever seeing a bit of rust on it. The plants are very strong and robust and have very long roots which make them one of the best drought-resisters. The shape of the berries is seen in the accompanying photograph. They are uniformly large, with prominent yellow seeds and an attractive, bright green cap, altogether making Chesapeake one of the most beautiful and attractive berries in the package that we have ever seen. The berries are unexcelled in quality, equaled only by a few varieties, such as McAlpin

MIDSEASON TO LATE STRAWBERRIES, continued

and Wm. Belt. The Chesapeake does not set an extraordinarily heavy crop of fruit; it does set a good crop. And the valuable thing about it is that every blossom matures a berry and the last ones are almost as large as the first. The flesh is very firm in texture and the berries will keep for many days in perfect condition, so that altogether it is an ideal berry for home use, for local market, or for distant shipment. Often new berries are reported to "sell as well as the Chesapeake," the inference being that no higher recommendation was necessary.

COMMONWEALTH. In the Commonwealth we have a berry as large as the largest—as productive as any of the large-fruited varieties, and as fine flavored and juicy and as dark colored as any Strawberry grown. The berries, of the largest size, are broadly cone-shaped, and quite smooth; moreover, it is very late. On the 17th of July as good berries were picked from it as earlier in the season; and the last berries were picked July 22. The plant is a good, strong grower, hardy, shows no sign of rust, and bears a strong staminate blossom. It is exceedingly productive. The Massachusetts Horticultural Society awarded this First Prize.

HUSTLER. (Pistillate.) This new variety is a native of Pennsylvania and it is destined to become one of the great fancy Strawberries, throughout the country. It is a vigorous grower, making a few large strong plants rather than many small ones. The fruit averages large in size, is uniform, and firm enough to ship to a distant market. The berry is rich scarlet in color, excellent in quality, and altogether one of the handsomest berries that we know. The blossoms are imperfect and should be planted with some perfect-flowering variety. We intend to plant Big Joe and Hustler together and we have confidence that this combination will be a good one.

McALPIN. The more we see of the McAlpin, the better we like it. We fruited a block of McAlpin last season and we can say that, out of over fifty varieties fruited, McAlpin came through several heavy rains with less dirt and sand on the berries than any variety we had. The berries average large in size and run about as even as any variety we know of. There are no extra-large berries and no very small ones. The berries are a beautiful scarlet in color and unexcelled in quality. The light green of the caps and the bright scarlet of the berries make a pleasing contrast which causes the berries to show up well in the package. They always bring top prices on the market, selling with Chesapeake and Big Joe.

WILLIAM BELT. A luxuriant grower, healthy and hardy, very productive, and the berries are very large. It has produced many 6-inch berries. Shape rather long, conical and quite uniform. The color is deep, glossy red all over. It is as firm as ordinary berries, and of a better quality than is often found in large varieties. All things considered, it is one of the best varieties for the home grower; the flesh is solid and meaty and of a rich crimson to the core.

VERY LATE STRAWBERRIES

GANDY. Probably no higher compliment could be paid to this variety than the fact that all other late varieties are compared with it. For best results it should be planted in black swampy land or, if this is not possible, in springy land with some clay in its makeup, but Gandy never should be planted on dry sandy land. It is a reliable old standby and a great favorite in the market. Gandy makes a vigorous healthy growth and, if planted in soil as recommended above, it will produce a good crop of large, uniform, highly colored, firm berries that will bring top prices in any market. We have known of the Gandy being shipped 200 or 300 miles and still taking precedence over fancy local berries.

STEVENS' LATE CHAMPION.

Has perfect blossoms. Originated in New Jersey and is supposed to be a seedling of the Gandy. It makes a rich foliage which amply protects the fruit. Berries are very large in size, bright red in color, and of good quality. It ripens quite late and makes a season of medium length. It blossoms late in the season which makes it almost immune to late frost. It is very popular in New England and the middle northern states.

Chesapeake

CELERY PLANTS

25 cts. per doz., \$1.25 per 100, \$10 per 1,000

Selected Transplanted Plants

PARIS GOLDEN SELF-BLANCHING. Our plants are grown from seed furnished by the originator in France. This strain of Celery somewhat resembles the White Plume variety, but is much superior. It is entirely free from the green type and does not grow soft or pithy as most strains of self-blanching do. Rich golden yellow, solid, and a splendid Celery for family or market-gardener's use. A very early variety and is acknowledged to be the best and most profitable Celery grown.

IMPROVED WHITE PLUME CELERY. is the most popular, as it is not necessary to bank up, as is the case with other Celeries. It is tender and of the very best flavor, also presents a very ornamental appearance on the table.

PERFECTION HEARTWELL. The finest and largest of the winter sorts, either for the family- or market-garden. The heart is golden yellow, and its crisp tenderness and delicious flavor are unequaled.

WINTER QUEEN. This is without doubt the most valuable variety of Celery for winter and spring use ever introduced, even excelling the celebrated Perfection Heartwell as a late winter keeper. It is also much stouter, thicker and heavier, with double the amount of heart of any known Celery. The plant is beautiful in appearance, of close habit and compact growth, and blanches to a beautiful cream-white. Ribs perfectly solid, crisp and of a delicious, nutty flavor. It is worthy of first place as a late Celery, and will keep longer than any other variety.

OTHER GOOD VARIETIES

BOSTON MARKET. Solid, half-round, green stalks, blanching white; crisp and tender, half dwarf and robust.

CRAWFORD'S HALF DWARF. Of vigorous growth and excellent flavor.

GIANT PASCAL. A desirable, long-keeping green winter Celery. Robust, healthy, stocky, about 2 feet high, making broad, thick, stringless stalks and large hearts.

GOLDEN HEART. A highly recommended variety. Full, golden heart, and an excellent keeper.

Paris Golden Self-blanching Celery

CABBAGE PLANTS

20 cts. per doz., \$1 per 100, \$8 per 1,000

AUTUMN KING. We believe this to be one of the finest strains of Cabbage ever offered. It produces regular, even heads of enormous size; a magnificent cropper.

AMERICAN DRUMHEAD SAVOY. None of the late-growing varieties can begin to equal in flavor this sort for family use; heads large, solid and a splendid keeper.

LARGE LATE DRUMHEAD. Very large, solid heads; standard variety for winter use.

LARGE LATE FLAT DUTCH. Without exception the best variety in cultivation for winter use; produces immense heads of the finest quality; splendid keeper.

RED CABBAGE

MAMMOTH ROCK RED. This is by far the best, largest and surest heading Red Cabbage ever introduced. The plant is large, with numerous spreading leaves. The head is large, round, very solid, and of a deep red color. The best red Cabbage on the market.

Early Snowball Cauliflower

CAULIFLOWER PLANTS

EARLY SNOWBALL. The best all-round Cauliflower for private or commercial use. This Cauliflower is absolutely certain to head, conditions being ordinarily favorable, invariably forming snow-white head. Plants, 25 cts. per doz., \$1.50 per 100, \$12 per 1,000.

Large Late Drumhead Cabbage

Vegetable Seed for Summer Sowing

WHAT TO PLANT IN THE VEGETABLE GARDEN AFTER YOU HAVE ENJOYED THE ONE CROP OF VEGETABLES

It is a well-known fact that the possibilities of the Vegetable Garden have not been exhausted after you have raised one crop of vegetables. Many varieties of vegetables yield larger crops from seed sown in the summer than from those sown in the late spring for the reason that the weather which usually prevails when the plants attain a fair size is more favorable to their needs and they are more likely to continue growth and reach their maximum of development without a check. Bush beans may be sown in some sections as late as September 1 and yield delicious pods before frost. Beets may be sown in rows every ten days until August 1 and give roots for table use or storage for the winter. Root crops, such as carrots, turnips and rutabagas also do well. We recommend the summer planting of lettuce, the curly varieties as well as the butterhead sorts, and also radishes, the early as well as summer and winter sorts.

OUR BOOKLET, "VEGETABLES FOR THE HOME GARDEN." HAVE YOU RECEIVED A COPY? WHY NOT WRITE FOR ONE NOW?

List of Vegetables offered of which additional sowings may be made June 1 and later

Beans, Dwarf or Bush. Every two weeks until September.

Beets. June to August 15.

Cabbage. Use plants. See page 5.

Carrot. July to August 15.

Cauliflower. Use plants. See page 5.

Celery. Use plants. See page 5.

Corn, Sweet. Every two weeks until July 15.

Cress. Every two weeks until September.

Endive. July to August 1.

Kale. June.

Kohlrabi. July 15.

Lettuce. August 15.

Mustard. Every two weeks to September 15.

Peas. From July 15 to September 15.

Radish. July and August.

Rutabagas. June and July.

Spinach. August and September.

Turnip. June and July.

BEANS, BUSH

Green-Podded

One quart will plant 200 feet of drill

We are offering a short list of Beans for present planting. Please refer to table of planting for latest dates.

NOTICE. If wanted by mail, add 5 cts. per ½ pint, 10 cts. per pint, and 15 cts. per quart.

Bountiful. To this Bean belongs the distinction of being one of the best flat, Green-podded Bush Beans; very prolific and a continuous bearer from early spring to late fall. It is absolutely stringless, tender and of delicious flavor. Is as entirely stringless as the breeder has been able to make a flat, green-podded Bean. Its pods contain a little more fiber than Stringless Green-Pod of like age, but they average large and are entirely stringless until they become longer than 5 inches. By far the earliest of all the Bush Beans. ½pt. 20 cts., pt. 40 cts., qt. 75 cts.

Black Valentine. A Bean which has been planted extensively in the South on account of its heat-resisting qualities. Matures early, producing long, round, straight pods, which are tender when quite young. Perfects the crop all at once, hence valuable as a market sort. ½pt. 20 cts., pt. 40 cts., qt. 75 cts.

Refugee, or 1,000-to-1. One of the latest Beans. The pods are nearly round, light green, 5 inches long, tapering to a slender point; fleshy, brittle, and mild in flavor, with but slight strings. ½pt. 20 cts., pt. 40 cts., qt. 75 cts.

BEETS One ounce will sow 100 feet of drill; 5 to 6 pounds to the acre

Eclipse. An extra-early sort which produces Beets sixty days from sowing. Of uniform, dark rosy red, top-shaped; easily pulled. Flesh dark purplish red with rose zones; remains in table condition for ten days, when it becomes tough. Pkt. 10c., oz. 20c., ¼lb. 75c., lb. \$2.50.

Crosby's Original Egyptian. One of the most widely grown turnip-shaped Beets in cultivation today. Will produce Beets ready for pulling within two or three days after Eclipse. The smooth, dark red roots are topped with light green foliage, which is prominently speckled with dark red. The flesh is carmine, handsomely marked with white zones, very tender and of uniformly sweet quality. Pkt. 10 cts., oz. 30 cts., ¼lb. \$1, lb. \$3.50.

BEETS, continued

Detroit Dark Red. Extended experience has shown that this Beet comes nearer the ideal than any other, and where but one variety is used this should be the first choice. The round, dark red globe roots are uniformly smooth. The flesh of the very young Beets is almost black-red, turning to dark crimson with dark purple zones as the Beets grow larger. When cooked, the Beets are of an appetizing dark red and very sweet. Pkt. 10c., oz. 25c., ¼lb. 90c., lb. \$3.

CARROT

One ounce will sow 100 feet of drill

Early French Forcing. The earliest variety and the one largely grown for forcing purposes. It makes a small, almost globe-shaped root of an orange-red color. Pkt. 15c., oz. 40c., ¼lb. \$1.40, lb. \$5.

Selected Chantenay. A very splendid type of the half-long, stumpy-rooted Carrot. Averages 5½ to 6 inches in length, broad at the neck, narrowing gradually to a blunt end. The flesh is rich orange-red, free from core, tender, fine flavored, and of excellent table quality. Pkt. 10 cts., oz. 30 cts., ¼lb. 90 cts., lb. \$3.

CRESS, OR PEPPER GRASS

One ounce will sow 100 feet of drill

Curled, or Pepper Grass. The leaves are crisp, tender, and pungent in flavor. Sow at short intervals for succession, as it soon runs to seed. Pkt. 5 cts., oz. 15 cts., ¼lb. 50 cts., lb. \$1.50.

Bountiful Beans

Chantenay Carrots

CORN

One quart will plant
200 hills

If wanted by mail, add 5 cts. per $\frac{1}{2}$ pint, 10 cts. per pint,
15 cts. per quart to the prices listed

Golden Bantam. Perhaps the sweetest Corn grown; the standard for quality by which others would be judged. Plant attains a height of only 3 to 4 feet, usually bearing two or more ears to the stalk. The ears are compactly filled with kernels which when ready for the table are cream-yellow. Golden Bantam is one of the hardiest varieties of Corn grown, therefore it can be planted with safety earlier than other varieties. This characteristic also adapts it to localities having cool summer weather, a continuous supply being maintained by successive plantings. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., $\frac{1}{2}$ pk. \$2.25, pk. \$4.25.

Early Mayflower. Is fully a week or ten days earlier than White Cory; and when we say that in size of ear, tenderness and sweetness of the kernels it is very noticeably superior to White Cory, we think we have said enough to indicate that the variety has distinct merits. The ears are long and well filled from tip to butt with large, tender, fine-flavored, white kernels. $\frac{1}{2}$ pt. 20 cts., pt. 35 cts., qt. 60 cts., $\frac{1}{2}$ pk. \$2.25, pk. \$4.25.

Peep-o'-Day. One of the earliest varieties of Sweet Corn. Grows about $3\frac{1}{2}$ feet high. Bears nearly always two ears on a stalk, which measure about 5 inches in length and are well filled. $\frac{1}{2}$ pt. 15 cts., pt. 25 cts., qt. 45 cts., $\frac{1}{2}$ pk. \$1.60, pk. \$3.

Howling Mob. Is ready for use only three to five days later than the extra-early Cory when both are planted at the same time, but the ears are much larger in size, while the grains are much whiter and sweeter. As an early variety of large size, we cannot too highly praise Howling Mob. Pkt. 15c., pt. 25c., qt. 45c., $\frac{1}{2}$ pk. \$1.60, pk. \$3.

ENDIVE

One ounce will sow
200 feet of drill

CULTURE.—One of the most attractive of all autumn and winter salads. It is commonly known in restaurants as Chicorée, and is especially refreshing when served with lettuce with plain French dressing. Sow seed from middle of June till last of August. When the plants are fully grown, tie all the outside leaves together, over the heart, to blanch the inner leaves, which will take about a week. Do not tie up when the leaves are wet, as they will then decay.

Green Curled. Is the hardiest variety and has deep green leaves that are finely crinkled and curled. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

White Curled. Very tender when cut young; blanches readily. Very similar to Green Curled, but the leaves are naturally of a light golden tint, and they do not have to be tied up to blanch them for table use. Flavor very good. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts.

Broad-leaved Batavian (Escarolle). Broad, thick leaves with rounded ends, much larger in size and not deeply fringed like the preceding sorts. This is used in its natural state as a salad, and also like spinach. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

KALE

One ounce will sow
100 feet of row

As greens, Kale is a very delicious vegetable. Since it is quite hardy, it may be sown up to August 1. Cover with the approach of snow and severe cold weather. Cold improves the quality. It may be left in the garden all winter.

Dwarf Green Curled Scotch. Very dwarf and spreading; one of the best. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

Siberian Kale, or Sprouts. Should be sown in September and treated like spinach; it is fit to cut early in spring. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Dwarf Brown Kale. A beautiful curled variety, with spreading foliage; very hardy and of fine flavor. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

KOHLRABI

One ounce will sow about
200 feet of drill

CULTURE.—This is a very delicious vegetable, and is increasing in popularity rapidly; combines the good qualities of the turnip and cabbage, but excels both in nutritive and productive qualities. May be sown up to July 15. Cooked the same as turnips, they are very tender and palatable. Sow in rows 18 inches apart, and thin the plants to 8 inches.

Early White Vienna. The earliest and best for either market or family use. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.50.

Early Purple Vienna. Similar to the preceding, except in color, which is of a bluish purple. Pkt. 10 cts., oz. 30 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.50.

LETTUCE

One ounce will sow about
150 feet of row

The same varieties that should be sown in very early spring should again be planted during August. Autumn presents ideal conditions for perfect development of this delicious salad plant. The heads stand considerable frost if slightly protected.

Wayahead. Large and fine. Very similar to May King described below. If seed is sown about the same time as Golden Queen, it will likely mature a few days sooner, but usually makes a looser head. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

May King. Unquestionably one of the best all-round, early, outdoor Lettuces. Does remarkably well in cold or wet weather, forming solid heads of bright green, the edges of the center leaves tinged reddish brown; the heart is clear yellow and of ideal flavor. If sown the same time as Wayahead, May King will be ready about four to five days later. This variety is sown in August for fall use. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

Big Boston. A splendid head Lettuce, perhaps the most generally and favorably known of the three mentioned here. Forced in frames to great extent in the spring and is also planted in August for late crop. Does not do well for midsummer use, but as a fall or early spring Lettuce is one of the best. Large heads; center crisp and of fine flavor. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

MUSHROOM SPAWN

Ten bricks will spawn 100
square feet of bed

CULTURE.—"I have the fresh horse droppings saved until a sufficient quantity accumulates to fill the beds, occasionally turning the manure and watering it slightly if it appears not to be moist enough. Then I leave the mass for three days, after which I again turn it, adding more water if necessary. After turning, I firm the manure, and in three days again repeat the operation. The most particular part is to get the manure moist enough and yet not too moist. After the second turning the manure is generally ready for the bed. My beds are only 10 inches in depth. I press in the manure very firmly, and cover slightly with salt hay or straw, which tends to retain the moisture in the bed. When the temperature of the bed drops to 85°, I insert 'Pure Culture' Spawn in pieces about the size of an egg, 1 foot apart one way and 9 inches the other. I insert the Spawn just deep enough to cover with a little manure. I keep the temperature of the house between 55° and 60°, and occasionally dampen the walls, etc., as required; also occasionally 'dew' over the hay covering the bed with warm water. If the Spawn runs properly, a white, frothy substance will be observed in about ten days or two weeks. I then remove the hay and cover with one-inch thickness of sifted soil, preferably good pasture loam, firming it down. Mushrooms will generally appear in from six to eight weeks. I always have a little finely sifted soil on hand, and fill all the holes up after gathering the Mushrooms—that is, the holes made by removing the stalks. With good care the bed will last three months. Should it appear dry, water thoroughly with water heated to 90°, in which a pinch of nitrate of soda dissolved will be found very beneficial. In conclusion, I may say I think most of the failures in mushroom-growing arise from the manure being too dry."—JOSEPH ROBINSON.

American Pure Culture Spawn

This type produces larger Mushrooms than the English, coming into bearing somewhat earlier, and continuing to crop for a long time. This spawn is produced by selecting spores from individual specimen Mushrooms, and is propagated and transferred to the bricks of manure, which, when planted, produce Mushrooms all of one type.

Per Brick (about $1\frac{1}{2}$ lbs.), 30c. **Per 10 Bricks**, \$2.80.
Per 25 Bricks, \$6.75. **Per 100 Bricks**, \$25.

Bed of S. & W. Co.'s Pure Culture Mushroom Spawn

Early Pea,
Little Marvel

MUSTARD

One ounce will sow
75 feet of drill

White London. The best variety for salads; the seed is also used medicinally and as a seasoning for pickles. Oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

PEAS

One quart will plant
100 feet of drill

If wanted by mail, add 5 cts. per $\frac{1}{2}$ pint, 10 cts. per pint, 15 cts. per quart to the prices listed

We have listed below several varieties of Peas which will produce good crops if sown from July 15 to September 15.

First of All, or Pedigree Extra-Early. A smooth-seeded variety that cannot be too highly recommended. In a planting where ten varieties are wanted to produce a continuous succession of Peas from June 1, this variety heads the list, and will give you Peas four or five days earlier. A splendid cropper; Peas very tender, of good flavor, and carried in long, well-filled pods. Height 2 $\frac{1}{2}$ feet. $\frac{1}{2}$ pt. 25 cts., pt. 40 cts., qt. 75 cts., $\frac{1}{2}$ pk. \$2.75.

Little Marvel. A first-early Pea of the finest quality, better than American Wonder or Nott's Excelsior. The vines of dwarf, even growth, average 15 inches high, and are heavily set with fine pods, usually in pairs. The pods average 2 $\frac{1}{2}$ inches in length, are square at the bottom, and are well filled with quite large, deep green Peas. The Peas are ready for picking fully as early as American Wonder, but the pods are larger and the vines bear a much heavier crop. All who desire a fine crop of an early, choice variety of Peas will be delighted with Little Marvel. Begins to bear just as Gradus is at its best. Height 15 inches. $\frac{1}{2}$ pt. 25 cts., pt. 45 cts., qt. 80 cts., $\frac{1}{2}$ pk. \$3.

RADISH

One ounce will sow
100 feet of row

This delicious spring vegetable may be enjoyed all winter, if proper varieties are sown during July and August. The early spring sorts will be ready for use during September from seed sown in August. July sowings of summer and winter varieties will provide radishes for constant use.

Cooper's Sparkler. Of rich carmine-scarlet color, with a very pronounced tip of the purest white. The roots, even when fully developed, are solid, crisp and sweet, and remain fit for use as long as the coarser kinds. It is equally well adapted for forcing in frames or growing in the open ground. While the leaves are small, they are sufficiently large for bunching. Pkt. 10 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.

Early Scarlet Globe. The best general-purpose variety in this class, perfecting handsome roots, as illustrated, in from 28 to 35 days after sowing. Of distinct shape, brilliant color, short-leaved, crisp and white; an excellent variety for forcing. Pkt. 5c., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.

White Icicle. The "best all-round" Radish for all purposes in the home-garden; also fine for market and splendid for growing under glass. Within 30 days from sowing seeds, the roots attain a length of 4 to 5 inches, by $\frac{3}{4}$ inch in diameter at the thickest part. The skin is thin, the flesh crisp and mild. It remains in fine table condition longer than any other early sort, regardless of shape. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.75.

Long Black Spanish. The popular winter sort. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.75.

Round Black Spanish. Thick black skin and pure white flesh. Pkt. 5 cts., oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.75.

SPINACH

One ounce will sow about
100 feet of drill

CULTURE.—Sow in drills an inch deep and 14 inches apart during August or September. Spinach delights in very rich soil—in fact, it is of no use sowing it in a poor one.

S. & W. Co.'s New York Market. (Long Island Grown.) This Spinach grows rapidly and produces unusually large, thick, crumpled leaves of beautiful green. Properly cultivated and manured, the plants very often measure 2 feet across, and stand the winter better than any other sort of Spinach. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

S. & W. Co.'s Savoy-leaved. A valuable variety with wrinkled leaves, resembling the Savoy Cabbage; hardy and prolific. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

S. & W. Co.'s Large Thick-leaved. Fine market sort. It produces a large, thick leaf and stands for a long time before running to seed. Pkt. 5 cts., oz. 20 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.

TURNIP

One ounce will sow about
150 feet of drill

The best crops of Turnips are raised from seed that is sown in the summer. They require a rich soil, preferably one that has been manured for a previous crop.

Early White Milan. As early as the Early Purple-Top Milan and possesses all of its good qualities. The entire bulb, inside and out, is clear ivory-white in color; the outer surface is perfectly smooth. It grows so quickly that even the outer surface of the bulb is quite tender. Its table qualities are unequaled, being of the most delicate flavor and tempting appearance. Pkt. 10 cts., oz. 35 cts., $\frac{1}{4}$ lb. \$1, lb. \$3.50.

Golden Ball, or Orange Jelly. This is the most distinct yellow Turnip we know. The flesh is of a very fine texture, making it one of the best table varieties. Its beautiful color and fine flesh have earned for it the synonym of "Orange Jelly," which well describes its appearance when ready for the table. The bulb is of medium size, with small tap-root, and is early in maturing. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

Purple-Top White Globe. An early variety, globe-shaped, heavy cropper, in other respects similar to Red-Top Strap-Leaf. A handsome-looking bulb, and is rapidly taking the lead of all other varieties of early Turnip for market-garden purposes. Pkt. 10c., oz. 30c., $\frac{1}{4}$ lb. 90c., lb. \$3.

Early Scarlet Globe Radishes

SEASONABLE FARM SEEDS FOR SUMMER SOWING

Prices on Farm Seeds are subject to change without notice

Mangel-Wurzel and Sugar Beets

Sow 6 to 8 pounds to the acre in drills

The best soil for Mangels is friable loam, well plowed. The better the condition the larger the yield. The ground should be well enriched and seed sown in drills 24 inches apart in light soil and 30 inches apart in soil of a heavy nature. Plants should be thinned to stand 9 inches apart in light soil and 12 inches apart in heavier soils.

Mammoth Long Red. Roots of mammoth size, very regular; small top. Skin bright, dark red; roots grow from one-half to two-thirds above ground and often 2 feet long. Produces large tonnage to the acre. Oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Barre's Sludstrup. Has been recommended as holding the record for dry-matter content. This Mangel has been awarded a First-Class Certificate several times by the Danish government, the highest honor in Denmark, where Mangels are as important as corn is here. Sludstrup is a long, reddish yellow, ovoid root, growing more than half above the ground. Easily harvested and is considered to excel most varieties in both weight and feeding value. Oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

Champion Yellow Globe. Skin a rich yellow; flesh white and solid; grows two-thirds out of the ground, hence a good variety where soil is shallow. Good keeper. Oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

Golden Tankard. Smooth, yellow flesh; small, yellow-stemmed top; length 11 inches, diameter 4 inches, shape cylindrical. Usually grows half out of the ground. Easily pulled, good yielder, very hardy and nutritious. Oz. 15 cts., $\frac{1}{4}$ lb. 50 cts., lb. \$1.50.

Half-Sugar Rose. A variety combining the best qualities of sugar beets and Mangels. They are about the same shape as Long Red, but have white skin at the bottom, rose at top. Easier to harvest than sugar beets. Oz. 15 cts., $\frac{1}{4}$ lb. 40 cts., lb. \$1.25.

Sugar Beet

Klein Wanzleben. This variety is cultivated on a larger scale than any other Sugar Beet. Root is conical, straight and even, large at top and rapidly tapering. Contains a large percentage of saccharine matter. Oz. 20 cts., $\frac{1}{4}$ lb. 60 cts., lb. \$2.

Rutabaga, Russian or Swedish Turnips

Sow 4 pounds to the acre

CULTURE.—The Rutabaga is important for stock-feeding purposes and can be sown quite late. It grows very rapidly and yields from twenty-five to thirty-five tons to the acre, in good rich deep soil, with proper cultivation. The Rutabaga proper should be sown in this latitude from May 25 to June 25. If sown then, it should be in rows, 30 inches apart, and the plants thinned with a hoe to 12 or 14 inches apart, but if sown a month later, the distances between the rows and between the plants may be 8 inches.

S. & W. Co.'s Long Island Improved. This special strain of Rutabaga is grown on Long Island by a very careful grower. It is of a remarkably uniform shape and fine quality, and is also a splendid keeper. It grows to a large size, the skin is smooth, and flesh is beautiful yellow and fine-grained. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

Improved American Purple-Top. A yellow-fleshed Purple-Top; great cropper; excellent for table or stock. Pkt. 10 cts., oz. 25 cts., $\frac{1}{4}$ lb. 75 cts., lb. \$2.50.

Sand or Winter Vetch (*Vicia villosa*)

Sow 1 bushel (60 pounds) to the acre with $\frac{1}{2}$ bushel of rye or wheat

This Vetch is perfectly hardy, remaining green all winter. It should be sown during August and September, mixed with rye, or wheat, which serves as a support for the plants, or in the spring with oats. It grows to the height of 4 to 5 feet and is the earliest crop for cutting, fully a month earlier than scarlet clover. A full crop can be taken off the land in time for planting spring crops. It is very nourishing and may be fed with safety to all kinds of stock. Lb. 40 cts., 10 lbs., \$3.50, 100 lbs. \$30.

Millets for Summer Sowing

The use of Millets as "catch" or "stolen" crops, especially in seasons where the hay crop is short, is finding great favor among farmers in recent years. They are annuals and grow rapidly, usually being ready for cutting in six weeks from the time the seed is sown. They are great drought-resisters, doing well when most other crops are parched up.

If cut when in blossom, millets cure into excellent hay; if allowed to ripen, they become too woody. Sow from May 1 to August 1.

Hungarian Millet

Sow at the rate of 1 bushel to the acre

This is one of the quickest catch-crops for hay and may be sown any time up to the middle of August. Some farmers now plant their land to other crops and for their hay depend entirely on Hungarian Grass, which they sow on the land from which other crops have been harvested. Pk. \$1.25, bus. \$4, 10-bus. lots at \$3.75 per bus.

Golden Millet

Sow at the rate of 50 pounds to the acre

This variety is considerably larger than Hungarian and yields a much heavier crop, but is later and not so quick-growing, consequently cannot be sown after the first of July in this latitude. Lb. 15 cts., 10 lbs. \$1, 100 lbs. \$9.

Japanese Millet

Quite distinct from any other Millet, growing 6 to 8 feet high and producing an enormous crop, frequently yielding ten to twelve tons of green fodder to the acre. When cured, it makes excellent hay, and whether green or cured, is much relished by all kinds of stock. Should be cured as you would a heavy crop of clover. This Millet does not endure drought well, but north of Washington we confidently recommend its cultivation.

Sow from June 1 to July 1, broadcast, at the rate of twenty-five pounds to the acre, but it is better sown in drills, 12 to 18 inches apart, using fifteen to twenty pounds to the acre, and hoed between the rows to keep down all weeds, until the plant attains a height of 12 to 18 inches, when its rapid growth will smother all weeds. Lb. 15 cts., 10 lbs. \$1, 100 lbs. \$9.

Japanese Buckwheat

This is a superior variety and more prolific, and yields double the weight per acre of other sorts. The grains are nearly twice as large as those of Silver Hull, and of fine color. This variety is always in demand, millers preferring it to all other sorts, and it makes the finest flour. Sow about the middle of June, broadcast, one bushel to the acre. Pk. \$1, bus. \$3.50.

Recleaned Alfalfa

NOW IS THE TIME TO SOW

Sow thirty to forty pounds per acre if broadcasted, or twenty-five to thirty pounds, if drilled in, in May, or during August and early September, or most any season when weather conditions are favorable; top-dress it with manure every fall, and it will rarely winter-kill. It can be cut usually three times in one season. The great secret in getting a successful stand of Alfalfa lies in the preparation of the ground; it will pay everyone who wants to grow this valuable farm-crop to give the ground preparation most intelligent thought. It must be borne in mind that an Alfalfa field properly started will yield successfully a score of years. Lb. 40 cts., 10 lbs. \$3.50, 100 lbs. \$30.

Crimson Clover (*Trifolium incarnatum*)

SPLENDID AND ECONOMICAL COVER-CROP FOR USING GREEN OR PLOWING UNDER

Used principally for soiling or green manuring, for which purposes it is largely used. If desired for feed, cut it just before it flowers; when desired for green manure or soiling, it should be left until mature before plowing under. Sow Crimson Clover in September and October or at the last working of such crops as corn, beans, melons, cucumbers, tomatoes, etc., at the rate of 20 pounds to the acre. Where Crimson Clover is sown as a cover-crop, it is very valuable for the ground over winter, and when plowed under the following spring helps to improve the soil—first by preventing valuable fertilizing elements from escaping in the winter, and second in restoring plant-food to the soil when plowed under. Lb. 40 cts., 10 lbs. \$3.50, 100 lbs. \$30.

Perennial Flower Seeds

FOR SOWING DURING LATE
SUMMER OR EARLY FALL

	Color	Height feet	Time of flowering	Per pkt.		Color	Height feet	Time of flowering	Per pkt.
Acacia	Mixed	3-6	Spring	\$0 05	Chrysanthemum leucan-	White	3	July-Oct.	\$0 10
Acanthus (Bear's Breech)					themum (Shasta Daisy)	White	3	Aug.-Oct.	10
latifolius.....	Purple	2	Aug., Sept.	05	maximum.....	White	3	Aug.-Oct.	10
mollis.....	Rose	1	Aug., Sept.	05	uliginosum.....	White	5	Aug.-Oct.	25
Achillea (Yarrow)					Clematis (Virgin's Bower)				
Ptarmica—The Pearl.....	White	2½	June, July	25	Jackmani.....	Mixed	15-25	Summer	10
Aconitum (Monkshood)					Coreopsis grandiflora	Yellow	2	Sum. oz. 75c.	10
Napellus.....	Blue	3	Aug., Sept.	10	lanceolata.....	Yellow	2	Sum. ¼ oz. 40c.	10
Finest Mixed.....		3	Aug., Sept.	10	Cowslip . See <i>Primula veris</i> .				
Adonis (Ox-Eye)					Delphinium (Larkspur)				
vernalis.....	Yellow	¾	June	10	Barlowi.....	Dark blue	3	Summer	25
Agrostemma (Rose Campion)					Belladonna.....	Blue	3-4		25
coronaria.....	Red	2	June, July	05	cardinale.....	Scarlet	1½	Summer	25
coronaria alba.....	White	3	June, July	05	formosum.....	Dark blue	2½	Summer	10
coronaria, Mixed.....	Mixed	3	June, July	05	formosum caelestinum.....	Sky-blue	2½	Midsummer	20
Alstroemeria (Chilian Lily). Finest Mxd.		3	July	25	nudicaule.....	Orange	1½	Midsummer	25
Alyssum saxatile compactum	Yellow	¾	June	10	hybridum fl.-pl.....	Mixed	3-5	Midsummer	15
Anchusa (Alkanet)					Dianthus (Pinks)				
Italica.....	Blue	3	July	05	plumarius, Double.....	Mixed	1	Midsummer	10
Italica, Dropmore Variety.....	Bright blue	4	July	15	plumarius, Single.....	Mixed	1	Midsummer	05
Barrelieri.....	Deep blue	2	June-Sept.	10	Scoticus.....	Mixed	1	Midsummer	25
Capensis (Biennial).....	Azure-blue	1½	July, Aug.	05	Digitalis (Foxglove)				
sempervirens.....	Blue	1½	July	05	monstrosa.....	Mixed	3	M'sum. oz. \$1.25	10
Anemone (Windflower)					purpurea.....	Purple	3	M'sum. oz. 75c.	10
Giant de Caen, Single.....	Mixed	¾	May, June	05	purpurea alba.....	White	3	M'sum. oz. 75c.	10
St. Brigid.....	Mixed	1	Spring	15	purpurea rosea.....	Rose	3	M'sum. oz. 75c.	10
Anthemis (Marguerite)					purpurea rubra.....	Red	3	M'sum. oz. 75c.	10
Kelwayi.....	Yellow	2	July	10	purpurea, Mixed.....	All colors	3	M'sum. oz. 75c.	10
nobilis.....	White	2	July	10	Dietamnus (Burning Bush)				
Anthericum (Hedge Flower)					Fraxinella.....	Red	2	June, July	05
Liliago.....	White	2	May, June	10	Doronicum Caucasicum.....	Yellow	3	Spring	25
Aquilegia (Columbine)					Echinops (Globe Thistle)				
Californica.....	Yellow	2	May-July	15	Ruthenicus.....	Blue	3	Autumn	10
chrysantha.....	Yellow	3	Sum. ¼ oz. \$1	10	Edelweiss . See <i>Gnaphalium</i> .				
caerulea.....	Pale blue	2	Sum. ¼ oz. 75c.	15	Eupatorium ageratoides.....	White	4	August, Sept.	10
Rose Queen.....	Rose	2	Summer	25	caelestinum.....	Blue	4	September	10
Skinneri.....	Scar. & Gr.	2½	Summer	25	Eryngium (Sea Holly)				
Stuarti.....	Pale blue	2	Summer	50	amethystinum.....	Amethyst blue.	2½	August	15
Double Mixed.....		3	Summer	10	Forget-me-not . See <i>Myosotis</i> .				
Single Mixed.....		3	Summer	10	Foxglove . See <i>Digitalis</i> .				
Asperula odorata.....	White	½	June, July	10	Gaillardia (Blanket Flower)				
Aster (Michaelmas Daisy)					Kermesina splendens.....	Crim.&yel.	2	Summer	15
alpinus.....	Blue	2	Autumn	15	grandiflora.....	Mixed	2	Summer	10
alpinus albus.....	White	2	Autumn	15	sulphurea oculata.....	Pale yel.	2	Summer	15
Bessarabicus.....	Pink	3	August	10	Gaura Lindheimeri.....	White and red-tinted	2	Summer	05
Novæ-Angliæ.....	Mixed	4	September	10	Gentiana acaulis.....	Dark blue	1½	Early summer	10
sub-caeruleus.....	Orange-yel.	2	Autumn	25	Geum atrosanguineum fl.-pl.....	Dk. crim.	2	Summer	10
Asclepias tuberosa.....	Or. and yel.	2	June-Sept.	15	Gnaphalium (Edelweiss)				
Aubrietia (False Wallcress)					leontopodium.....	White	½	Midsummer	25
Bougainvillei.....	Rosy lilac	½	Spring	10	Gypsophila (Baby's Breath)				
Leichtlinii.....	Red-crim.	½	Spring	10	paniculata.....	White	2	E. Sum. oz. 50c.	05
Baptisia australis.....	Deep blue	3	June, July	05	acutifolia.....	Rose	3	July, oz. 50c.	05
Bellis perennis (Double English Daisy)					repens.....	White	1	Early summer	05
Snowball.....	White	½	Summer	10	Heuchera (Alum Root)				
Longfellow.....	Rose	½	Summer	10	sanguinea.....	Crimson	2	Summer	25
Red Quilled.....	Red	½	Summer	25	Helenium (Sneezeweed)				
Giant-flowering White.....	White	½	Summer	25	autumnale.....	Yellow	6	Autumn	10
Giant-flowering Pink.....	Pink	½	Summer	25	Bigelovii.....	Golden yel.	5	Autumn	25
Giant-flowering Mixed.....	Mixed	½	Summer	25	Hoopseii.....	Dark yel.	2½	Autumn	25
Bocconia cordata (Plume Poppy)					Helianthus (Sunflower)				
Poppy.....	Cry. white	2-3	Summer	05	Missouricus.....	Yellow	5	June-Sept.	10
Calliopsis . See <i>Coreopsis</i> .					rigidus.....	Yellow	4	June-Sept.	25
Campanula (Canterbury Bells)					Perennial sorts.....	Mixed	3-6	June-Sept.	10
Carpatia.....	Blue	½	June, July	10	Heliopsis Pitcheriana.....	Orange	3	Autumn	10
Carpatia.....	White	½	June, July	10	Hesperis (Sweet Rocket)				
macrantha.....	Blue	1	June, July	10	matronalis.....	Purple	3½	Summer	05
persicifolia.....	Blue	3	June, July	15	Hibiscus (Marshmallow)				
persicifolia.....	White	3½	June, July	15	palustris.....	Pink	3½	Aug., Sept.	05
persicifolia, Fairy Queen.....	Azure-blue	3	June, July	25	moscheutos.....	Rosy red	3½	Aug., Sept.	05
persicifolia Moerheimi.....	White; dbl.	3	June, July	25	Golden Bowl.....	Cr. yellow	3½	Aug., Sept.	10
pyramidalis.....	Blue	3-4	Summer	10	Hollyhock, Chater's Superb				
pyramidalis.....	White	3-4	Summer	10	Double White.....		5	Midsummer	25
Mixed.....		4	Summer	10	Double Pink.....		5	Midsummer	25
For other varieties see Spring Catalogue					Double Cerise.....		5	Midsummer	25
Candytuft . See <i>Iberis</i> .					Double Crimson.....		5	Midsummer	25
Cerastium tomentosum.....	White	½	Summer	15	Double Scarlet.....		5	Midsummer	25
Cheiranthus (Winter Wallflower)					Double Flesh-color.....		5	Midsummer	25
Kewensis.....	Mixed	2	Winter	25	Double Lilac.....		5	Midsummer	25
Chelone (Turtle Head)					Double Primrose.....		5	Midsummer	25
barbata.....	Red	2	Summer	10	Double Yellow.....		5	Midsummer	25
barbata Torreyi.....	Coral-red	3	Summer	10	Double Mixed.....		5	Midsummer	20
barbata Lyonii.....	Deep red	2	Summer	10					

STUMPP & WALTER CO.'S SELECTED SEEDS

PERENNIAL FLOWER SEEDS, continued

	Color	Height feet	Time of flowering	Per pkt. \$0
Hollyhock, Chater's Superb, continued.				
Good Double Mixed.....		5	Midsummer	10
Single White.....		5	Midsummer	25
Single Pink.....		5	Midsummer	25
Single Scarlet.....		5	Midsummer	25
Single Purple.....		5	Midsummer	25
Single Primrose.....		5	Midsummer	25
Single Yellow.....		5	Midsummer	25
Single Mixed.....		5	Midsummer	20
Honesty (Moonwort)	Silvery w.	2	Summer	05
Iberis (Hardy Candytuft)				
Gibraltarica.....	Lilac	1	Spring	25
sempervirens.....	White	1	Spring	10
Incarvillea (Hardy Gloxinia)				
Delavayi.....	Pink	2	Summer	50
Lavandula (Lavender)	Lavender	1½	Summer	10
Lathyrus (Hardy Sweet Pea)				
latifolius albus.....	White	6-8	Midsummer	10
latifolius.....	Rose	6-8	Midsummer	10
latifolius.....	Red	6-8	Midsummer	05
latifolius.....	Mixed	6-8	Midsummer	05
Linum (Flax)				
perenne.....	Blue	1½	July-Sept.	10
luteum.....	Yellow	1½	July-Sept.	10
Lobelia (Cardinal Flower)				
cardinalis.....	Scarlet	2	Aug., Sept.	25
Lupinus (Hardy Lupine)				
polyphyllus, White.....		4	June-Sept.	10
polyphyllus, Blue.....		4	June-Sept.	10
polyphyllus, Rose.....		4	June-Sept.	10
polyphyllus, Mixed.....		4	June-Sept.	10
polyphyllus, Excelsior, Mxd.		4	June-Sept.	15
Lychnis (Campion)				
Chalcedonica.....	Scarlet	1½	May, June	10
Lagascæ.....	Rose	1½	May, June	25
Malva (Mallow) moschata	Rose	5	July-Sept.	10
moschata alba.....	White	5	July-Sept.	10
Monarda didyma (Bee Balm)	Crimson	3	July-Sept.	25
Myosotis (Forget-me-not)				
alpestris.....	Blue	½	Spring	05
alpestris, Victoria.....	Light blue	½	Spring	25
Eliza Fonrobert.....	Sky-blue	½	Spring	10
palustris.....	Blue	½	Spring	10
Ruth Fischer.....	Blue	½	Spring	25
semperflorens.....	Deep blue	¾	Spring	10
Finest Mixed.....		¾	Spring	05
Oenothera (Evening Primrose)				
Fraseri.....	Yellow	1½	June-Sept.	25
Papaver (Poppy)				
bracteatum.....	Scarlet	2	Summer	10
Iceland, Single.....	Mixed	1½	Summer	10
Iceland, Double.....	Mixed	1½	Summer	10
Oriental.....	Scarlet	2½	Summer	10
Passiflora (Passion Flower)				
cærulea.....	Blue	10-15	Midsummer	10
alba.....	White	10-15	Midsummer	10
incarnata.....	Pink	10-15	Midsummer	10
Pentstemon (Beard Tongue)				
Digitalis.....	White	1½	Summer	10
Sensation.....	Mixed	2	Summer	15
S. & W. Co.'s Giant-flower- ing Hybrids.....	Mixed	2	Summer	25
Phlox, Large-flowering Hybrids,				
Tall.....	Mixed	3	Summer	10
Large-flowering Hybrids, Dwarf.....	Mixed	2	Summer	10
Red Shades.....	Mixed	3	Summer	25
Mixed.....		2-3	June-August	10
Physostegia (False Dragon Head)				
Virginica.....	Lilac	2-3	Summer	10
Pinks. See Dianthus.				
Polemonium (Jacob's Ladder)				
cæruleum.....	Deep blue	2	Summer	10
cæruleum album.....	White	2	Summer	10
Richardsonii.....	Sky-blue	2	Summer	10
Primula Auricula	Mixed	¾	Spring	15
Forbesi.....	Rosy lilac	¾	Spring	25
veris (English Cowslip).....	Mixed	¾	Spring	05
vulgaris (Evening Primrose).....	Yellow	¾	Spring	10
Japonica (Jap. Primrose).....	Mixed	1	Spring	10
Pyrethrum roseum				
hybridum, Double.....	Mixed	2	Spring	25
hybridum, Single.....	Mixed	2	Spring	25
Rehmannia angulata	Rosy pur.	2½	Summer	25
Romneya Coulteri	White	5	Midsummer	10
Rudbeckia (Golden Glow)				
fulgida.....	Golden yel.	3	July-Sept.	10

	Color	Height feet	Time of flowering	Per pkt. \$0
Salvia patens	Blue	2	Summer	10
azurea grandiflora.....	Sky-blue	2¼	Aug., Sept.	10
Sanvitalia procumbens	Yellow	¾	Spring	25
Saxifraga cordifolia	Rose	1	Spring	25
Scabiosa (Scabious)				
caucasica.....	Lilac	3	Summer	10
caucasica alba.....	White	3	Summer	10
Solidago (Goldenrod)				
Canadensis.....	Yellow	4	Summer	10
Statice (Sea Lavender)	Mixed	½	June-Sept.	10
Stokesia (Cornflower Aster)				
cyanea.....	Blue	2	July-Oct.	15
alba.....	White	2	July-Oct.	15
Sunflower. See Helianthus.				
Sweet Rocket. See Hesperis.				
Thalictrum (Meadow Rue)				
adanthifolium.....	Yellow	1½	Summer	10
Tritoma (Red-hot Poker)				
Express.....	Orange-yel.	4	Summer	20
May Queen.....	Yellow	2	June-Oct.	25
Trollius (Orange Globe)				
caucasica.....	Orange	1½	Summer	25
japonicus.....	Yellow	1½	June, July	25
Valeriana, or Centranthus (Spurred Flower)				
rubra.....	Red	2	June-Oct.	10
alba.....	White	2	June-Oct.	10
Mixed.....	Mixed	2	June-Oct.	10
Verbena venosa	Purple	1	Summer	05
Veronica (Iron Weed)				
spicata alba.....	White	2	July, Aug.	10
spicata rosea.....	Pink	2	July, Aug.	10
spicata, Mixed.....	Mixed	2	July, Aug.	10
Viola cornuta (Tufted Pansies)				
Admiration.....	Dark blue	½	Spring	25
alba.....	White	½	Spring oz. \$2.50	10
lutea.....	Yellow	½	Spring oz. \$3	10
Mauve Queen.....	Mauve	½	Spring oz. \$3	10
papilio.....	Blue-white	½	Spring oz. \$2.50	10
Perfection.....	Light blue	½	Spring oz. \$2.50	10
Purple Queen.....	Purple	½	Spring oz. \$3	10
Viola odorata				
Single Sweet Violets.....	Blue	½	Spring	10
Wahlenbergia (Chinese Bellflower)				
grandiflora.....	Blue	1½	Summer oz. 75c.	10
grandiflora alba.....	White	1½	Summer oz. 75c.	10
grandiflora cærulea plena.....	Dark blue	1½	Summer oz. 75c.	10
grandiflora nana (Mariesii).....	Dark blue	1½	Summer oz. 75c.	10
nana alba.....	White	1½	Summer	25
Wallflower. Single Mixed.....	Mixed	2	Summer	10
Double Mixed.....	Mixed	2	Summer	10

A Bed of Ornamental Grasses

ORNAMENTAL GRASSES

Perennial Varieties

Sow now, and transplant next spring.

	Pkt. \$0	Pkt. \$0
Erianthus Ravennæ	10	Gynerium argenteum
Eulalia Japonica foliis		jubatum.....
vittatis.....	10	Pennisetum Rupelianum
zebrina.....	10	Stipa elegantissima
		Uniola latifolia

STUMPP & WALTER CO.'S GIANT PANSIES

This very popular annual needs little description. Good results may be obtained from sowing seed in April in a light, cool, but well-moistened soil, enriched with a slight amount of barnyard manure or fine ground bone. Sow seed in drills, covering them five times their diameter, and firm soil. Water once a day, except in very dry weather, when they may be watered twice a day. Seed will germinate in about two weeks and should not be allowed to dry out. A small covering of newspapers will prevent drying out. When plants are large enough to handle, they should be transplanted to a distance of 1 foot apart. Where greenhouse and coldframe facilities are at hand, seed may be sown in July or August and plants protected during winter.

Pansies in Mixture

Our Pansy Mixtures are prepared in our Flower Seed Department by an expert who has a thorough knowledge of the finest sorts extant, and is done in a very careful manner. Our Pansies have been grown throughout the United States, by leading florists, many of whom have repeated their order every year, thereby giving their unqualified indorsement to our famous strain.

World's Best Mixture. This mixture of Giant Pansies has been prepared of the finest varieties grown; blooms of gigantic size, splendid texture; the plants of robust constitution hold their majestic blooms well above the foliage. Every conceivable color and combination of colors has been included. Pkt. 25 cts., 1,000 seeds \$2, 5,000 seeds \$8.

Non Plus Ultra. A mixture of Pansies designed for the critical buyer who desires his beds to look of uniform quality, giving every conceivable color and combination of colors that exists in this highly meritorious flower. Pkt. 15 cts. ¼ oz. \$1.50, oz. \$6.

Masterpiece (Frlled Pansy). A remarkable type, each petal being conspicuously curled or waved. The color range is quite extensive, the rich, dark, velvety shades predominating. Pkt. 25 cts., ¼ oz. \$2, oz. \$7.50.

Cassier's Giant. A grand mixture of the finest blotched varieties; very large in size and rich in coloring. Pkt. 15 cts., ¼ oz. \$1.50, oz. \$5.

Mme. Perret. A new and beautiful strain, originated with a French specialist; flowers of large size, borne very freely in a great diversity of colors, especially rich in red and wine shades. Pkt. 20 cts., ¼ oz. \$2, oz. \$7.

S. & W. Co.'s Special Mixed. Pkt. 10 cts., ¼ oz. 75 cts., oz. \$2.50.

Finest English Mixed. Pkt. 5 cts., ¼ oz. 50 cts., oz. \$1.50.

S. & W. CO.'S GIANT PANSIES

Giant Pansies in Separate Colors

	Pkt.	¼oz.	Oz.		Pkt.	¼oz.	Oz.
Giant Adonis. Soft lavender-blue.....	\$0 15	\$1 50	\$5 00	Giant Purple	\$0 15	\$1 50	\$5 00
Giant Azure-Blue	15	1 50	5 00	Giant Snow-White	15	1 25	4 00
Giant Dark Blue. Deep blue.....	15	1 50	5 00	Giant White. Dark eye.....	15	1 50	5 00
Giant Fire King. Mahogany and gold...	15	1 25	4 00	Giant Pure Golden Yellow	15	1 50	5 00
Giant Lord Beaconsfield. Violet-blue...	15	1 50	5 00	Giant Yellow. Dark eye.....	15	1 50	5 00

Flower Seeds for Autumn Sowing

Antirrhinum, Giant-flowering

ANTIRRHINUM (Snapdragon)

TALL VARIETIES

	Pkt.	1/4oz.
Giant Coral-Red. Very pretty and attractive shade..	\$0 10	\$0 35
Giant Blood-Red. Very beautiful shade.....	10	35
Giant White. Excellent cutting variety.....	10	35
Giant Yellow.	10	35
Giant Queen Victoria. A very large white.....	10	35
Giant Rose Dore. A lovely new shade, a pretty self-salmon-rose.....	10	35
Giant Fairy Queen. Rich orange-salmon, with white throat.....	10	35

DWARF VARIETIES

Snowflake. New. Splendid pure white.....	25	75
Golden Queen. Yellow.....	10	35
Queen of the North. White. An excellent bedding variety.....	10	25
Crimson King. Deep crimson.....	10	50

ASPARAGUS

Plumosus nanus. Graceful, fern-like foliage; grown extensively by florists for decoration. **Full Greenhouse Grown.** Pkt. 25 cts., 100 seeds, \$1.

Sprengeri. Of more drooping and coarser habit; excellent for hanging-baskets. Pkt. 25 cts., oz. 75 cts.

BELLIS PERENNIS (Double Daisy)

Our strain of this popular flower is grown by a specialist in France, and for size cannot be excelled.

	Pkt.
Giant-flowering Pink	\$0 25
Giant-flowering White	25
Double Red, Quilled	25
Double Selected, Mixed	25

CALCEOLARIA

The strains of this beautiful decorative pot-plant are grown by a famous English Calceolaria Specialist, and are the finest in existence.

	Pkt.
S. & W. Co.'s Giant Strain	\$0 50
S. & W. Co.'s Giant Prize Strain	50
Rugosa, Mixed. Shrubby. Small-flowering varieties for bedding.....	50

CALENDULA OFFICINALIS FL. PL.

(Pot Marigold)

	Pkt.	1/2oz.	Oz.
Meteor. Double; yellow striped with orange..	\$0 05	\$0 15	\$0 25
Prince of Orange. Similar to Meteor, but much darker.....	05	15	25
Sulphurea fl. pl.	05	25	40

CALLIOPSIS

	Pkt.	1/2oz.	Oz.
Drummondii (Golden Wave). Rich golden yellow.....	\$0 05	\$0 20	\$0 35
Tinctoria marmorata. Marbled yellow and brown.....	05	20	35

CANDYTUFT (Iberis)

	Pkt.	Oz.
Giant Hyacinth-flowered. Immense, pure white spikes; when grown in rows for cut-flowers best results can be obtained only by setting the plants at least a foot apart in the rows and 1 1/2 feet between the rows.....	\$0 25	\$3 00
Empress. Pyramidal, pure white.....	10	1 00
Queen of Italy. Light pink.....	10	50
Lilacina. Beautiful large-flowering lilac.....	10	50
Crimson. Bright crimson-red.....	10	50

ASK FOR OUR SPECIAL CIRCULAR ON SWEET PEAS FOR AUTUMN SOWING

CORNFLOWER (*Centaurea Cyanus*)

This favorite flower is frequently grown under glass for Christmas flowering. Sow in September.

	Pkt.	Oz.
Blue. Well-known blue.....	\$0 05	\$0 25
Rose. Delicate rose.....	05	25
White. Pure white.....	05	25
Double Blue. A variety largely used by commercial florists on account of its large-sized and double flowers.....	15	1 50

GIANT SWEET SULTAN

(*Centaurea imperialis*)

Our strains of Sweet Sultans are grown by a great many florists and gardeners, and are pronounced *par excellence*. Splendid for forcing under glass.

S. & W. Co.'s Pure White. One of the best varieties for cutting; large and deliciously sweet-scented.....	Pkt. \$0 15	1/2 oz. \$0 50
Pink. Pink with white tinge.....	15	50
Lilac. Delicate lilac.....	15	50
Purple. Purple-rose.....	15	50
Rose. Brilliant deep rose.....	15	50

Four Fine *Centaureas* (For Greenhouse Growing)

The following four varieties are largely grown by florists during the winter months for cut-flowers.

Suaveolens. (Yellow Sweet Sultan.) Very showy, bright yellow flowers; sweetly scented.....	Pkt. \$0 05	Oz. \$0 60
Odorata. Beautiful large flowers of light blue, deliciously scented.....	10	1 00
Odorata, Chameleon. Large flowers of pale sulphur-yellow, changing to rosy lilac.....	10	2 00
Marguerite (Giant White Cornflower). Flowers 4 inches across, purest white and very fragrant.....	10	1 00

CINERARIA

Seed should be sown from May to September where a succession is desired. When sown at this time, fine plants may be secured. The main point in the culture of Cinerarias is to secure as hardy a growth as possible with leaves of medium size. Seed may be transferred direct from seed-pans to thumb-pots. After planting, place in cold-frame facing north, if possible. As pots become full of roots, shift to larger ones until flowering size is reached.

S. & W. Co.'s Giant-flowering Mixed.

This strain of Prize Cineraria is grown for us by a famous English seed specialist. The flowers seldom measure less than 3 inches in diameter, comprising the following colors: White, rose, flesh, crimson, blue, violet, etc. The plants are of a very robust dwarf habit, which, combined with the mass of giant blooms, makes this strain exceedingly valuable. Pkt. 50 cts.

Matador. A new, large-flowering, deep scarlet; one which adds brilliance to a collection. Pkt. 50 cts.

S. & W. Co.'s Stellata. Delicate star-like blooms are borne in great profusion on long stems, giving this variety a double use, as it is excellent for cutting as well as decorative purposes; all shades.

Tall Mixed. Pkt. 50 cts.

Dwarf Mixed. Pkt. 50 cts.

MIGNONETTE (Greenhouse-grown)

S. & W. Co.'s Triumph. This 'Mignonette' is one of the choicest varieties for winter forcing. In type similar to Allen's Defiance, except that spikes are more compact and the individual florets are much larger in size. Seed of this grand variety is grown at our greenhouses, and is saved from the best spikes. Pkt. 50 cts.

Allen's Defiance. A popular variety for indoor culture. Very fragrant; fine for cutting. Pkt. 10 cts., oz. \$2.

Giant Sweet Sultan (*Centaurea imperialis*)

GIANT-FLOWERING CYCLAMEN

Flowers of extraordinary size and of great substance. The leaves are proportionately large and beautifully marked. These are among the most beautiful winter- and spring-flowering plants for the window and greenhouse. Not only are the flowers of striking beauty, but the foliage is also highly ornamental. Sow seed from August to September, and do not permit the seedlings to become checked. When grown cool, most satisfactory results are obtained. Our strain is selected by a well-known English Cyclamen grower.

S. & W. Co.'s Giant Strain

Giant Salmon-Red	Giant Rose-Salmon
Giant Rose	Giant Pale Rose
Giant Pure White	Giant White. Red eye.
Giant Dark Red	Giant Light Red
Giant Lilac	Giant White. Striped violet.
Giant Cattleya Purple	Giant Prize Mixed

Pkt. 25 cts., 100 seeds \$1.25

S. & W. CO.'S Victoria. Beautiful, fringed, white and rose flowers. Pkt. 25 cts., 100 seeds \$1.50.

MYOSOTIS (Forget-me-not)

All the varieties of these popular plants are very beautiful and general favorites with all; they succeed best in a moist situation. Half-hardy perennial. 1 1/2 feet.

	Pkt.	Oz.
Alpestris. A pretty trailer with blue flower.....	\$0 05	\$0 60
" Eliza Forrobert. Sky-blue.....	10	1 00
" Victoria. Dwarf habit; sky-blue.....	25	1 50

Oblongata perfecta. Flowers borne on long spikes; very suitable for winter blooming..... 10 | 1 25 |

Palustris (True Forget-me-not)..... 10 | 3 00 |

" **semperflorens.** Continuous bloomer..... 10 | 2 50 |

Finest Mixed..... 05 | 60 |

Ruth Fischer. The latest and said to be the finest and largest-flowered Forget-me-not yet sent out, producing flowers up to 1/2 inch in diameter, of true Forget-me-not-blue; plants of strong, vigorous growth, of exceptional value for pot culture and spring bedding..... 25 | |

PRIMULA (Primrose)

The strains of Primula offered below are specially grown for us by a famous English Primula specialist and are selected from the finest and best-developed plants. Seed sown in April will bloom during early winter; August for spring blooming. Sow in shallow pans, in soil consisting of part sand and leaf-mold worked through a fine sieve and allow for good drainage. Cover seeds lightly and water frequently; give a temperature of about 65 degrees.

PRIMULA SINENSIS (Chinese Primrose)

This beautiful Chinese Fringed Primrose is indispensable for spring decoration in the home or conservatory, and ranks as one of the most important winter-blooming pot-plants grown by the florist. Our Giant Fringed strain is of the highest merit, and is carefully selected.

Stumpp & Walter's Co.'s Giant Primulas

Giant Magnifica, Blue
Giant Crimson
Giant Rose Queen
Giant Ruby Queen

Giant Salmon
Giant White Fern-leaved
Giant Mixed

Pkt. 75 cts.; collection of 6 pkts. \$4.25

Giant Double White
Giant Double Princess of Wales,
Striped
Giant Double Blue

Giant Double Rosy Pink
Giant Double Salmon-Pink
Giant Double Mixed

Pkt. 75 cts.; collection of 6 pkts. \$4.25

Primula obconica gigantea

This type of Primula outrivals the old Obconica type, the flowers being considerably larger, often measuring 1½ inches in diameter.

	Pkt.		Pkt.
Kermesina. Rich crimson.	\$0 25	Lilacina. Lilac.	\$0 25
Rosea. Rose.	25	Mixed. Pure white to	
Alba.	25	crimson.	25

Schizanthus Wisetonensis

S. & W. Co.'s Giant Primula

PRIMULA STELLATA

A very pretty form, with large heads of star-shaped flowers of various colors; a splendid type for decorative purposes.

Giant White Star Giant Crimson Star Giant Rosy Star
Giant Salmon-Pink Giant Blue Star Giant Mixed

Pkt. 75 cts.; collection of 6 pkts. \$4.25

Forbesi (Baby Primrose). This is the freest-flowering Primula we know of. The little plants throw up tiny flower-stalks when only a few weeks old. These should be pinched off and the plants kept growing until October, and from then on until late in spring they produce their sprays of beautiful rosy lilac flowers in seemingly never-ending profusion. Pkt. 25 cts.

Kewensis. This new variety is most attractive, with pleasing bright yellow flowers borne on long stems. It is delightfully fragrant and stands well as a house-plant. Pkt. 25 cts.

Primula malacoides (The Giant Baby Primrose). The flowers measure ½ to ¾ inches across, and the plants branch every freely. The flowers are of a pretty light lilac, are borne in whorls on stems which are graceful and strong. If grown in a greenhouse can be had in bloom in four or five months after sowing. A most delightful plant for table decoration. Pkt. 25 cts., 5 pkts. \$1.

Primula malacoides alba. This beautiful new variety is a welcome addition to this type of Primula. All those who have grown the white Malacoides have been pleased, making this variety a strong favorite. Makes a charming combination with the lilac form. Pkt. 25 cts., 5 pkts. \$1.

SCHIZANTHUS

(Butterfly or Fringe Flower)

These dainty plants are of easy culture in any good garden soil. They are also useful as pot-plants for spring flowering, the seed being sown in early fall and the plants kept in a light house and given plenty of room as they need it.

Wisetonensis. A variety largely used as a pot-plant for the house or conservatory. It is remarkably free-flowering and presents a beautiful appearance, with its myriads of blooms, the ground-color of which is white, dotted with delicate rose. Pkt. 25 cts., 5 pkts. \$1.

Dwarf Hybridus grandiflorus. New. A very popular strain of this well-known showy annual: plants grow 12 inches in height, of compact and pyramidal habit, with a great range of colors, bright and handsome. Splendid for border planting. Pkt. 25 cts., 5 pkts. \$1.
Mixed. A splendid mixture of the regular type. Pkt. 10 cts.

Grass for Hay or Permanent Pasture

For every different kind and condition of soil there are a large number of grasses, either indigenous or introduced, which are especially suitable. Some sorts do best on high ground and in dry weather; others prefer plenty of moisture. Some mature so early and others so late that from the beginning of spring until winter sets in there is no time when one species or another is not at its best. From these considerations, the importance of sowing many varieties for pasture and meadow purposes will be apparent, consisting of the following varieties: Orchard Grass, Meadow Foxtail, Sheep's Fescue, Rhode Island or Creeping Bent, Hard Fescue, Sweet-scented Vernal (True Perennial), Meadow Fescue, English Rye Grass, Italian Rye Grass, Red Top, Timothy, Red and Alsike Clover, blended in proportions which we have found, from actual use, give the most satisfactory results.

On ordinarily fertile soil 80 pounds of this mixture are sufficient to seed an acre, but where the land is poor a larger quantity will be necessary.

For Hay and Permanent Pasture for Light Soils.

For Hay and Permanent Pasture for Medium Soils.

For Hay and Permanent Pasture for Heavy Soils.

For Orchard and Shady Places.

For Hay only. Specially recommended for large hay crop.

For Pasture Only. Will stand close cropping without injury.

10 lbs. \$2.50, 100 lbs. \$20

STEEL DISC SMOOTHING HARROW

The frame measures 6 feet 8 inches by 6 feet, and has four sets of rollers, having 58 discs, 8 inches in diameter. **Price \$40. Price subject to change without notice.**

S. & W. CO.'S WHEELBARROW GRASS SEEDERS

(Weight, 45 to 50 pounds.)

On the market over thirty years and over 200,000 sold. For sowing all kinds of grass seeds broadcast, clover, timothy, alfalfa, Hungarian millet, rape and all small seeds. Also all chaffy seeds like red top, orchard grass, and clean blue grass, bent grass, any quantity per acre desired. They are no experiment, and are guaranteed to do an even, accurate, first-class job of seeding. **Price (14 feet sowing area) \$12.**

S. & W. Co.'s Wheelbarrow Grass Seeder

Grass Seed ^{SPECIAL MIXTURES} for Various Situations

The following mixtures are prepared for various situations. Each mixture is prepared with a thorough understanding of the grasses best suited for its purpose.

High-Grade Lawn Seed

FOR GENERAL LAWN PURPOSES

Our High-Grade Lawn Seed is composed of the finest re-cleaned grasses, care being taken to include various varieties of grasses of the highest purity and germination, best suited for the lawn.

The varieties are carefully proportioned so that they will succeed one another and give the lawn that much-desired green, velvety appearance throughout the summer. The remarkably heavy demand for our lawn seed this past year proves the quality.

One quart will sow 15 x 15 feet, or 225 square feet; four bushels to the acre—for renovating old lawns, two bushels. **Qt. 25 cts., 4 qts. 85 cts., 8 qts. \$1.50, bus. \$5, 10 bus. \$45.**

Weights 22 pounds per bushel

Terrace Sod Lawn Seed

FOR TERRACES, HILLSIDES AND EMBANKMENTS

To Grass a Bank or Terrace. For each square rod take two quarts of lawn grass seed and mix it thoroughly with 6 cubic feet of good, dry garden loam. Place it in a tub, and add liquid manure, diluted with about two-thirds of water, so as to bring the whole to the consistency of mortar. The slope must be made perfectly smooth, and then well watered, after which the paste should be applied, and made as even and thin as possible.

A special mixture of grasses best suited for sowing on terraces and side-hills—grasses that produce strong, spreading roots, thus preventing heavy rains from washing them out, that will withstand drought and exposure, thrive on shallow soils, and at the same time produce a rich, green turf throughout the season. **Qt. 35 cts., 4 qts. \$1, 8 qts. \$1.75, bus. (20 lbs.) \$6.**

S. & W. Co.'s Shady Place Lawn Seed

Shady Place Lawn Seed

There is nothing more annoying in caring for a lawn than the bare, unsightly spots under the trees, shrubs, etc., and invariably all efforts have failed to get the grass to grow in such places; but, by sowing this mixture, the difficulties will be overcome. It is a combination of dwarf-growing varieties which do well in all shaded places, being found in their natural state in woods and other sheltered spots. **Qt. 35 cts., 4 qts. \$1, 8 qts. \$1.75, bus. (20 lbs.) \$6.**

Tennis-Court Grass Seed

Our Tennis-Court Grass Seed is composed of grasses best suited for making grass tennis-courts, croquet-grounds or bowling-greens. The turf required for these must be firm and yet elastic, and composed of grasses which can be mowed close and kept exceedingly dwarf. This mixture is composed of the best-known, fine-leaved, deep-rooting grasses, properly proportioned so as to give an even playing surface throughout the year. It is advisable to sow at least twice the quantity as for ordinary lawn purposes, of these fine-leaved grasses in order to obtain proper playing turf. One quart to 100 square feet is advisable on new seeding, and where bowling greens are desired, or several courts are to be made, it is advisable to consult us, and we will be glad to suggest special formulas to suit soil and locations. **Qt. 30 cts., 4 qts. \$1.10, 8 qts. \$2, bus. (25 lbs.) \$7.50, 10 bus. (250 lbs.) \$75.**

S. & W. CO.'S TENNIS COURT GRASS SEED

S. & W. Co.'s Tennis-Court Grass Seed

Tenth Green of the Arcola Country Club, New Jersey

Accomplished by the sowing of the proper varieties of grasses in a mixture of seed of known purity and germination, the varieties carefully proportioned to suit climatic and soil conditions

Grasses for Golf-Courses

When you buy Grass Seed for golf-courses, either for putting-greens, fair-greens, or outlying grounds, great care must be taken to select only such seeds as will do best for the purpose.

First.—See that you get the proper varieties, for very often grasses are sometimes used that are not fit to make the proper sod. This means disappointment in appearance, and endless work in trying to rid the greens of such grasses.

Second.—The quality of the seed. This should always be bought with the known germination and purity.

Third.—If your soil is sandy, clayey, moist or dry, this all makes a difference; and where seeding is done, it is always best to have only such grasses in the mixture as will give the best satisfaction. This information can always be obtained by consulting us.

Our Grass Seed Department is second to none; we always have in great quantities such valuable Grasses as Creeping Bent, Rhode Island Bent, Red Fescue, and all other varieties of Grass Seeds that are generally used on golf-courses, whether for putting-greens, fair-greens, or outlying grounds.

Putting-Green Mixture

Composed of Creeping Bent, Rhode Island Bent, Red Top Re-cleaned, Fine-leaved Sheep Fescue, all of the very highest purity and germination. If for new work, or where the entire seeding of all greens is required, it would be best to consult us and have us suggest the formula for the soil and location. Lb. 50 cts., 5 lbs. \$2.25, 25 lbs. \$10.50, 100 lbs. \$40.

Fair-Green Mixture

The best-balanced, finest selection of Grasses that will give an even, tough and lasting turf. We can supply a general good mixture that we know will give good satisfaction; but in cases where a lot of seeding is to be done we should like to supply a special formula according to the requirements of the soil. Lb. 40 cts., 5 lbs. \$1.75, 25 lbs. \$8, 100 lbs. \$30.

HOW ABOUT YOUR LAWN?

Staigreen LAWN SEED BEST ON EARTH

25-Pound *versus* 14-Pound LAWN SEED

Many low-priced Grass Seed mixtures weigh only 14 pounds per bushel. This indicates either a good proportion of chaff or some of the real good varieties in the rough state, not properly cleansed so as to leave only the vital part and less of the chaff or shell—in other words, so many less seeds to the quart or pound that will germinate and grow real grass.

Why Not Buy the Re-cleaned Kind—

A mixture of grasses weighing 25 pounds per bushel, of high germination and purity, permanent in nature, the varieties carefully proportioned so that they will succeed one another in brightness of foliage, with the result that the lawn, even in its first year, will have a bright, rich green color from early spring until covered by snow?

Stumpp & Walter Co

One Pound will sow a
Plot 20 x 20 feet
Sow 80 Pounds to the
Acre

30 and 32 Barclay St.
New York

Not How Cheap, But How Good

DELIVERED ANYWHERE IN UNITED STATES

Pound	5 Pounds	25 Pounds	100 Pounds
40 cts.	\$1.75	\$8.00	\$30.00

DELIVERED ANYWHERE IN UNITED STATES

"HOW TO BUILD A PERMANENT LAWN"
PAMPHLET FREE IN EVERY BAG

Rubber Hose, Menders, Nozzles and Lawn Sprinklers

PRICES SUBJECT TO MARKET CHANGES

RUBBER HOSE

S. & W. Co.'s Special Brand (Wayahead). Surpasses all the cheaper grades of Hose. Its durability is not excelled by much of the higher-priced Hose. It is three-ply, seamless, and non-kinkable. Standard lengths, $\frac{3}{4}$ -inch bore, 25 ft., \$5; 50 ft., \$9.

Electric. Three-ply, non-kinkable, molded Hose. The strength and durability of this Hose places it with the very best grade of Hose manufactured.

Standard lengths, $\frac{3}{4}$ -inch bore, 25 ft., \$6, 50 ft., \$11.
Standard lengths, $\frac{1}{2}$ -inch bore, 25 ft., \$5.50, 50 ft., \$10.
Other lengths, $\frac{3}{4}$ -inch bore, cut and coupled, 23 cts. per ft.
Other lengths, $\frac{1}{2}$ -inch bore, cut and coupled, 21 cts. per ft.

Golf-Course. Four-ply heavy duck Hose, with exceptionally strong black tube and white cover. Especially adapted for use on golf-courses, tennis-courts, and cricket-creases. This is guaranteed for any pressure and hard work as usually found on golf-courses and private estates. Will stand up and give satisfaction under conditions where ordinary garden Hose has failed.

Standard lengths, $\frac{3}{4}$ -inch bore, 25 ft., \$6; 50 ft., \$11.
Standard lengths, 1-inch bore, 25 ft., \$8; 50 ft., \$15.

HOSE NOZZLES

Stott's. A Nozzle that has become a favorite among rose-growers, etc., for exterminating red spider. Splendid Nozzle for reaching under the foliage; gives a very fine, misty spray. Single, \$1.50, double, \$2.

Mistry Jr. Can be used for spraying white-wash. \$1.25 each.

Magic. Brass Hose Nozzle, $\frac{3}{4}$ -inch. Has a shut-off, a stream, and a rosy spray. Without rose, \$1.25; with rose, \$1.50.

No. 191. The most efficient and simplest in construction of any shut-off Nozzle. Has fewer parts and is less liable to get out of order. \$1.50 each.

Justrite Spray. A very popular adjustable Nozzle. It gives a copious spray or a well-defined full stream. Has a positive shut-off, by turning the barrel of the nozzle. 65 cts.

Bordeaux Spray Nozzle. A good nozzle for whitewash and all heavy spray materials. \$1.40.

HOSE COUPLINGS, Lightning. $\frac{3}{4}$ -inch, 50 cts. each.
Regular, $\frac{1}{2}$ -inch, 30 cts.; $\frac{3}{4}$ -inch, 35 cts. each.

Perfect Clincher Mender

HOSE MENDERS

Cooper's Brass. $\frac{1}{2}$ - and $\frac{3}{4}$ -inch, 10c. each.

Perfect Clincher. $\frac{1}{2}$ - or $\frac{3}{4}$ -inch, 15 cts. each, \$1.50 per doz.

Iron. $\frac{1}{2}$ - or $\frac{3}{4}$ -inch, 7 cts. each, 70 cts. per doz.

Hudson. $\frac{1}{2}$ - or $\frac{3}{4}$ -inch; state size. Box of 6 tubes and 20 bands, with pliers, \$1.

Sykes Hose Holder

A simple and inexpensive device for holding the hose. With this the nozzle can be placed at almost any angle. 25 cts.

LAWN SPRINKLERS

Eureka No. 55B Lawn Sprinkler. The Eureka Sprinkler will revolve under extremely low pressure, and is a first-rate article. The head, arms, and upper stem are nickel-plated brass and all bearing parts of the Eureka are of brass. The base is japanned black and has a loose swivel. Height, 10 inches. \$1.75.

Eureka No. 55B

California

California Lawn Sprinkler.

Is made with three and four arms. Arms and head are polished brass. Attached to a sled base, 10 inches square. Can readily be drawn about the lawn and will not upset.

With 4 arms, \$2. With 3 arms, \$1.75.

Maid-of-the-Mist Sprinkler. An effective device for sprinkling lawns, gardens, or flower-beds. The water flows with unimpeded force, and is divided and deflected by the two lips of the swivel piece, which it causes to revolve rapidly, scattering the water in fine drops and evenly over a circular area of 25 feet. It works more satisfactorily with a very low pressure of water than any Sprinkler we know of. With spur, 75 cts., mailed 10 cts. extra. With sled (recommended) \$1.25.

Maid-of-the-Mist

The Dayton Rotary and Oscillating Sprinkler

The Dayton is the most practical, durable, and efficient Sprinkler devised for watering lawns or gardens and is now being used by thousands of lovers of a beautiful lawn or garden. Briefly here are the points of interest:

The lawn sprinkler attaches to your hose. The garden type attaches to a pipe riser as shown in cut. It sprinkles in a circle. It sprinkles in a half-circle. It sprinkles from a 3-foot radius to a 40-foot radius. It sprinkles every inch of the ground. It is better for your lawn or plants than sprinkling with a hose. It operates on any pressure from 15 pounds up. The nozzle can be adjusted to any kind of stream. It pays for itself in water saved and convenience. It is made of the best brass, aluminum, and German silver. \$6.

Ring Lawn Sprinkler. The S. & W. Co. Ring Sprinkler is not to be compared with the Cheaper Ring Sprinklers. It is made of brass, firmly constructed and guaranteed to stand the water-pressure of any municipal water-works in the United States. \$1.

C. B. G. Sprinkler

The C. B. G. Sprinkler

Cheap but Good

Is made on the well-known principle of the tangential spray. Nothing to get out of order. Will last a lifetime. It is easily drawn about the lawn without shutting off the water. 50 cts. each, \$5 per doz.

PRICES SUBJECT TO MARKET CHANGES

The Stumpp & Walter Co. Ball-Bearing Lawn Mower

ALWAYS READY, EASY-RUNNING, NOISELESS, SELF-SHARPENING, PERFECT ADJUSTMENTS. WILL CUT GRASS 6 INCHES HIGH

The Stumpp & Walter Co. Ball-Bearing Lawn Mower is universally a family Mower. Most anybody—man, woman or child—can use it with little exertion. It is a high-grade standard machine, adopting only the best features in its construction. The cutting parts are made of oil-hardened water-tempered crucible tool-steel, and are positively self-sharpening. The knives and blade will hold a durable edge and will not dull as the softer cutting parts of other Mowers do. The lawn is shaved smooth and even and without any corrugations. The simple adjustment sets the machine to shave the lawn to $\frac{1}{2}$ inch or up to $1\frac{1}{2}$ inches as may be desired. See the illustration which is a photograph of actual results. The expense of mowing a lawn is reduced to a minimum with the S. & W. Co. Lawn Mower. The durability of this Mower is unquestionable. It does not have to go to the repair shop each season as do frequently the lower-priced Lawn Mowers.

The construction of this Lawn Mower has overcome the bobbing up and down and gouging that is common to some hand Mowers. The axle revolves in extra-large balls placed in hardened tool-steel cones and cups, and is driven with two gears by two 10-inch traction wheels. These wheels are made durable and are not easily broken.

This Lawn Mower is made to give good and long service and with ordinary good care will last from five to ten years. We take the liberty to recommend the S. & W. Co. Ball-Bearing Lawn Mower to be the best all-round Lawn Mower of its type manufactured. We guarantee it to give entire satisfaction. We supply this Lawn Mower in four sizes.

Size	Gross weight	Net weight	Price	Grass Catcher
15-inch cut.....	65 lbs.....	40 lbs.....	\$15 00	\$3 00
17-inch cut.....	67 lbs.....	42 lbs.....	17 00	3 10
19-inch cut.....	71 lbs.....	45 lbs.....	19 00	3 25
21-inch cut.....	76 lbs.....	48 lbs.....	21 00	3 50

The Aristocrat Golf Mower Ball-Bearing

The Aristocrat Golf Ball-Bearing

The Aristocrat is the acme of putting-green Mowers. Extreme tests have proved this machine superior to all other Mowers in keeping the greens in first-class condition. The Aristocrat was specially designed for putting-greens. Consideration was exercised in the construction of this machine to give the longest service, ease of adjustment and operation, and the best possible satisfaction that can be obtained from a Golf Mower. The life of this Mower is long compared with the other styles of Golf Mowers. The seven revolving blades and the bottom knife are the best crucible tool-steel, oil-tempered and water-hardened. A double train of gears drives the revolving

blades from two $9\frac{1}{2}$ -inch traction wheels. The greens are shaved to $\frac{1}{8}$ of an inch and left even and smooth. The Aristocrat is ball-bearing, runs easily, and does not jump when starting.

The Aristocrat with Grass Box Attached

ence. The illustration with the Grass Box attached shows the Aristocrat complete, and the way it should be operated to obtain the best results.

The Aristocrat is used exclusively and highly recommended by many of the best golf, tennis and cricket clubs.

Size	Gross weight	Net weight	Price	Grass Box
17-inch cut.....	102 lbs.....	72 lbs.....	\$31 50	\$4 75
19-inch cut.....	104 lbs.....	76 lbs.....	35 00	5 00

Pennsylvania Junior Ball-Bearing

The perfection of Lawn Mowers. The Pennsylvania Junior has all the good features incorporated in a perfect Lawn Mower. The five revolving blades are driven by a triple set of gears and a 10-inch traction wheel from each side. The revolving blades and the bottom knife are the best crucible

Pennsylvania Junior Ball-Bearing

tool-steel, oil-tempered and water-hardened. The Pennsylvania Junior is capable of cutting grass 6 inches high. Will not jump, as many of the lower-priced machines do.

Size	Gross weight	Net weight	Price	Grass Catcher
15-inch cut.....	71 lbs.....	48 lbs.....	\$21 50	\$3 00
17-inch cut.....	74 lbs.....	51 lbs.....	24 00	3 15
19-inch cut.....	77 lbs.....	53 lbs.....	26 50	3 25
21-inch cut.....	80 lbs.....	55 lbs.....	29 00	3 50

Pennsylvania Lawn Trimmer Ball-Bearing

Made to meet the demand for a serviceable tool to take the place of grass shears and other devices for cutting grass left at the edge of lawns, around flower-beds, etc. Will cut to within $\frac{3}{8}$ of an inch of walls, fences, walks, etc. Will mow any border wide enough to run one wheel on. High 8-inch wheel; runs easily; self-sharpening.

Width of cut 6 inches; gross weight 26 lbs.; net weight 20 lbs. Price \$9.

High-Wheel Universal Mower

The best low-priced Mower made with ball-bearings. Four revolving blades, flexible bottom knife, self-sharpening. Made of best materials. A very easy-running and light Mower for ladies and children to operate. For small lawns order 12-inch or 14-inch sizes.

Size	Gross weight	Net weight	Price	Grass Catcher
12-inch cut.....	38 lbs.....	28 lbs.....	\$8 00	No. 1 \$1 75
14-inch cut.....	41 lbs.....	30 lbs.....	8 75	No. 1 1 75
16-inch cut.....	43 lbs.....	32 lbs.....	9 50	No. 2 2 00
18-inch cut.....	45 lbs.....	34 lbs.....	10 00	No. 2 2 00
20-inch cut.....	47 lbs.....	36 lbs.....	11 00	No. 2 2 00

PRICES SUBJECT TO MARKET CHANGES

The Shawnee Triple Mower

"SULKY" MODEL 1918

The Shawnee Mower is the first of its kind—the pioneer gang Mower of the world. It combines the work of three Mowers in one. In its complete form it has a cutting width of over 7 feet, and as a "sulky," a cutting width of only 30 inches. With cutters raised and under pressure of the "spring" it supersedes the ordinary hay-cutting machine on the "rough." This triple combination, possessed by the Shawnee Triple alone, is a striking and entirely novel development in lawn-mower construction. It has been rigidly tested for six years. It is used by the leading golf-clubs and on the finest lawns in America. Its draft is the easiest of any horse-drawn mower in use. The "spring" holds the cutters closely to the ground and is the only known method of stopping the jumping of these cutters along the surface. All the gears are steel and malleable iron, machine cut. No breakages ever occur.

All the gears and journals have ball bearings running in oil in dust-proof housings with splash lubrication.

A descriptive circular showing that it is the most economical grass-cutter, owing to its durability, speed of operation, and its applicability to the triple uses and the conditions above mentioned, will be promptly furnished upon request.

Width of cut	Gross weight	Net weight	Price
84 in.	750 lbs.	605 lbs.	\$300 00
Extra cutting units.	190 lbs.	155 lbs.	80 00

Coldwell's Combination Roller and Motor Lawn Mower MODELS F, G, AND H

These three Motor Mowers are designed for use on small estates, golf, and tennis grounds, etc., not sufficiently large to warrant the purchase or use of one of the larger and heavier machines. These Power Lawn Mowers are in great demand and will largely take the place of the very heavy motor mowers which in some

localities are used as rollers in the early spring, for the reason that their very heavy weight has a tendency to pack the soil to a point where it discourages the grass to make deep roots.

Simplicity. Can be operated and cared for by very ordinary labor and **handled as easily as a Hand Lawn Mower.**

Capacity. 40-inch swath; speeds up to four miles an hour, and will negotiate 25 per cent grades.

Motor. Not our own manufacture, but selected as the best in our judgment after seasons' trial of many of the leading makes.

Bearings. All bronze.

Transmission. Direct chain drive forward. Planetary system for reverse.

Clutch. Friction, multiple-disc type for propelling and Coldwell's Self-releasing Friction Clutch driving the cutter.

Oiling. All bearings have direct lubrication from either oil or grease cups.

Drive. Chain rather than gear, it being longer lived and easier and quicker to repair.

Drive Rollers. Equipped with differential gears. No brakes necessary, as engine will hold machine back when going down hill.

Operating Handles. Used not only for guiding the machine but for raising and lowering cutter unit over obstacles.

Cutting Mechanism. Coldwell's Patent Demountable Cutter Unit, absolutely independent of the main frame, and is easily and quickly attached or detached.

The knives are the parts of a Lawn Mower most liable to damage, and when this happens with a **Demountable Cutter Unit Machine**, it does not necessitate the laying up of the entire machine while adjustments are being made, as another Cutter Unit, all ready and adjusted for use, can be substituted in less than two minutes. This is an especially desirable feature in a Motor Lawn Mower, as the knives form but a small part of the machine.

The Cutter Unit is carried between the sides of the main frame on the front ends of the steering handle irons, and can be raised and lowered at will by the operator without disturbing any other part of the machine.

Model	Size cut	Gross weight	Net weight	Price
F.	40-inch.	1,740 lbs.	1,270 lbs.	\$475 00
G.	35-inch.	1,230 lbs.	1,040 lbs.	350 00
H.	30-inch.	1,130 lbs.	940 lbs.	300 00

Coldwell's Chain Roller Mower

This Roller Mower is designed especially to meet the demand for a machine that will more perfectly cut borders, terraces, verges, etc., and still retain all other features required in a Mower for general work with four blades.

This Mower is also made with gears.

The chain roller is preferred, although the prices of both Mowers are the same. When six blades are desired, add \$1 to the price.

Size	Gross weight	Net weight	Price
12-inch.	65 lbs.	48 lbs.	\$16 00
14-inch.	70 lbs.	52 lbs.	18 00
16-inch.	78 lbs.	55 lbs.	20 00
18-inch.	90 lbs.	67 lbs.	22 50
20-inch.	98 lbs.	71 lbs.	24 50

Coldwell's Imperial Lawn Mower

Is one of the best in quality of material used and workmanship. High-10-inch wheel; noiseless and easy-running; four revolving blades; double cutting edge; bottom knife can be reversed when dull; adjustment is perfect.

Size	Gross weight	Net weight	Price
14-inch.	54 lbs.	41 lbs.	\$11 50
16-inch.	56 lbs.	43 lbs.	12 50
18-inch.	62 lbs.	46 lbs.	13 50
20-inch.	65 lbs.	48 lbs.	15 50

Leather Horse Boots, Quality Kind

Easily attached to the horse's feet; prevents marring the lawns. Frequently after rains, or in the spring, the lawns are soft and easily cut up. Use a good leather boot and save the lawn. Quality Kind are made good. Double-thick soles and uppers reinforced; heavy parts put together with copper rivets. Small size, \$13; medium size, \$14; large size, \$15.

Baskets, Plant Supports, Rustic Ware, Etc.

Wire Hanging-Baskets

Steel wire, heavily galvanized. Line with moss and fill with house plants requiring little soil. They look very unique.

Diam.	Each	Doz.
8 in.....	\$0 70	\$7 00
10 in.....	80	8 00
12 in.....	90	9 00
14 in.....	1 00	10 00

Strong, neat, swivel
Brackets, furnished with screws, 25 cts.

Rustic Hanging-Basket

Rustic Hanging-Baskets

Bowl is hexagon-shaped, covered with laurel wood; fine finish. Are very attractive when filled with ferns and running plants.

Diam.	Each	Doz.
10 in..	\$2 00	\$20 00
12 in..	2 25	22 50
15 in..	2 75	28 00

Wire Hanging-Basket

Rustic Cedar Settee

Rustic Ware

Rustic Cedar Settee. Durably made of natural cedar, similar to illustration. 4 ft. \$10, 5 ft. \$12, 6 ft. \$14.

Rustic Cedar Table

Rustic Cedar Vase. 12 inches inside diameter of bowl by 3½ feet high, \$6; 16 inches diameter, 3½ feet high, \$7.

Rustic Cedar Vase

Rustic Cedar Table. 24 inches in diameter by 30 inches high, \$10.

Plant Stakes and Supports

Bean Poles. Excellent for staking Pole Lima Beans. 25 cts. each, \$2.50 per doz., \$18 per 100.

Plant, Tapering, Green—

	Doz.	100		Doz.	100
1 ½ feet.....	\$0 25	\$1 50	3 ½ feet.....	\$0 80	\$5 50
2 feet.....	35	2 00	4 feet.....	90	6 50
2 ½ feet.....	45	2 70	5 feet.....	1 00	7 50
3 feet.....	60	4 80			

Chinese Cane. These are genuine Chinese canes, very strong and heavy.

100	1,000	100	1,000		
2 feet, heavy...	\$1 25	\$10 00	7 feet, heavy...	\$4 50	\$40 00
4 feet, heavy...	2 25	19 00	8 feet, heavy...	5 50	50 00
5 feet, heavy...	3 00	24 00	10 feet, heavy...	6 00	55 00
6 feet, heavy...	3 50	28 00			

Japanese Cane. For staking plants and trees.

	100	1,000		100	1,000
6 feet.....	\$1 50	\$13 00	14 feet.....	\$15 00	\$135 00
8 feet.....	3 50	27 00	16 feet.....	20 00	180 00
10 feet.....	5 00	40 00	18 feet.....	30 00	250 00
12 feet.....	8 00	70 00	20 feet.....	40 00	350 00

Dahlia Poles—

	Doz.	100		Doz.	100
3 feet.....	\$0 90	\$6 50	4 feet.....	\$1 20	\$8 50
3 ½ feet.....	1 00	7 50	5 feet.....	1 50	11 00
			6 feet.....	1 80	13 00

Galvanized Wire—

	100	1,000		100	1,000
3 feet.....	\$2 25	\$20 00	4½ feet.....	\$3 25	\$30 00
3½ feet.....	2 75	24 00	5 feet.....	3 75	36 00
4 feet.....	3 00	27 00	6 feet.....	4 50	40 00

Tomato Supports, Wire. 32 inches high, 14 inches in diameter, made of heavy steel wire. 35 cts. each, \$4 per doz., \$30 per 100.

Burners for Leaves, Paper, and Rubbish

The best receptacle used for burning leaves, papers, and all kinds of rubbish. This handy Burner is a safeguard against many fires that have their origin in the burning of rubbish in the open. The Burner is extra strong, manufactured of heavy galvanized steel wire, reinforced with iron supports. Made to give life-long satisfaction. We supply this Burner in three sizes.

No.	Diam.	Height	Weight	Each
2	15 in.	24 in.	16 lbs.	\$3 50
2 ½	18 in.	30 in.	22 lbs.	5 50
3	20 in.	35 in.	33 lbs.	7 50

Watering Pots

Heavy galvanized iron, reinforced; made good and substantial. Each pot has a long spout, with one fine and one coarse rose.

Round Pattern.

6-quart.....	\$3 00
8-quart.....	3 25
10-quart.....	3 50
12-quart.....	4 00

French Oval Pattern.

6-quart.....	\$3 25
8-quart.....	3 50
10-quart.....	4 00
12-quart.....	4 75

Haw's Pattern—

Ladies', 2-quart..	\$2 00
No. 1, 3-quart..	2 50
No. 2, 4-quart..	3 50
No. 3, 6-quart..	4 00
No. 4, 8-quart..	4 50
No. 5, 10-quart.	5 00

French Oval

Haw's

GARDEN AND LAWN TOOLS

Tampers

S. & W. Co.'s Iron Sod Tamper. This Sod Tamper is in demand for the laying of sod. It is used on putting-greens and terraces; also in the spring for compacting the sod after the frost has disappeared. The Tamper is square. A wooden handle of right size is firmly secured to the Tamper. Size, in. Weight lbs. ea. Price

8x8	17	\$1 25
10x10	20	1 50

Cement Tamper. Largely used in the laying of concrete, brick and cement floors, walks and driveways. The Tamper is round and equipped with a wooden handle, the same as the sod tamper.

5-in. diam.	15 lbs.	\$1.25 ea.
6-in. diam.	20 lbs.	\$1.50 ea.

Cement Tamper

Iron Sod Tamper

S. & W. Sod Perforator

The best low-priced device for renovating bad spots in lawns, terraces, greens, etc. Before sowing grass seed, use the Sod Perforator. The operation permits the seed to enter the soil, where it is covered with fertilizer or by sprinkling the surface. The seed will germinate and come up uniformly, producing a vigorous growth of rich grass. The spikes are firmly set in an oak block, made in two halves and put together with screws. The handle is the right thickness and length. Made in two sizes.

10x10 in., \$2.75 10x14 in. \$3

Sod Perforator

The Rittenhouse.

The Rittenhouse

Olmstead's Improved

Made of all steel and tinned. Six in a crate. The spears are spring steel, therefore do not have to be so long as soft steel. \$1 each, \$10 per doz.

Out-of-Sight. 85 cts. each, \$9 per doz.

Norcross Cultivator Hoe and Weeder

Wherever vegetables, plants and flowers are grown, these modern tools are rapidly replacing the ordinary hoe. They are made in three sizes, and can be used in wide or narrow rows. Will also cultivate both sides of a row at one operation, when the middle prongs are removed. The three-prong weeder is the women's size. They destroy weeds, leave the soil level, loose and untrampled.

5-prong, \$1.25; 3-prong, 85c.; Midget, 45c.

Hoes

English Scuffle Hoe. Imported. Positively the best. The quality of material used and finish is superior to all others.

Size	Each	Size	Each
4-in.	\$0 85	8-in.	\$1 20
5-in.	90	9-in.	1 35
6-in.	1 00	10-in.	1 50
7-in.	1 10	12-in.	1 75

Extra-strong handles, 4½ ft., 15 cts.; 6 ft., 20 cts. each.

Warren or Heart-shaped.

The best Hoe for making drills, covering, hoeing, and weeding.

Size	Each
Small size	\$0 90
Medium size	1 00
Large size	1 10

Draw or Garden.

Sizes for boys, ladies, and men.

Size	Each	Doz.
4- and 5-in.	\$0 65	\$6 50
6-, 7-, and 7½-in.	75	8 00

Acme Single Prong. Acme Hoes are similar to the Warren, and are used by florists and gardeners. 90 cts. each.

Perfect Fruit-Picker

Made of steel wire, heavily galvanized; can be attached to any pole. 50 cts.

Double-Pronged.

Perfect Fruit-Picker

Rakes

Reversible Steel. Suitable for lawn and garden. Has 24 teeth. 75 cts. each.

Steel-Bow Garden.

Extra strong; will not break in the middle. Each

12-tooth	\$0 90
14-tooth	95
16-tooth	1 10

Steel Garden. Cut from one piece of steel; strong and durable.

Size	Each
10-tooth	\$0 80
12-tooth	90
14-tooth	\$1 00
16-tooth	1 10

Steel Gravel. Like the Garden Rake. Made substantial, with short teeth. Each

14-tooth	\$0 90
16-tooth	1 00
18-tooth	1 10

Wood Hay and Lawn.

Made light and substantial, with tubular steel bow; does not break like the wood bow.

Size	Each	Doz.
12-tooth Hay	\$0 70	\$7 00
24-tooth Lawn	85	8 50

Challenge Step-Ladder

Strongest and best Ladder manufactured. Made of ash; fine finish. Each step is braced and bolted. Only safe ladder to use 10 feet or over. Each

5 ft.	\$3 00
6 ft.	3 60
7 ft.	4 20
8 ft.	5 00
10 ft.	6 50
12 ft.	9 50
14 ft.	13 00

Asbestos Torch

Attach the Torch to the end of a pole; saturate with kerosene oil, light and hold under the caterpillars' nests, and pass quickly along the branches and around the trunk of the tree. The heat instantly destroys the insects and will in no way injure the tree. Without pole, 60 cts.

Sprayers for Applying Insecticides and Fungicides

PRICES SUBJECT TO MARKET CHANGES

Auto Spray No. 40 Hand Lever Pump COMPLETE OUTFIT

The demand for this portable Sprayer is rapidly increasing. The efficiency of this general-purpose Sprayer is finding favor among hundreds of gardeners, florists, and poultrymen.

Uses.—For handling whitewash, cold-water paint, insecticides, fungicides, and all solutions in the garden, greenhouse, or poultry plant.

Tank.—Heavy galvanized steel.

Capacity.—12 gals.

Pump.—Plunger style. Graphite packing, adjustable from the

outside by tightening two bolts. No leather cup.

Plunger.—Brass; 1½ inches in diameter; 3 to 4½-inch stroke as desired. The plunger is hollow with a valve at the bottom and this, operating in connection with the air-chamber, ensures a greater reserve capacity than usual in this size of machine.

Valves.—Brass-ball valves; suction pipe fitted with brass strainer.

Agitation.—Mechanical and effective; operated from the handle. The top casting on the tank has broad flange, which prevents the solution from slopping over.

Equipment.—8-foot-high pressure; ¾-inch hose; 8-foot iron extension; lever shut-off; and latest Vermorel Nozzle, or Non-Clog, Jr., as specified.

Repair list, with formula for mixing whitewash and cold-water paint, with each machine.

Galvanized tank, capacity 12 gallons, with truck, 20-inch wheel. Shipping weight, with truck, crated, 75 lbs. (net 58 lbs.) \$20.

Double-Acting Pump Sprayer and Knapsack Tank

THE SAME SPRAY WITH HALF
THE LABOR

Pump.—This Pump is the ideal all-purpose sprayer. Its field is practically unlimited, as it may be used for spraying trees, vines, garden truck, potatoes, and any field crops. Made entirely of brass, doing away with all danger of corrosion. This pump is double-acting, which gives a continuous spray, a distinct advantage over single-acting Pumps in that the pump

works on both the up and the down stroke. The Pump cylinder is small in diameter, and in a test a pressure of 180 pounds to the square inch was raised with very little labor.

Knapsack Tank.—Where a portable tank for field or garden work is needed, we recommend our patrons' purchasing the Knapsack Tank as well as the Pump.

OUTFITS AND EQUIPMENT

Double-Acting pump, with 2½ feet of ½-inch suction hose, nozzle, and strainer, complete.....\$5 00
Knapsack galvanized-iron tank, for field or garden work..... 3 00
Extension rod, curved brass..... 60
Two-row attachment of solid brass, for spraying two rows at a time..... 1 50

S. & W. Bucket Spray Pump

The S. & W. Spray Pump is a saving in the cost of small hand Sprayers. It is a quality Sprayer. This Pump is made of heavy seamless brass tubing, with a large brass air-chamber; it has brass ball valves; is double-acting and will produce a continuous spray or stream. A bordeaux nozzle, with 3 feet of ½-inch spray hose is furnished. The nozzle can be regulated to throw a very fine, medium, or coarse spray. We recommend this Sprayer as the best cheap hand Sprayer for applying whitewash, cold-water paint and disinfectants. When ordering Sprayer to be sent by parcel post, allow for 10 lbs., the packed weight of Sprayer. \$5.25.

Extra ½-inch hose, five-ply, of good quality, is furnished at 16 cts. per foot.

Extra couplings, 30 cts. per set.

S. & W. Co.'s Vaporizing Sprayer

A marvelous insect exterminator; throws a spray as fine as mist and is therefore more effective than any other Spray Pump, and loses only about one-tenth the liquid. Shipping weight, 3 lbs. No. 1, all tin, 75c.; No. 2, galvanized reservoir, \$1; No. 3, all brass, \$2.

S. & W. Co.'s Continuous Sprayer

Will handle all solutions, insecticides, and disinfectants. Used in the greenhouse, kitchen-garden, window-garden, for rose bushes, and in the poultry-house. Two spray caps—one straight, the other at an angle for reaching under leaves or spraying directly down. Construction of tank permits the Sprayer to be operated at any angle, and it will not tip over when filling. Galvanized reservoir, \$1.25; brass reservoir, \$1.50. Weight, 3 lbs.

S. & W. CO.'S BRASS SYRINGES

These Syringes are applicable for all horticultural purposes in the conservatory and garden. They are fitted with roses and jets for ejecting water in one stream or dispersing it in a fine or coarse spray, as required. Specially adapted for applying fluid insecticides.

No. A. Barrel, 12 in. long, diam. 1 in. One spray rose and one jet, \$3. Weight, 3 lbs.

No. G. Barrel 16 inches long, diam. 1½ in. One spray rose and one stream jet, side attachment and elbow joint for sprinkling under foliage, \$5. Weight, 4 lbs.

No. H. Sheet-brass Syringe, with fixed spray rose. Barrel 16 inches long, diam. 1½ inches, \$3.25. Weight, 4 lbs.

No. 2. Barrel 13½ inches long, diam. 1½-inch. One coarse and one fine spray rose and one jet, side attachment, \$5. Weight, 4 lbs.

No. 10. Barrel 18 inches long, diam. 1½ inches. One coarse and one fine spray rose and one stream jet, with patent valves and elbow joint for sprinkling under the foliage, \$7. Weight, 5 lbs.

No. 11. Same as No. 10, without patent valves, \$5.50. Weight, 5 lbs.

Sprayers for Applying Insecticides and Fungicides

PRICES SUBJECT TO MARKET CHANGES

AUTO-SPRAY

Convenient, durable, efficient. Our patented leader of spray apparatus for small uses. Will do better work and do it more easily than any other similar article. Useful with bordeaux and all solutions, also in applying cold-water paint or white-wash. Holds four gallons. Illustration shows our new "Auto-Pop" attachment which doubles the efficiency by saving half the solution and labor. Our "Anti-Choke" Nozzle, cleaned at every operation of "Auto-Pop," can never clog. Tank made of galvanized steel or brass. High-grade hose. Castings for handle, etc., all malleable. No continuous pumping as in the case of the Knapsack Sprayer, no continuous pumping or slopping as in the case of the bucket pump. A few strokes of plunger compresses enough air to cover a quarter acre of potatoes or similar crop. The operator simply holds the nozzle. Also used for spraying disinfectants. A practical machine for potatoes, tobacco, small-fruits, vineyards, poultry-houses, greenhouses, etc. Extension pipes useful for spraying tall trees. Detailed descriptive circular on request.

Auto-Spray No. 1B. Brass Tank, with "Auto-Pop".....\$10 00
Auto-Spray No. 1D. Galvanized Tank, with "Auto-Pop"..... 6 75

Two-row Attachment for spraying two rows at one passing.... 1 50
2-foot Brass Extension Pipe..... 50
2-foot Galvanized Extension Pipe..... 45
Brass Elbows for spraying under vines..... 30
Torch..... 1 00
Brass Strainer for straining solution..... 1 20
Auto-Spray Nozzle..... 60

Bamboo Spray Pole

SPRAY POLE FOR TALL-TREE SPRAYING

Bamboo Spray Pole

Bamboo Spray Poles are brass-lined to resist the corroding effect caused by strong solutions. Each Spray Pole is equipped with a drip-shield at the top and brass shut-off at the bottom. Spray Poles over 12 feet are not entirely satisfactory, and we do not recommend them. 8 ft. \$4, 9 ft. \$4.20, 10 ft. \$4.40, 12 ft. \$4.80.

S. & W. CO.'S "FRUITALL" SPRAY PUMP

The "Fruitall" illustrated herewith has been designed especially to meet the demand for a low-priced Sprayer combining the necessary durability, efficiency, and strength.

Outfit C. Sprayer with agitator and one lead of 15 feet 1/2-inch discharge hose, with "Mistry" or "Mistry Jr." spray nozzle. Price, without barrel, \$20.

Outfit D. Sprayer with agitator and two leads, 15 feet each, 1/2-inch discharge hose, with "Mistry" or "Mistry Jr." spray nozzle. Price, without barrel, \$27.

We supply barrel, and mount sprayer on it, for \$5, extra, but the barrel is not furnished unless specially ordered.

POMONA SPRAY PUMP

The Best Barrel Spray Pump on the Market

It is of large capacity and powerful, with long adjustable leverage, so that it is easily operated by one person, when necessary, but is especially built for spraying from two leads of hose. The unusually large steel air-chamber gives sufficient pressure for a continuous and regular spray. All working parts are of brass, including plunger and valves, which are easily accessible; it has a paddle agitator. The bulk of the pump goes within the barrel, it is not top-heavy, and does not catch low branches.

Pomona Outfit A. Sprayer with agitator and one lead of 15 feet of 1/2-inch spray hose, with Mistry Jr. Spray Nozzle.

With barrel.....\$35 00

Pomona Outfit B. Same as the above, except with two leads of hose and two nozzles. (See cut.)

With barrel.....\$40 00

Extra trunnions for barrel, \$1.25 per set.

S. & W. Co.'s Truck is recommended to save time and labor.

RUBBER SPRAY HOSE

High-pressure, 1/2-inch bore, seven-ply Hose is best. 18 cts. per foot. Low pressure, 1/2-inch bore, five-ply, 14 cts. per foot. Couplings and clamps, 25 cts. extra.

S. & W. CO.'S TRUCK, LEAF-RACK AND WATER-BARREL COMBINATION

When we consider the almost innumerable uses to which our combined Truck, Leaf-Rack, and Water-Barrel can be put, its handiness and the immense amount of time and hard labor saved by its use, it is not a matter of surprise that it is steadily growing in popular favor. It is one of those articles that causes the user to wonder how he ever did without it, as it really becomes indispensable when once used. Prices: Truck and barrel, as in cut, with 2-in. tires, \$14; with 3-inch tires, \$15; with handy cart box, length 38 in. long by 24 in. wide by 10 in. deep, \$5 extra; with leaf-rack, 42 in. long by 28 in. wide by 21 in. deep, \$7.50 extra; complete with truck, water-barrel, box, and leaf-rack, \$27.

Abol Syringe

The most economical and efficient of Hand Sprayers. Embodies all the good features that are desired. The new, improved nozzle has three caps—fine, medium, and coarse. The fluid is divided by two whirling streams which come into violent contact just before leaving the cap and scatter into tiny particles, which do not fall to the ground on being discharged, but hang in the air and envelope the tree or bush. A bend is furnished to spray the under foliage. \$10. Shipping weight, 4 lbs.

Bellows, Woodason's

Powder, small size.....\$2 00
" large size..... 3 25
Liquid, small size..... 2 75
" large size..... 3 25

Double-Cone Powder Bellows. For dusting plants with dry powders for insects and fungus. \$5.50.

SPRAYING IS A NECESSITY, AND OUR APPLIANCES ARE THE VERY BEST FOR THE PURPOSE. WRITE FOR OUR SPRAYING CALENDAR.

ORDER SHEET. MIDSUMMER CATALOG

We, Stumpp & Walter Co., give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs, or plants we send out, and will not be responsible for the crop.

STUMPP & WALTER CO., 30 and 32 Barclay St., New York

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That we may enter for Catalogs

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AMOUNT INCLOSED

\$

[illegible]

REMEDIES FOR INSECTS AND FUNGUS

This list contains most of the remedies used in the fall of the year. For a more extensive list see our Spring Catalogue, pages 133 and 134.

ALL PRICES SUBJECT TO MARKET CHANGES

Aphine. Effective against all soft-bodied and plant-sucking insects, such as green, black, and white fly, red spider, thrips, mealy bug, brown and white scale. Used as a spray when diluted with water in the proportions as directed on each can. An insecticide which can be used indoors and in the garden. An excellent cleanser for house plants. Gal. \$2.50, qt. \$1, pt. 65 cts., $\frac{1}{2}$ pt. 40 cts., $\frac{1}{4}$ pt. 25 cts.

Aphis Punk. Used for fumigating in greenhouses, giving off dense fumes of nicotine. Consists of paper saturated with nicotine. Box 75 cts., case of 12 boxes \$7.50.

Arsenate of Lead, Paste. For caterpillars and chewing insects. For spraying trees and shrubs against leaf-chewing insects, fruit flies, and codling moth. Contains $15\frac{1}{2}$ per cent of arsenic oxide, mixes easily in water without clogging nozzle, sticks like paint, kills quickly, and will not burn foliage. Dilute 1 pound to 25 gallons of water. Lb. 40 cts., 5 lbs. \$1.75, $12\frac{1}{2}$ lbs. \$3.50, 25 lbs. \$6.50, 50 lbs. \$12.50, 100 lbs. \$24.

Black-Leaf 40. A concentrated solution of nicotine sulphate; an excellent spray for black aphides and sucking insects of all kinds. Dilutes one part to 900 or 1,000 parts of water, according to treatment. Full directions on each package. 1-oz. bottle 25 cts., $\frac{1}{2}$ -lb. tin 75 cts., 2 lbs. \$2.50, 10 lbs. \$10.75.

Quick Bordeaux Material. Makes best Bordeaux mixture for apples, grapes, and vegetables of all kinds. Is different from other prepared fungicides on account of the physical condition of the materials, which permits their going into solution quickly, at the same time giving a perfect Bordeaux mixture, fresh and strong. A pound package makes 5 gallons of perfect Bordeaux mixture. Lb. 25 cts., 5 lbs. \$1, 10 lbs. \$1.75.

Borowax. The fruit-grower's friend. A complete protection against borers if properly applied to peach, plum, apple, pear, and quince trees. Qt. 35c., $\frac{1}{2}$ gal. 60c., gal. can \$1.60, 5-gal. bbl. \$20, bbl. \$35.

Climax Lawn Sand. A unique combination of carefully dried and finely ground chemicals. Destroys weeds in lawns. $3\frac{1}{2}$ -lb. can 40 cts., 7-lb. can 75 cts., 14-lb. can \$1.25, 28-lb. pkg. \$2, 56-lb. pkg. \$3.50, 112 lbs. \$6, 560 lbs. \$25, 1,120 lbs. \$45.

Copper Solution Ammoniated. A fungicide the same as Bordeaux mixture, the essential ingredient, carbonate of copper, being dissolved in ammonia in this, while in Bordeaux it is counteracted by lime. For late sprayings, when fruits are nearing maturity, or plants in bloom, copper solutions are usually used. Qt. \$1, gal. \$2.50.

Fungine. An infallible remedy for mildew, rust, wilt, bench-rot, and other blights affecting flowers, fruits, and vegetables. Highly indorsed by leading growers. It is equally effective under glass and out-of-doors. A spraying material which is diluted with water, and does not stain the foliage. Gal. \$3.50, qt. \$1, pt. 65 cts., $\frac{1}{2}$ pt. 40 cts.

Grape Dust. For mold, mildew, or rust-mites, either in the green-houses or open air. 5 lbs. 75 cts., 10 lbs. \$1.40, 25 lbs. \$3.50.

Kerosene Miscible Oil. Better than Kerosene Emulsion, mixes easier, has greater killing power, and is especially valuable against all soft-bodied insects. Can be used on practically all insects for which nicotine is employed. For woolly aphis on apple and thorn it is much more effective than nicotine. Contains 80 per cent kerosene. Dilute 1 part of Oil to 16 parts of water. Tender plants 1 part to 36 parts of water. Pt. 30 cts., qt. 50 cts., gal. \$1.25, 5 gals. \$5, 50 gals. \$40.

Lemon Oil. Odorless and poisonless; one to thirty to fifty parts of water. Destroys mealy bug, scale, thrips, red spider, black and green fly, caterpillar, etc. $\frac{1}{2}$ pt. 40 cts., pt. 60 cts., qt. \$1, $\frac{1}{2}$ gal. \$1.75, gal. \$3.

Lime-Sulphur, Bowker's Concentrated. For destroying San José scale. One gallon makes ten gallons of spray; dilute with cold water. Bowker's Lime-Sulphur is manufactured under the direct personal supervision of skilled graduate chemists who have devoted years to manufacturing spraying materials, with the one dominant idea that any spray to be worth branding "Bowker's" must be the best. Bowker's is "Lime-Sulphur" with the guesswork left out. 1-gal. can 90 cts., 5-gal. can \$2.75, 10-gal. can \$4.50, barrel, 50 gals., \$12.50.

Nico-Fume Liquid. This preparation is used similar to Nicoticide, and is used by many of the leading growers. $\frac{1}{4}$ -lb. can 50 cts., 1-lb. can \$1.50, 4-lb. can ($\frac{1}{2}$ gal.) \$5.50, 8 lbs. (1 gal.) \$10.50.

Nico-Fume Paper. This is a paper treated with nicotine, giving off dense fumes of strong nicotine when ignited. It is also used for tying near blooms of chrysanthemums in early fall to keep down insects. Preferred by many who do not wish to spray or vaporize. Box of 24 sheets 85c., box of 144 sheets \$4, box of 288 sheets \$7.50.

Nikoteen. One of the milder forms of tobacco or nicotine preparations, used extensively for spraying; also for vaporizing. $\frac{1}{4}$ pt. 40c., pt. \$1.50, case of 10 pts. \$14, 4 lbs. ($\frac{1}{2}$ gal) \$5, 8 lbs. (1 gal.) \$10.

Pyrox. (Bowker's.) The one best and safest all-round spray which kills all leaf-eating insects and prevents blights and all fungous troubles, without injury, on fruit trees, grape-vines, currant bushes, potatoes, cantaloupes, cucumbers, and other garden vegetables, also on rose bushes, shrubbery, etc. It is a creamy paste which looks like paint and "sticks like paint." It needs only to be mixed with cold water and it is ready to apply. Once tried, always used. Lb. 35 cts., 5 lbs. \$1.40, 10 lbs. \$2.50, 25 lbs. \$5.75, 50 lbs. \$10.75, 100 lbs. \$20, 300 lbs. \$57.

Scalecide. Soluble crude oil. Used for the destruction of the San José scale. Dilute at the rate of one gallon to twenty gallons of water. Scalecide does not clog nozzles, hose or pump, and is pleasant to use. This preparation is perhaps the best known and is very widely advertised. Orchardists throughout the country use it in large quantities. Trees may be sprayed in winter and early spring before they start to come to bud. Qt. 55 cts., gal. \$1.35, 5 gals. \$5.75, 10 gals. \$9.85, 30-gal. bbl. \$22, 50-gal. bbl. \$33.

Scale Destroyer, Target Brand (Soluble Oil). Most effective for leaf roller. Dormant spray for San José scale. Spray for tree-infesting scale and most soft-bodied sucking insects. No disagreeable odor, or clogging of nozzle, or burning of the eyes like Lime-Sulphur. May be used in spring or fall. Mixes easily, has no sediment. Dilutes 1 gallon to 20 gallons of water. Qt. 50 cts., gal. \$1, 5 gals. \$4.50, 10 gals. \$8.50, 30 gals. \$20, 50 gals. \$30.

Slug-Shot. The standard remedy for currant worms, rose slugs, cabbage worms, and almost any soft-shelled insects that infest the garden. Lb. 15 cts., 5 lbs. 50 cts., 10 lbs. 90 cts., 100 lbs. \$8.25.

Styptic. To prevent bleeding of vines after pruning. Bottle, \$1.50.

Sulphur. Used principally in greenhouse for checking mildew. Lb. 15 cts., 5 lbs. 60 cts., 10 lbs. \$1, 100 lbs. \$8.

Sulpho-Tobacco Soap. A combination of tobacco extract and sulphur, excellent for washing and spraying plants; dissolve in warm water. 3-oz. pkg. 10 cts., 8-oz. pkg. 20 cts.

Tobacco Dust (Kilmdead). The best of the Tobacco Dusts for dusting or fumigating. Lb. 15 cts., 5 lbs. 50 cts., 25 lbs. \$1.50, 50 lbs. \$2.75, 100 lbs. \$5.

Tobacco Stems. Used for fumigating and under benches in green-houses. Bale of 100 lbs. \$2.50.

Liquid Weed Killers

There is nothing more annoying in the well-kept home grounds than weeds constantly coming up in the roadways, paths and gutters. The following weed killers may be applied by means of a sprinkling apparatus of any kind from the small sprinkling can to the large street-sprinkling wagon. They are harmless to stone, woodwork, or shoes and are perfectly odorless. One thorough application will kill all weeds as well as the roots of the same. They are combinations of high-grade chemicals which when diluted according to the directions given will destroy weeds at once. The best time to apply is shortly after a rain. One gallon of either of these preparations diluted is sufficient to cover 100 to 150 square yards of space.

Herbicide. This is a standard preparation which the manufacturer recommends being diluted 1 part to 40 parts of water. Qt. 55 cts., gal. \$1.75, 2-gal. keg \$3.25, 5-gal. keg \$7, 10-gal. keg \$12.50, 25-gal. cask \$27.50, 48-gal. bbl. \$47.50.

Target Brand. This is also a similar preparation to the above which the manufacturer recommends being diluted 1 part to 50 parts of water. Qt. 55 cts., gal. \$1.75, 5 gals. \$7, 10 gals. \$12.50, 50 gals. \$47.50.

Whale- or Fish-Oil Soap. For mild forms of scale, and is an excellent summer spray, when something stronger cannot be used, where the San José scale exists. It is good for washing off lemon trees, oleanders and almost anything that would be infested with a soft-shelled or in fact almost any kind of insect. Dissolves in water according to various purposes. Lb. 25 cts., 5 lbs. \$1, 10 lbs. \$1.75, 25 lbs. \$4, 100 lbs. \$14.

X-L-All Liquid Insecticide. Destroys mealy-bug, scale, thrip, red-spider, green and black fly, caterpillars, blight and all insect pests in the garden; it is perfectly safe to use on tender plants. For the winter dressing of vines, figs, peaches and other fruit trees, it has been proved to be the safest and most valuable preparation in the market. Leaves the foliage bright and clean, and much improved in appearance. Qt. \$1.75, $\frac{1}{2}$ gal. \$3, gal. \$5.50.

X-L-All Vaporizing Compound. Used very extensively abroad for vaporizing. No. 1 (sufficient for 40,000 cubic feet), \$8; No. 2 (sufficient for 20,000 cubic feet), \$5; No. 3 (sufficient for 10,000 cubic feet), \$2.50.

FERTILIZERS

Our list contains the very best and most modern kinds.
We can quote special prices on carload quantities

All prices subject to market
changes

S. & W. Co.'s Bone Fertilizers

- NO. 1 BONE DUST FOR QUICK ACTION.** A fine-ground bone of the best quality that is immediately available. As a top-dressing or for mixing with soil will be found very effective. 5 lbs. 35 cts., 10 lbs. 60 cts., 25 lbs. \$1.25, 50 lbs. \$2.25, 100 lbs. \$4, ton \$70.
- NO. 2 BONE DUST FOR GENERAL USE.** A bone dust about pinhead size, with a fair percentage of bone flour. Excellent for top-dressing lawns as well as good for mixing with soil. Sold largely to carnation- and rose-growers for top-dressing and for mixing with soil. 5 lbs. 35 cts., 10 lbs. 60 cts., 25 lbs. \$1.25, 50 lbs. \$2.25, 100 lbs. \$4, ton \$70.
- NO. 3 CRUSHED BONE FOR VINES AND TREES.** Largely used for vines, trees and shrubs. About the size of a bean. Very effective and lasting. 5 lbs. 35 cts., 10 lbs. 60 cts., 25 lbs. \$1.25, 50 lbs. \$2.25, 100 lbs. \$4, ton \$75.
- S. & W. CO.'S CHARCOAL.** For mixing with soil for pot-plants and vines. No. 1, Powdered; No. 2, Medium; No. 3, Lumps, 3 to 4 inches. Any size, per bag of 50 lbs., \$2.25, 100 lbs. \$4, 1,000 lbs. \$36, 2,000 lbs. \$70.

GENERAL LIST OF FERTILIZERS

Ashes, Canada Hardwood. Quantity required: Apply one to two tons to the acre, as one heavy application will help much more than the same quantity would applied in fractions. Apply in early spring or late fall. Bags of about 75 lbs., \$1.50; ton in bags, \$27; carload lots of about 30 tons, \$25 per ton.

Basic Slag. See Phosphate.

Blood. (Dried.) Excellent for indoor culture of flowering plants, such as carnations, roses, etc. Its chief element is nitrogen. 10 lbs. \$1.50, 50 lbs. \$5.50, 100 lbs. \$10.

Bon Arbor. A concentrated chemical fertilizer to be used in liquid or powder form according to the directions on the package. Dilute 1 pound with 30 gallons of water. 1/2 lb. pkg. 35 cts., 1-lb. pkg. 50 cts., 5 lbs. \$2.25. Furnished in lots of 100 lbs. or over at \$26 per 100 lbs., 50 lbs. \$15.50.

Bowker's Ammoniated Food for Flowers. Made especially for plants grown in the conservatory, house, or garden; clean, free from offensive odor. Full directions with each package. Small size 15 cts. each, large size 25 cts.; by mail, 20 cts. and 30 cts.

Cow or Cattle Manure, Shredded. One sack of this is equal to one carload of fresh cow manure; is convenient to handle, making it possible for everyone to get this usually scarce article at all times. In 100-lb. sacks only. 100 lbs. \$3.25, 500 lbs. \$15, 1,000 lbs. \$28, ton \$55.

Emerald Lawn Dressing. A clean, portable, and convenient lawn dressing, which we have found to be never-failing in inducing a rapid and rich green growth. It should be sown broadcast in the spring or fall. It is in every way more desirable than manure. The use of Emerald Lawn Dressing entirely does away with the old practice of top-dressing lawns with stable manure. Quantity required: 1 10-lb. package is sufficient to go over an area of 300 square feet, or for forming a new lawn, from 1,000 to 1,500 lbs. to the acre, or a smaller quantity for renovating an old one. It is best to apply during dull weather and, if applied during warm weather, soak down with a hose after applying. 5 lbs. 35 cts., 10 lbs. 60 cts., 25 lbs. \$1.25, 50 lbs. \$2.25, 100 lbs. \$4, 500 lbs. \$17.50, 2,000 lbs. (ton) \$60.

Bactelo. A nitrogen-gathering bacteria which should be used when planting seeds of all leguminous crops such as peas, beans, and clovers. Garden-size bottle 50 cts., acre-size bottle \$1.50, 5-acre-size bottle \$5. When ordering, state what seed legume you wish to inoculate. Pamphlet telling all about inoculation free on request.

Humus. An excellent product for enriching lawns, also good for gardens. Used in making fine lawns where soil conditions are poor. Bbl. of about 200 lbs. \$3.50; ton \$25. Write for prices on carload lots delivered to your station.

Lime, Agricultural, Hydrated. This Lime is specially prepared for use on the soil, and is a combination of calcium-hydrate and calcium-carbonate, finely pulverized. Quantity required: Heavy soils, 2,000 to 6,000 lbs. to the acre; light, sandy soils, 1,000 to 3,000 lbs. to the acre, according to their apparent need. In 100-lb. bags

only. 100-lb. bag \$1.50, 500 lbs. \$6.25, ton \$20. In lots of 3 tons or over, \$17.50 per ton; carload lots, \$12 per ton, f.o.b. New York.

Limestone, Pulverized. This product is having a large sale among the most intelligent agriculturists, with the best results. It is made from the purest crystalline, white limestone obtainable, and has many advantages over burnt or caustic lime. Not being caustic, it does not burn the humus in the soil, and may be applied at any time of the year without danger. It is good for all crops, is especially recommended for the successful growing of alfalfa, and, owing to its extreme fineness, admits of very even distribution. Apply 2 tons to the acre. Put up in 100-lb. bags, \$1.25, 500 lbs. \$5, 1,000 lbs. \$9.50, ton \$18. In carload lots, in bags, f.o.b. works, \$9 per ton. In car lots in bags, the bags are returnable at 8 cts. each, delivered back to the works. This makes net cost of \$7.40 per ton.

Manure, Pulverized Horse. This horse manure is taken from large deposits which have been allowed to become thoroughly rotted. It is evenly dried by artificial heat, screened and ground without liberating any of the original elements, its efficiency being increased so that its component parts are immediately available for plant-food. It is excellent for mixing with soil for potted plants, for field crops, and for vegetable gardens, promoting rapid, steady growth. 100-lb. bag \$3.25, 500 lbs. \$15, 1,000 lbs. \$28, ton \$55.

Nitrate of Soda. Quantity required: Being extremely soluble, it is usually applied after the plants are above ground, 100 to 500 lbs. to the acre. 1-lb. tin 25 cts., 5-lb. pkg. 60 cts., 10-lb. pkg. \$1, 25-lb. bag \$2.25, 50-lb. bag \$4, 100 lbs. \$7.50.

Phosphate, High-Grade Acid or Rock. Apply 1,000 lbs. to the acre. Used for mixing with other fertilizers to increase the phosphoric acid analysis. In 200-lb. sacks only, \$5, ton \$40.

Phosphate, Thomas' Basic Slag. Contains proper elements to produce a rich, luxuriant growth. Apply 600 to 800 lbs. to the acre. 5 lbs. 60 cts., 10 lbs. \$1, 25 lbs. \$2, 50 lbs. \$3.50, 100 lbs. \$6.

Salt. For agricultural purposes, asparagus beds and putting on walks and roads to kill weeds. Apply 600 to 800 lbs. to the acre in early spring. 25 lbs. 50 cts., 50 lbs. 90 cts., 100 lbs. \$1.75, 200 lbs. \$3.25, ton \$25.

Sheep Manure, Pure Pulverized. A pure, natural, nutritious manure. Immediate and lasting in effect. Excellent for mixing with the soil for greenhouse plants. In the vegetable-garden it promotes a rapid, steady growth until maturity. It makes a rich liquid manure. Quantity required: For garden and field crops, one to two tons to the acre; one-half before plowing, the balance before harrowing. For top-dressing grass, use one ton to the acre, applied in fall or early spring. 100-lb. bag \$3.25, 500 lbs. \$15, 1,000 lbs. \$28, ton \$55. In packages of 5 lbs. 40 cts., 10 lbs. 75 cts.

Thomson's Chrysanthemum Manure. A highly concentrated English chemical fertilizer used by the leading private gardeners in America and abroad. May be used in liquid or dry form. 7-lb. bag \$1.50, 14-lb. bag \$2.75, 28-lb. bag \$4.50, 56-lb. bag \$8.

CHARCOAL, COCOANUT FIBER, PEAT AND MOSS

Charcoal. For prices and sizes, see above.

Cocoanut Fiber. Excellent material for use in growing bulbs without drainage. 5 lbs. 25 cts., 25 lbs. \$1, 50 lbs. \$1.50, 100 lbs. \$2.50.

Leaf-Mold. Used for preparing rhododendron beds. Bbl. \$3.50.

Moss, Live Green Sphagnum. Freshly gathered in season. Bbl. \$3.50.

Moss, Dry Sphagnum. Large bale \$4.

Moss, Sheet, Natural Green. For covering the pots or tubs of large plants; sheets range in size about 1 foot wide and from 2 to 5 feet long. Bag (10 lbs.) \$5.

Peat. (Osmundi.) For orchids. Bbl. \$2.50.

Peat, Rotted, Fibrous. An excellent material for mixing with potting soil for many plants. This peat has been dug from an old bog and exposed for a number of years until it has become thoroughly decayed. Bbl. \$2.50.

STUMPP & WALTER CO., 30 and 32 Barclay St., NEW YORK