Historic, Archive Document

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

62.67
JMC

1929

JMC

SEED ANNUAL

THE J. CHAS. McCULLOUGH SEED CO.

228-230-232 EAST FOURTH STREET

Near Sycamore Street

PRIVATE EXCHANGE, LONG DISTANCE PHONE, MAIN 5640

Connecting all Departments

CINCINNATI, OHIO

SUGGESTIONS FOR ORDERING

All varieties of Flower and Vegetable seeds are numbered. Our order sheet is arranged to save you the time and trouble of writing the names of the seeds in full.

If you send your order early the benefit will be mutual. You will have your seed on hand when the planting season arrives and it will enable us to get it out before the "please rush" time arrives.

REMITTANCES can be made by any of the following methods: Post Office Money Order, Express Co. Money Order, Registered Letter, New York or Chicago Exchange or for small amounts postage stamps. PERSONAL CHECKS on local banks cost us extra for collection but will be accepted if the customer desires.

ALL PRICES on VEGETABLE SEEDS are net, but on PACKETS and OZS., WE PREPAY POSTAGE.

Write your Name and Address distinctly and in full; please use the order sheet and envelope inserted in this catalog.

SEEDS BY MAIL, ETC.

PARCEL POST CHARGES have greatly lowered the cost of sending packages by mail. Most customers are no doubt familiar with charges from Cincinnati and that it depends on the weight of the package and the zone. We have estimated as a general average the following rates and these are to be added to prices of bulk seeds if they be sent by mail. Lb., 7c. Pt., 7c. Qt., 10c. Larger size packages, especially in the 1st, 2nd and 3rd zones will not average quite these prices.

DOMESTIC PARCEL POST RATES		First Pound (over 8 oz. rates 1 lb.)	Each Additional Pound or fraction
First Zone within	50 Miles.....	7c	1c
Second Zone within	50 to 150 Miles.....	7c	1c
Third Zone within	150 to 300 Miles.....	8c	2c
Fourth Zone within	300 to 600 Miles.....	8c	4c
Fifth Zone within	600 to 1000 Miles.....	9c	6c
Sixth Zone within	1000 to 1400 Miles.....	10c	8c
Seventh Zone within	1400 to 1800 Miles.....	12c	10c
Eighth Zone all over	1800 Miles.....	13c	12c

WEIGHTS OF BULK SEEDS in measured quantities are approximately as follows:

- Quarts of Peas and Beans approximately 30 ounces.
- Corn, Sugar, approximately, quarts 24 ounces, pints 12 ounces.
- Corn, Early and Field, quarts 28 ounces, pints 14 ounces.
- Onion Sets, quarts 16 and pints 8 ounces.

The above tables will enable customers to remit the proper amount of postage.

EXPRESS AND FREIGHT CHARGES on large quantities are cheaper than Parcel Post. We charge no cartage to depots or the Express Company Offices, nor do we charge for boxes, packing or for small muslin bags.

When seamless cotton bags are required they must be remitted for 40c each.

WE DO NOT SHIP ANY GOODS, C. O. D. Our prices are plainly printed and if we cannot supply at the prices quoted, we will promptly notify customers. There is no reasonable doubt that vegetable seeds will be supplied at these prices, but we reserve the right to advance or decline with the market.

ABOUT WARRANTING SEEDS

We have often been asked if we "guarantee or warrant our Seeds." We beg to state plainly, we do not, for the reason that practical experience has assured us of the fact that crops may fail, no matter how fresh or pure the seed sown may be. We trust that our customers will fully realize that it is to our interest to send none but the best quality of seeds.

To secure success, however, it is necessary that the customer should do his part well, or our good seeds will be ruined. With the best of management and good seeds there will be an occasional unaccountable failure. The best of gardeners sometimes fail, and try again with seeds from the same lot with good results.

The J. Chas. McCullough Seed Co. give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants they send out and will not be in any way responsible for the crop. Purity and germination tests are for information only and without guarantee.

THE J. CHAS. McCULLOUGH SEED CO.

THE J. CHAS. McCULLOUGH SEED CO.

Date _____		AMOUNT ENCLOSED	
Name _____		Cash _____	_____
Street _____		Check _____	_____
R. F. D. _____ Box _____		Money Order _____	_____
Post Office _____		Stamps _____	_____
County _____ State _____		TOTAL	
FREIGHT OR EXPRESS OFFICE _____		No. _____	
SHIP BY		Put up by _____	
☐ MAIL	☐ EXPRESS	Date _____	
☐ FREIGHT			

[illegible]

TO OUR FRIENDS AND CUSTOMERS

JMC BUILDING - SEED CLEANING PLANT - EGGLESTON AVE., THIRD & FOURTH STS.
OFFICE: 720-728 EAST THIRD ST NEAR PENNA STATION

SERVICE

For 62 years we have been growing, and with every move into larger quarters. This has been possible only through several mediums, as a firm in the seed business cannot deliver poor quality and be successful. Below we try to outline the four out-standing features that have helped to make this success possible.

First—Our location is in the heart of the seed producing areas and this fact, combined with unlimited buying facilities, enables us to give first-class quality at a reasonable price.

Second—Because all our products are the result of scientific research. We maintain one of the finest equipped seed testing laboratories to be found anywhere.

Third—Because of the fact that we clean practically every lot of seed we sell on our own modern seed-cleaning machinery. We are cleaners, not merely jobbers. We want our customers to know that our products are improved from time to time as new conditions arise and as scientific research suggests something for the better.

Fourth—The personnel of our firm are all thoroughly experienced in their particular line of work, always striving to turn out a better quality.

Buyers of Seeds will find it worth while to devote some of their time to this catalogue. In

it you will find reliable information as to varieties of seeds, bulbs, plants, etc. We hope it will be of use to all who are interested in making their vegetable gardens profitable and flower beds and lawns more attractive.

We have our seeds grown by competent growers in the sections best suited to the different varieties. From our active and practical experience of 62 years in the seed business and all its branches you will find us as competent to handle the business as any one in the trade. If in need of further information do not hesitate to write us; it is to our interest **to serve you**. Please remember if you **order early** the benefit will be mutual.

Sincerely yours,

THE J. CHAS. McCULLOUGH SEED CO.

Garden Seed and Sales Department
228-230-232 East Fourth Street

The J. Chas. McCullough Seed Co.'s "EMERALD" LAWN GRASS SEED

PRICES— $\frac{1}{2}$ Lb., 30c; 1 Lb., 50c; 5 Lbs., \$2.25; 10 Lbs., \$4.25; 20 Lbs., \$8.25

"Emerald" Lawn Seed is composed of Kentucky Blue Grass, Red Top, English Rye Grass, White Clover and other fine grasses. We combine these grasses because they grow quickly and protect the blue grass, which is slower to germinate, thereby giving not only a permanent lawn but a good sod in six weeks. For 62 years we have made a study of lawns and our experiments have shown us that for quick and permanent results our "Emerald" Lawn Grass Seed has never been excelled. We know that "Emerald" Lawn Seed will give satisfaction wherever a fine velvety turf is wanted, except in dense shade.

QUANTITIES

For New Lawns—1 lb. sows 250 sq. ft. (10 x 25). An acre requires 80 to 100 lbs.

For Old Lawns—It will take about half as much seed as for a new lawn, depending on how thick a stand of grass there is, usually requiring 35 to 50 lbs. per acre for renovating.

MAKING LAWNS

Preparation—The soil should be deeply spaded or plowed, thoroughly pulverized and raked fine and smooth, removing all roots, stones, clods, trash, etc. If not properly graded it should be done now, allowing for water to drain off and not stand in pools. If the lawn is made of clay from recent excavations, it should be covered with 3 or 4 inches of good rich garden soil before the seed is sown.

Fertilizers—Sacco Plant Food or Pulverized Sheep Manure is thoroughly satisfactory for lawns. Unless

stable manure is well decomposed it contains weed seeds. Work the fertilizer into the soil at time of sowing seed.

Sowing—Seed can be sown in the spring from February to May or in the fall from August to October. To get it evenly distributed half the seed should be sown one way then cross and sow balance at right angles. The seed should be covered by raking or harrowing and then well rolled.

Mowing—Cut the young grass for the first time when it is about $1\frac{1}{2}$ to 2 inches high with either a sharp scythe or a free running machine set high. It is most important to keep grass cut quite short from the very start, otherwise it will grow long and thin, instead of tillering out and covering the ground.

Never allow the grass, whether it be young or old to grow long and ragged. Two inches may be considered the extreme length to which it should attain at any time of the year. It is not advisable to keep grass too closely cut during hot and dry weather.

Renovating—If the grass is thin it is not necessary in most cases to plow up the entire lawn and reseed, though if it is choked with weeds and there is very little grass left it is decidedly preferable to plow up or spade up the entire lawn and seed over. Unless this is the case, however, raking over roughly with a sharp tooth rake and sowing more seed, will improve the lawn wonderfully. Grass usually dies out from lack of plant food, hence it is a good plan to apply either Sacco Plant Food or Sheep Manure in March, April or May, after the growing season has started.

For a smooth, thick lawn use SACCO PLANT FOOD

GRASS SEEDS PRESCRIBED FOR ALL SOILS AND PURPOSES

For Lawns, Shaded Lawns, Tennis Courts, Golf Courses, Bowling Greens, Cricket Grounds, Football, Baseball and Polo Fields.

We supply in this vicinity nearly all of the cemeteries, public parks, golf courses and other places where considerable quantities of grass seed are used and are prepared at all times to furnish the highest quality seeds for all purposes.

We put up special mixtures for all purposes and will be very glad to estimate on any special mixture that may be required.

We offer the following splendid mixtures which can be relied on to be the very highest quality.

JMC "Shady Nook" Lawn Grass—For sowing on the north side of buildings, between houses, and for securing a lawn under large shade trees. In many lawns there are places where it seems as though nothing can be grown; some are shaded by large trees and others by buildings. For these locations we recommend our **Shady Nook Lawn Seed**. It is always advisable for those who are seeding down the shady places to supply new soil, if possible, especially if large trees are producing the shade, as their roots spread so fast as to exhaust the nourishment in the soil. When unable to supply new soil, the ground should be well dug over, and if the tree roots predominate, these should be taken out. In most shady places the soil has a tendency to be sour, and we strongly recommend the use of lawn lime (about 50 lbs. per 1,000 sq. ft.). Per $\frac{1}{2}$ lb., 35c; 1 lb., 55c; 5 lbs., \$2.50; 10 lbs., \$4.75; 20 lbs., \$9.25.

JMC Hill Side or Terrace Lawn Grass—For high dry situations where moisture and poor soil are conditions to be contended with. It is composed of grasses that will succeed fairly well under these conditions and produces short green turf of fair quality. Per $\frac{1}{2}$ lb., 30c; 1 lb., 50c; 5 lbs., \$2.25; 10 lbs., \$4.25; 20 lbs., \$8.25.

Golf Course Mixtures—It is most important that the best seeds be used for this and in proper proportions to produce desired results. New golf courses require somewhat different mixtures from that for old courses because it is imperative that quick sod should be obtained and one which will be lasting and produce good, green, smooth turf. From our long experience with grasses, we are well informed on the requirements for the average golf course whether it be for greens or fairways and will be glad to advise with you. The fact that we are among the largest importers of grass seeds and one of the largest cleaners of domestic sorts, enables us to offer at very reasonable figures.

JMC Putting Green Mixture—Composed of short, fine grasses which make smooth, even putting greens. Should be sown 100 lbs. per acre on new ground or for renovating, the amount should be according to stand of grass. Per lb., 75c; 5 lbs., \$3.50; 10 lbs., \$6.75; 20 lbs., \$13.00.

Fair Green Mixture—(For old courses)—Composed of the best and most permanent grasses which produce short, green, thick turf, not in clumps but of spreading habit. It is the best mixture that is offered in this country.

Ask for prices. Requires 30 to 40 lbs. per acre according to the stand of grass already on the ground.

JMC Fair Green Mixture—(For new courses)—This is composed of grasses which will afford a quick, serviceable turf in a short time. We have sold it for some courses which were sown as late as April 15 and obtained such a good stand that the club was opened and the ground played on July 4. It will give the best results in after years. The course, if used too soon after seed is sown, will not be in the finest condition but sufficiently good to satisfy players. Ask for prices.

For a new course, it requires 60 to 100 lbs. per acre according to results desired. If for quick results, thick seedings are best. Per lb., 50c; 5 lbs., \$2.25; 10 lbs., \$4.25; 20 lbs., \$8.25; 50 lbs., \$18.00; 100 lbs., \$35.00.

For a smooth, thick lawn use SACCO PLANT FOOD

PRICE LIST

The J. Chas McCullough Seed Co. give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants they send out and will not be in any way responsible for the crop. Purity and germination tests are for information only and without guarantee.

Page	ASPARAGUS	Pkg.	Oz.	¼ Lb.	Lb.
7	Washington.....	\$0.10	\$0.30	\$1.00	.....
7	Palmetto.....	.10	.15	.30	.....
7	Conovers Colossai.....	.10	.15	.30	.....

BEANS, DWARF

GREEN POD

Pkg. ½ Pt. Pt. Qt. 4 Qts.

8	Improved Early Red Valentine.....	\$0.10	\$0.25	\$0.40	\$0.75	\$2.75
8	Stringless Green Pod.....	.10	.25	.45	.85	3 25
8	Giant Stringless.....	.10	.25	.45	.85	3 25
8	Dwarf Horticultural.....	.10	.25	.40	.75	2 75
8	Full Measure.....	.10	.30	.50	.95	3 50
8	Refugee Late or 1000 to 1.....	.10	.25	.40	.75	2 75
8	Bountiful.....	.10	.30	.50	.95	3 50
9	Tennessee Green Pod.....	.10	.25	.40	.75	2 75

BEANS, DWARF FOR SHELLING

9	Dwarf White Navy.....	.15	.20	.40	1 25
9	Dwarf White Marrow.....	.15	.25	.40	1 50
9	Dwarf White Kidney.....	.15	.25	.40	1 50
9	Dwarf Red Kidney.....	.15	.25	.40	1 50

BEANS, WAX PODDED SORTS

9	Wardwells Kidney Wax....	.10	.25	.45	.85	3 25
9	Dwarf Black Wax.....	.10	.25	.40	.75	2 75
9	Curries Rust Proof Wax....	.10	.25	.40	.75	2 75
9	Golden Wax.....	.10	.25	.40	.75	2 75
9	Davis White Wax.....	.10	.25	.40	.75	2 75

BEANS, POLE OR CORN FIELD

9	Black Ky. Wonder.....	.10	.20	.35	.65	2 40
10	Improved Kentucky Wonder	.10	.20	.30	.55	2 00
10	White Kentucky Wonder....	.10	.20	.35	.65	2 40
10	Cut Short or Corn Hill....	.10	.20	.30	.55	2 00
10	Horticultural Pole or Cranberry.....	.10	.20	.30	.55	2 00
10	White Creaseback.....	.10	.20	.30	.55	2 00
10	Scotia, or Striped Creaseback.....	.10	.20	.30	.55	2 00
10	Tennessee Wonder or Egg Harbor.....	.10	.20	.35	.65	2 40
10	Lazy Wife.....	.10	.20	.35	.65	2 40
10	McCaslan.....	.10	.20	.35	.65	2 40
10	Ohio Pole Wax.....	.10	.25	.40	.75	2 75
10	Golden Cluster Wax.....	.10	.25	.40	.75	2 75

BEANS, LIMA DWARF

11	Burpee's Improved Bush Lima.....	.10	.25	.45	.85	3 25
11	Fordhook Bush Lima.....	.10	.30	.50	.95	3 50
11	Burpees Bush Lima.....	.10	.25	.40	.75	2 75
11	Hendersons Bush Lima....	.10	.20	.30	.55	2 00

BEANS, LIMA, POLE

11	Fords Mammoth Podded....	.10	.20	.35	.60	2 20
11	King of Garden.....	.10	.20	.35	.60	2 20
11	Extra Large White.....	.10	.20	.35	.60	2 20
11	Small Lima or Sieva.....	.10	.20	.35	.60	2 20

Page	BEETS, TABLE	Pkg.	Oz.	¼ Lb.	Lb.
12	Crosbys Improved Egyptian.....	\$0.10	\$0.15	\$0.35	\$1.25
12	Detroit Dark Red.....	.10	.15	.35	1 25
12	Early Eclipse.....	.10	.15	.35	1 25
12	Norwood Blood Turnip....	.10	.15	.50	1 50
12	Extra Early Egyptian.....	.10	.15	.35	1 25
12	Extra Early Bassano.....	.10	.15	.35	1 25
12	Edmand's Early Blood Turnip.....	.10	.15	.35	1 25
12	Improved Early Blood Turnip.....	.10	.15	.35	1 25
12	Dewings Blood Turnip.....	.10	.15	.35	1 25
12	Long Smooth Blood.....	.10	.15	.35	1 25
12	Swiss Chard.....	.10	.15	.30	1 00

BEETS, STOCK

13	Mammoth Prize Red Mang- gel.....		\$0.15	\$0.25	\$0.60
13	Golden Tankard Mangel....		.15	.25	.60
13	Yellow Globe Mangel.....		.15	.25	.60
13	Lanes Imperial Sugar.....		.15	.25	.75

BRUSSELS SPROUTS

13	Perfection.....	.10	.35		
----	-----------------	-----	-----	-------	-------

CABBAGE, FIRST EARLY SORTS

14	Golden Acre.....	.10	.75	2 50	.....
14	Early Jersey Wakefield....	.10	.30	1 00	.....
14	Early Winningstadt.....	.10	.30	1 00	.....
14	Copenhagen Market.....	.10	.40	1 25	.....

CABBAGE, SECOND EARLY SORTS

14	Louisville Drumhead.....	.10	.30	1 00	.....
14	All Seasons.....	.10	.30	1 00	.....
14	Early Dwarf Flat Dutch....	.10	.30	1 00	.....
14	Hendersons Early Summer..	.10	.30	1 00	.....
14	Allhead Early.....	.10	.30	1 00	.....

CABBAGE, LATE

14	Late Flat Dutch.....	.10	.25	.85	.....
15	Large Late Drumhead.....	.10	.25	.85	.....
15	Danish Ballhead.....	.10	.40	1 25	.....
15	Amer. Drumhead Savoy....	.10	.30	1 00	.....
15	Red.....	.10	.30	1 00	.....
15	Pe-Tsai-Chinese.....	.10	.30	1 00	.....

CARROTS

15	French Forcing.....	.10	.15	.50	.....
15	Early Scarlet Horn.....	.10	.15	.50	.....
15	Oxheart.....	.10	.15	.50	.....
15	Chantenay.....	.10	.15	.50	.....
15	Half Long Danvers.....	.10	.15	.50	.....
15	Nantes Half Long Scarlet..	.10	.15	.50	.....
15	Improved Long Orange.....	.10	.15	.40	.....
15	Large White Belgian.....	.10	.15	.40	.....

CAULIFLOWER

16	Earliest Snowball.....	.20	2 50	.....	.....
16	Early Dwarf Erfurt.....	.20	2 50	.....	.....

CELERY

16	Improved White Plume....	.10	.30	1 00	.....
16	Golden Self Blanching....	.10	.40	1 50	.....
16	Giant Pascal.....	.10	.25	.75	.....
17	Celeriac.....	.10	.25	.75	.....

COLLARDS

17	Georgia or Southern.....	.10	.15	.40	
----	--------------------------	-----	-----	-----	-------

ALL 10c PACKETS ARE 3 PACKETS FOR 25c.

PRICE LIST—Continued

Page	CORN	Pkg.	½ Pt.	Pt.	Qt.	4 Qts.
17	Extra Early Adams.....	\$0.10	\$0.15	\$0.20	\$0.35	\$1.15
17	Early Adams.....	.10	.15	.20	.35	1.15
17	Golden Bantam.....	.10	.15	.25	.40	1.40
18	Wonder Bantam.....	.10	.15	.25	.40	1.40
18	Bantam Evergreen.....	.10	.15	.25	.40	1.40
18	Whipple's Early.....	.10	.15	.25	.40	1.40
18	Early Evergreen.....	.10	.15	.25	.40	1.40
18	Black Mexican.....	.10	.15	.25	.40	1.40
18	Mammoth White Cory....	.10	.15	.25	.40	1.40
18	Early Mammoth.....	.10	.15	.25	.40	1.40
18	Howling Mob.....	.10	.15	.25	.40	1.40
18	Kendels Early Giant.....	.10	.15	.25	.40	1.40
19	Country Gentleman.....	.10	.15	.25	.40	1.40
19	Stowell's Evergreen.....	.10	.15	.25	.40	1.40
19	Zig-Zag Evergreen.....	.10	.15	.25	.40	1.40
19	Late Mammoth.....	.10	.15	.25	.40	1.40
19	Club Zig-Zag Evergreen...	.10	.15	.25	.40	1.40

	POP CORN	Pkg.	Oz.	¼ Lb.	Lb.
19	Rice.....			\$0.10	\$0.20
19	White Pearl.....			.10	.20

	CORN SALAD	Pkg.	Oz.	¼ Lb.	Lb.
19	Large Seeded.....	.10	.15	.40	.....

	CUCUMBER	Pkg.	Oz.	¼ Lb.	Lb.
20	Longfellow.....	.10	.20	.60	2.00
20	Improved White Spine.....	.10	.15	.40	1.25
20	Improved Long Green.....	.10	.15	.40	1.25
20	Davis Perfect.....	.10	.15	.40	1.25
20	Early Frame.....	.10	.15	.40	1.25
20	Early Fortune.....	.10	.15	.40	1.25
20	Jersey Pickling.....	.10	.15	.40	1.25
20	Nichols Medium Green....	.10	.15	.40	1.25
20	Early Green Cluster.....	.10	.15	.40	1.25
20	Cool and Crisp.....	.10	.15	.40	1.25
20	Japanese Climbing.....	.10	.15	.50	1.50
20	Gherkin or Burr.....	.10	.15	.50	1.50

	EGG PLANT	Pkg.	Oz.	¼ Lb.	Lb.
21	Black Beauty.....	.10	.40	1.50	.....
21	New York Improved.....	.10	.40	1.50	.....

	ENDIVE	Pkg.	Oz.	¼ Lb.	Lb.
21	Green Curled.....	.10	.15	.50	.....
21	Broad Leaf Batavian.....	.10	.15	.50	.....
21	Moss Curled.....	.10	.15	.50	.....

	GARLIC	Pkg.	Oz.	¼ Lb.	Lb.
21	Bulbs.....			.20	.50

	HERBS	Pkg.	Oz.	¼ Lb.	Lb.
22	Caraway Flavoring only...			.10	.20
22	Dill.....	.10	.20	.....	.....
22	Fennel, Sweet.....	.10	.20	.....	.....
22	Fennel, Sweet for Flavoring			.....	.30
22	Sage.....	.10	.40	.....	.....
22	Blue Poppy for Flavoring..			.....	.25
22	Yellow Mustard for Flavoring			.....	.25

	KALE	Pkg.	Oz.	¼ Lb.	Lb.
22	Dwarf Green Curled.....	.10	.15	.30	.85
22	Dwarf Curled Siberian.....	.10	.15	.30	.85
22	Dwarf Green Scotch.....	.10	.15	.45	1.50
22	Tall Scotch.....	.10	.15	.45	1.50

	KOHL RABI	Pkg.	Oz.	¼ Lb.	Lb.
22	Early Purple Vienna.....	.10	.30	.75	.....
22	Early White Vienna.....	.10	.30	.75	.....

	LEEK	Pkg.	Oz.	¼ Lb.	Lb.
22	Large American Flag.....	\$0.10	\$0.20	\$0.65	.....

Page	LETTUCE, CURLED	Pkg.	Oz.	¼ Lb.	Lb.
23	Grand Rapids.....	.10	.20	.50	.....
23	Black Seeded Simpson.....	.10	.20	.50	.....
23	Early Curled Simpson.....	.10	.20	.50	.....
23	Early Curled Silesian.....	.10	.20	.50	.....
23	Early Prize Head.....	.10	.20	.50	.....

	LETTUCE, HEAD OR CABBAGE	Pkg.	Oz.	¼ Lb.	Lb.
23	May King.....	.10	.20	.50	.....
23	Iceberg.....	.10	.20	.50	.....
24	Top Notch.....	.10	.20	.50	.....
24	Big Boston.....	.10	.20	.50	.....
24	California Cream Butter...	.10	.20	.50	.....
24	Improved Hanson.....	.10	.20	.50	.....
24	New York Head.....	.10	.25	.90	.....

	MUSK MELON, GREEN FLESH	Pkg.	Oz.	¼ Lb.	Lb.
25	Honey Ball.....	.10	.30	1.00	.....
25	Honey Dew.....	.10	.15	.50	.....
25	Rockyford.....	.10	.15	.40	.....
25	Netted Gem.....	.10	.15	.40	.....
25	Green Nutmeg.....	.10	.15	.40	.....
25	Acme or Baltimore.....	.10	.15	.40	.....
25	Extra Early Hackensack...	.10	.15	.40	.....
25	Large Hackensack.....	.10	.15	.40	.....

	MUSK MELON, SALMON FLESH	Pkg.	Oz.	¼ Lb.	Lb.
25	Pollock's No. 10-25.....	.10	.15	.40	.....
25	Burrells Gem.....	.10	.15	.40	.....
25	Emerald Gem.....	.10	.15	.50	.....
26	Tiptop.....	.10	.15	.50	.....
26	Paul Rose.....	.10	.15	.40	.....
26	Osage or Millers Cream....	.10	.15	.50	.....
26	Banana.....	.10	.15	.50	.....

	WATER MELON	Pkg.	Oz.	¼ Lb.	Lb.
26	Ribault.....	.10	.15	.40	1.00
26	Stone Mountain or Dixie Bell.....	.10	.20	.50	1.75
26	Excel.....	.10	.15	.30	.85
27	Tom Watson.....	.10	.15	.30	.85
27	Kleckleys Sweet.....	.10	.15	.40	1.00
27	Florida Favorite.....	.10	.15	.30	.85
27	Kolbs Gem.....	.10	.15	.30	.85
27	Sweetheart.....	.10	.15	.30	.85
27	Peerless or Ice Cream.....	.10	.15	.30	.85
27	Gray Monarch.....	.10	.15	.30	.85
27	Long Light Icing.....	.10	.15	.30	.85
27	Gypsy or Georgia Rattlesnake.....	.10	.15	.30	.85
27	Halberts Honey.....	.10	.15	.40	1.00
27	Dark Icing.....	.10	.15	.30	.85
27	Irish Gray.....	.10	.15	.30	.85
27	Dixie.....	.10	.15	.30	.85

	MUSTARD	Pkg.	Oz.	¼ Lb.	Lb.
27	Southern Giant Curled....	.10	.15	.30	.....
27	White.....	.10	.15	.30	.....

MUSHROOM SPAWN
(See Page 28)

	OKRA OR GUMBO	Pkg.	Oz.	¼ Lb.	Lb.
28	White Velvet.....	.10	.15	.25	.....
28	Dwarf Prolific.....	.10	.15	.25	.....
28	Perkins Mammoth.....	.10	.15	.25	.....

ALL 10c PACKETS ARE 3 PACKETS FOR 25c

PRICE LIST—Continued

Page	ONION	Pkg.	Oz.	¼ Lb.	Lb.
29	Large Red Wethersfield.....	\$0.10	\$0.25	\$0.75	.....
29	Yellow Flat Danvers.....	.10	.20	.60	.....
29	Yellow Globe Danvers.....	.10	.25	.75	.....
29	Ohio Yellow Globe.....	.10	.25	.75	.....
29	Prizetaker.....	.10	.25	.75	.....
29	Silver Skin or White Portugal.....	.10	.25	.75	.....
29	White Globe.....	.10	.30	1.00	.....

PARSLEY

30	Champion Moss Curled....	.10	.15	.35	.....
30	Hamburg Rooted.....	.10	.15	.35	.....
30	Plain Leaf.....	.10	.15	.35	.....

PARSNIPS

30	Sugar or Hollow Crown....	.10	.15	.35	.....
30	Long White.....	.10	.15	.35	.....

PEAS, EARLY
SMOOTH

	SMOOTH	Pkg.	½ Pt.	Pt.	Qt.	4 Qts.
31	Maud S.....	\$0.10	\$0.20	\$0.30	\$0.50	\$1.75
31	J. C. McC. Extra Early....	.10	.20	.30	.50	1.75
31	Alaska.....	.10	.20	.30	.50	1.75

PEAS, EARLY
WRINKLED

31	Gradus.....	.10	.20	.30	.55	2.00
32	Thomas Laxton.....	.10	.20	.30	.55	2.00
32	Laxtonian.....	.10	.20	.35	.60	2.00
32	Little Marvel.....	.10	.20	.30	.55	2.00
32	American Wonder.....	.10	.20	.30	.55	2.00
32	Notts Excelsior.....	.10	.20	.30	.55	2.00
32	Suttons Excelsior.....	.10	.20	.30	.55	2.00

PEAS, MEDIUM
CROP VARIETIES

32	Premium Gem.....	.10	.20	.30	.50	1.75
32	Daisy or Dwarf Telephone..	.10	.20	.30	.50	1.75

PEAS, LATE

32	Telephone.....	.10	.20	.30	.55	2.00
32	Alderman.....	.10	.20	.30	.55	2.00
32	White Marrowfat.....	.10	.15	.25	.45	1.75
32	Melting Sugar.....	.10	.20	.30	.55	2.00

PEANUTS

	Pkg.	½ Lb.	Lb.
33	Improved Virginia.....	\$0.20	\$0.30

PEPPER

	Pkg.	Oz.	¼ Lb.	Lb.
33	Chinese Giant.....	\$0.10	\$0.50	\$1.75
33	Large Bell or Bull Nose....	.10	.40	1.25
33	Ruby King.....	.10	.40	1.25
33	Ruby Giant.....	.10	.40	1.50
33	Long Red Cayenne.....	.10	.40	1.25
33	Sweet Mountain.....	.10	.40	1.25
33	Golden Dawn.....	.10	.40	1.50
33	Red Chili.....	.10	.40	1.25
33	Pimento.....	.10	.40	1.25

PUMPKIN

34	King of Mammoths.....	.10	.15	.40	1.25
34	Japanese Pie.....	.10	.15	.40	1.50
34	Tennessee Sweet Potato....	.10	.15	.40	1.50
34	Cushaw Crook-Neck Striped.....	.10	.15	.40	1.50
34	Golden Cushaw.....	.10	.15	.40	1.50
34	Large Cheese.....	.10	.15	.25	.75
34	Small Sugar.....	.10	.15	.30	1.00
34	Connecticut Field.....	.10	.15	.25	.75
34	Kentucky Field.....	.10	.15	.25	.60

RADISH, ROUND

35	Early White Tip Scarlet...	.10	.15	.30	1.00
35	Early White Turnip.....	.10	.15	.30	1.00
35	Golden Globe.....	.10	.15	.30	1.00
35	White Stuttgart.....	.10	.15	.30	1.00
35	French Breakfast.....	.10	.15	.30	1.00
35	Crimson Giant.....	.....	.....	.....	.....
35	Early Scarlet Turnip.....	.10	.15	.30	1.00
35	Early Scarlet Globe.....	.10	.15	.30	1.00

Page	RADISH, LONG	Pkg.	Oz.	¼ Lb.	Lb.
36	Cincinnati Market.....	\$0.10	\$0.15	\$0.30	\$1.00
36	Long Scarlet Short Top....	.10	.15	.30	1.00
36	Long White Icicle.....	.10	.15	.30	1.00
36	White Strasburg.....	.10	.15	.30	1.00
36	Long White Vienna.....	.10	.15	.30	1.00

RADISH, FALL

36	Long Black Spanish.....	.10	.15	.30	1.00
36	Round Black Spanish.....	.10	.15	.30	1.00
36	Rose China Winter.....	.10	.15	.30	1.00
36	White Chinese.....	.10	.15	.30	1.00
36	California Mammoth White Winter.....	.10	.15	.30	1.00

RHUBARB

37	Victoria.....	.10	.20	.60	
----	---------------	-----	-----	-----	-------

SALSIFY

37	Mammoth Sandwich Island	.10	.20	.60	
----	-------------------------	-----	-----	-----	-------

SPINACH

37	King of Denmark.....	.10	.15	.25	.50
37	Bloomsdale Savoy.....	.10	.15	.25	.40
37	Round Thick Leaf.....	.10	.15	.25	.40
37	New Zealand.....	.10	.15	.30	.....

SQUASH, SUMMER

38	Mammoth White Bush....	.10	.15	.40	1.25
38	Golden Summer Crookneck..	.10	.15	.40	1.25
38	Vegetable Marrow.....	.10	.15	.40	1.25

SQUASH, WINTER

38	Hubbard.....	.10	.15	.40	1.25
38	Golden Hubbard.....	.10	.15	.40	1.25
38	Warted Hubbard.....	.10	.15	.40	1.25
38	Mammoth Chili.....	.10	.15	.40	1.25
38	Boston Marrow.....	.10	.15	.30	1.00

TOMATO
WILT RESISTANT

39	Marglobe.....	.10	.40	1.25	.....
39	Norton.....	.10	.40	1.25	.....
39	Marvelosa.....	.10	.40	1.25	.....
39	Marvana.....	.10	.40	1.25	.....

TOMATO, EARLY

39	Purple King.....	.10	.35	1.00	.....
39	Earliana.....	.10	.35	1.00	.....
39	June Pink.....	.10	.35	1.00	.....
39	Chalk's Early Jewel.....	.10	.35	1.00	.....
39	Dwarf Champion.....	.10	.35	1.00	.....
39	John Baer.....	.10	.35	1.00	.....
40	Bonny Best.....	.10	.35	1.00	.....
40	Early Detroit.....	.10	.35	1.00	.....

TOMATO, MAIN CROP

40	Ponderosa.....	.10	.50	1.50	.....
40	Beauty.....	.10	.35	1.00	.....
40	Stone.....	.10	.25	.85	.....
40	Truckers Favorite.....	.10	.35	1.00	.....
40	Cincinnati Purple.....	.10	.35	1.00	.....
40	Golden Queen.....	.10	.40	1.25	.....

TOMATO
SMALL FRUITED

40	Pear-Shaped, Red.....	.10	.40	1.25	.....
40	Pear-Shaped, Yellow.....	.10	.40	1.25	.....
40	Red Cherry.....	.10	.40	1.25	.....
40	Yellow Cherry.....	.10	.40	1.25	.....

TURNIP

41	Early Purple Top Milan...	.10	.15	.30	1.00
41	Purple Top Strap Leaf....	.10	.15	.25	.75
41	Purple Top Globe.....	.10	.15	.25	.75
41	Early White Flat Dutch...	.10	.15	.25	.75
41	Large White Globe.....	.10	.15	.25	.75
41	White Egg.....	.10	.15	.25	.75
41	Long White Cow Horn....	.10	.15	.25	.75
41	Yellow Aberdeen.....	.10	.15	.25	.75
41	Amber Globe.....	.10	.15	.25	.75
41	Seven Top.....	.10	.15	.25	.75
41	American Purple Top Ruta- baga.....	.10	.15	.25	.75

TOBACCO

	Pkg.	¼ Oz.	1 Oz.
41	White Burley.....	\$0.10	\$0.20
41	Stand Up Burley.....	.10	.20
41	Connecticut Seed Leaf....	.10	.20
41	Havana.....	.10	.20

GENERAL LIST OF **SELECT VEGETABLE SEEDS** (SEE PAGES 4, 5 AND 6 FOR PRICES)

Postage paid on Seeds at pkt., oz., $\frac{1}{4}$ lb., and $\frac{1}{2}$ pt. rates. On larger quantities add 7c per pt., 7c per lb., 10c per qt. to prices.

EXPRESS RATES on Seeds, Bulbs, etc., have been considerably reduced in the last few years.

ASPARAGUS

(See Page 4 for Prices)

One ounce of seed sows 50 ft. producing about 500 plants; 10 lbs. sow one acre. One pound produces plants enough to set one acre.

Roots can be set from February to May, or in the fall, in October or November.

100 roots plant a bed 100 feet long and are sufficient for a medium garden. An acre requires 4000 to 7000 roots.

Culture Growing Roots—Asparagus seed is sown in March or April one inch deep, in rows 15 inches apart. Keep clean with hand tools and thin out the plants to four inches apart. When one or two years old, set in permanent beds.

Growing Asparagus—The size of asparagus depends more on high fertilization than on the variety. Well-drained, rich soil, where

it will not be in the way when the rest of the garden is plowed is best. Two year old roots give quickest results. Plow or dig out a trench 18 inches wide, six to ten inches deep, making the trenches six to eight feet apart. In the bottom of the furrow use four to six inches of well-rotted manure, then cover with two or three inches of good soil. The roots are set twelve to fifteen inches apart, and should be spread out carefully and afterwards covered with about two inches of soil. Do not cover with too much soil the first year, but the following years they can be hilled up. If white asparagus is wanted the beds should be thrown higher than if wanted for green asparagus.

Do not cut asparagus too late in the spring, as it exhausts the plant. The most practical growers on the day they stop cutting, throw down the beds with a plow, then harrow the ground, leaving the plants to grow. In November the tops are cut off and a mulch of manure put on the top of the rows, which is afterwards worked into the soil, when the beds are thrown up in the spring.

For a small garden asparagus roots can be set in double rows instead of single.

Insect Remedies—For the asparagus beetle, spray with Arsenate of Lead, 3 lbs. to 50 gallons of water. Or dust with Slug Shot, or dry Arsenate of Lead, while the dew is on the plant.

1 Washington—This variety has proven as nearly Rust-proof as is possible to produce Asparagus. It is much in demand on account of its heavy yield and fine flavor. The stalks are of rich, dark green color, tinted darker at tips.

2 Palmetto—An early maturing and very prolific variety, producing an abundance of very large deep, green shoots of the best quality.

3 Conover's Colossal—An old favorite, well-known sort, producing very large shoots; tips somewhat blunted and slightly tinged with purple.

Asparagus Roots—See Page 77 for Prices.

BEANS

DWARF OR BUSH

Sometimes called String Beans,
Snap Beans, etc.

(See Page 4 for Prices)

Always popular and easily grown. If planted every two or three weeks, commencing after all danger of frost has passed and continuing until about August 15, a supply will be kept up during the whole summer.

One pint plants about 100 feet. An acre requires 1 to $1\frac{1}{2}$ bushels. Half pint planted every 3 weeks is sufficient for a medium garden. They are ready for the table from 40 to 50 days after planting.

Culture—To produce the best results, Beans should have a good soil and deep or thorough tillage before planting and shallow cultivation afterwards to prevent too much disturbing of the roots. Land which was planted in other crops is better than that freshly manured and sheep manure, one or two hundred pounds per acre, will give excellent results. For field culture plant in rows $2\frac{1}{2}$ feet apart, dropping the beans 3 or 4 inches apart in the rows, covering about 2 inches with soil. In small gardens, rows may be 18 inches apart. Up to the time of blooming, cultivate often, but never while the vines are wet, and do not disturb the roots, especially after blooming, as they will blight and the crop will be reduced. Constant picking extends bearing.

Insect Remedies—For Mexican Bean Beetle, dust the under side of leaves with Magnesium Arsenate Dust Mixture. (See Page 81.)

For the Bean Aphis or Lice, spray with "Black Leaf 40."

For Fungus diseases and rust, spray with Bordeaux Mixture.

Burpee's Stringless Green Pod

Grow better vegetables with SACCO PLANT FOOD

BEANS—DWARF OR BUSH—Continued

(See Page 4 for Prices)

Postage paid on pkts., and $\frac{1}{2}$ pts. On pints remit 7c; on quarts 10c extra if to be sent by mail.

GREEN PODDED VARIETIES

4 Improved Earliest Red Valentine—A well-known very early sort. Pods of medium length about $4\frac{1}{2}$ inches long of medium green color, curved, cylindrical, with crease in the back, very fleshy, crisp and tender. Vines medium to large, erect with dark green leaves. Seed long, purplish pink, splashed with light buff.

5 Burpee's Stringless Green Pod—A very handsome, long, cylindrical medium maturing green bean. Pods larger than those of the Valentine and straighter. Very fleshy and remain crisp and tender longer. Vines of vigorous growth and productiveness. Seeds oval, light brown in color. A very desirable sort for home gardens and largely grown for market.

6 Giant Stringless Green Pod—A highly productive and very handsome sort. Vines vigorous, spreading. Pods large, round, averaging larger and straighter than the Stringless Green Pod, but a few days later. Seed long, slender, buff color.

Bountiful Beans **Tennessee Green Pod**

7 Dwarf Horticultural—Very popular in most localities, especially for market, as they are valuable both for snap beans and shelling. They become fit for use as shelled beans early, and in this condition the beans are large, easily shelled and equal to Lima Beans in quality. The vines are very productive, compact and upright in growth, with large leaves. The pods are 5 to $5\frac{1}{2}$ in. long, broad, thick, curved and have splashes of bright red on yellowish green. Seeds large, oval, plump, pale buff splashed with red.

8 Full Measure—A very desirable round-podded variety with pods 6 to 7 inches long, which are solid, meaty, brittle and stringless. It is a little later than Stringless Green Pod and is a splendid Bean for home or market use.

9 Refugee (late or 1000 to 1). One of the best sorts for late planting and especially desirable for canning and pickling. The vines are large, spreading, very hardy, with small, smooth light green leaves. The beans are borne in great profusion, pods being about 5 to $5\frac{1}{4}$ inches long; cylindrical, slightly curved, medium green, afterwards becoming light yellow, slightly splashed with purple. The seed is long, cylindrical, light drab thickly dotted and splashed with purple.

10 Bountiful—An Improved long Yellow Six Weeks, in that it is earlier, very much larger and more tender. It is very hardy, extremely early, very prolific, and bears continuously for several weeks. Pods are flat, absolutely stringless, rich green, very large and handsome. The seed is yellow, long, resembling Six Weeks. For very early or very late planting is very desirable for both home garden and market.

PARCEL POST RATES—To calculate Zone Rates. Beans can be taken at the following rates: A pint weighs approximately 15 oz., a quart approximately 30 oz.; or packed, a pint weighs about 1 lb., a qt. about 2 lbs.

BEANS—DWARF OR BUSH—Continued

(See Page 4 for Prices)

12 Tennessee Green Pod—A dwarf, early, snap bean, which is very popular in Eastern Tennessee and Southern Kentucky. Seed is brown, a little larger than Kentucky Wonder, very hardy and more capable of withstanding inclement weather than most other sorts. The vines are large, somewhat spreading, prolific. The pods are very long (often 6 to 7 inches), flat, irregular in shape, dark vivid green color.

DWARF BEANS—For Shelling Only

Usually profitable as a farm crop especially in Northern sections.

Culture—Plant in rows about $2\frac{1}{2}$ feet apart. The Navy requires about $\frac{1}{2}$ bu. per acre. Other sorts about a bushel.

15 Dwarf White Navy—The well-known small oval white variety so largely used in all sections.

16 Dwarf White Marrow—Beans oval about double as large as Navy. Vines vigorous and productive.

17 Dwarf White Kidney—Large, white kidney shaped, slightly flattened. Pods about six inches long, large and coarse. Beans excellent quality either green or dry.

18 Dwarf Red Kidney—Similar to above but dark pink color. Very salable.

Inoculation for Beans—Excellent results will be obtained by treating the seeds of beans with Inoculation Bacteria before planting. • It can be easily done. We have it put up in convenient size for small gardens. (See Page 64).

WAX PODDED SORTS

These find ready sale in northern markets and are largely planted by southern growers for shipping. The pods vary from light to golden yellow color.

19 Wardwell's Kidney Wax—A variety which matures a little later than the Golden Wax, yields large crops of long, nearly straight, broad pods of light golden yellow color. They are extremely showy, consequently are ready sale and most profitable for market gardeners and an excellent variety for growing for home gardens. The seed is large, flat, kidney shape, white with dark markings about the eye.

20 Dwarf Black Wax—One of the most popular varieties for home use and market. The pods are about $4\frac{1}{2}$ inches long, slightly curved, round, very brittle and tender. They are very fleshy, clear golden yellow color and remain tender a long time. Seed is long, round, medium size, shiny black.

21 Currie's Rust-proof Wax—A variety which is claimed to be rust-proof. The vines are very vigorous, hardy, productive. Pods, light yellow, similar in shape to Golden Wax, $5\frac{1}{2}$ to 6 inches long. Matures early and is a splendid sort for market gardens and excellent for home use. The seed is long, oval, medium size, purplish black.

22 Dwarf Golden Wax—An early maturing variety very productive. Vines erect, compact, bearing the pods well off the ground. Pods nearly straight, broad, flat, golden yellow, very fleshy and wax like, usually $4\frac{1}{2}$ to 5 inches long. Seed medium size, oval, white blotched with purple. A good sort for home garden, either for table use or pickling.

Dwarf Golden Wax

23 Davis White Wax—A very hardy productive variety which is popular with truckers growing for northern markets and market gardeners. The vines are very vigorous and productive. Pods straight, $6\frac{1}{2}$ to 7 inches long, light yellow, and when young are very crisp and tender. The seed is kidney shape, clear white, excellent for baking.

BEANS—POLE OR CORNFIELD

These are very profitable and usually command good prices on the markets and are more easily and economically gathered than the Dwarf Beans. Can be planted to run up good, strong poles and some varieties are desirable to use on strong growing corn.

Culture—Pole Beans are more sensitive to cold and wet than Dwarf varieties, hence should not be planted too early. Use poles from 6 to 8 feet long in rows 4 feet apart, placing the poles about 3 feet apart in the row. If the poles are slanted slightly to the north, the vines climb better and the pods are more easily seen. In home gardens three poles are usually placed wigwam style and tied at the top. Around each pole plant 4 to 6 beans from 1 to 2 inches deep. When ready to run, thin to four plants and see that they all climb the same way, as if trained wrong they will not climb. If to be planted in corn, this should be done after the corn is well started and has had two or three workings.

BLACK KENTUCKY WONDER

25 Introduced by the late J. Chas. McCullough. Plant of large growth, climbs well, very compact, and exceedingly productive. Snap pods very large, 7 to 9 inches long, 8 to 10 seeded, extremely fleshy and very brittle. Suitable for either snap or green shell purposes. Undoubtedly the best late green podded sort for snap purposes.

BEANS—POLE OR CORNFIELD—Cont'd

(See Page 4 for Prices)

26 Improved Kentucky Wonder (or Old Homestead)—A well-known variety and one of the most popular of all Pole Beans, especially in the middle sections. The vines are very vigorous, heavy and very prolific, hence not desirable to use for planting in corn. Pods are of irregular shape, bright green, very long, often reaching 9 to 10 inches. They are very tender, crisp and stringless when young, but become irregular and spongy as the beans ripen. The seed is long, oval, slightly flattened and brown or dun colored.

27 White Seeded Kentucky Wonder. (St. Louis Perfection White)—Similar to the above, excepting that the beans are different shape and solid white. It is early maturing, very desirable for snap beans and an excellent variety for green shelling and unsurpassed in quality as baked beans. Very profitable for market gardeners and highly prized in all sections.

28 Red Speckled Cut-Short or Corn Hill. A very popular variety in Central and Southern States especially for planting among corn. It will give a good crop without the use of poles. The vines are not as heavy as Kentucky Wonder, being medium size, vigorous, twining loosely, with dark colored leaves. Pods are 3 to 3½ inches long, straight, flat, fleshy and of good quality. As they mature the pods become light yellow tinged with red, the beans showing distinctly through the pods. The seed is small, round, light greyish white, spotted with purplish brown.

29 Horticultural Pole or Speckled Cranberry—A very popular variety for general purposes, either as a late green shelled bean or for snaps. The pods are of medium length 4½ to 5 inches long, broad; when young pale green, gradually changing to yellowish green striped or splashed with red. Vines are moderately vigorous, with large light colored leaves. Can be grown on corn or on short poles. As shelled beans they equal in flavor Limas and are excellent to use as dry beans for boiling or baking.

30 White Creaseback—An extremely early variety, which produces nearly all its pods at the same time. The vines are medium size and vigorous, and in rich soil wonderfully productive, bearing round, fleshy

Improved Kentucky Wonder Pole Bean

White Creaseback

pods in clusters of from 4 to 12, which makes it extremely easy to gather. Pods are about 5 inches long, comparatively straight, attractive, light green, very fleshy, with a crease down the center. Beans are small, oblong, clear white.

31 Scotia or Striped Creaseback—A hardy and very productive green-podded cornfield bean. The vines are sturdy and of good climbing habit with small-medium deep green leaves. The pods are long, about 6 inches, very cylindrical or completely rounded, distinctly creasebacked, very fleshy and of excellent quality. The color, when in condition for use as snaps, is light silvery green, becoming tinged with purple as the pods mature. This variety is especially suitable for growing in corn for snaps.

32 Tennessee Wonder, or Egg Harbor—Large green pods, curved, double barreled, tinged with purple and wrinkled, depressed between each of the eight or nine seeds. Considered one of the largest of all cultivated beans.

33 Lazy Wife—A somewhat late maturing variety, bearing medium green pods in large clusters. Pods are 5½ to 6½ inches long, broad, thick fleshy and entirely stringless. When young they have a rich flavor which is retained until they are nearly ripe. An excellent sort for either snap green shelling, or using as dry beans. Seed white, medium size and generally round.

34 McCaslan—The pods, produced in great abundance, are a rich, dark green color, measuring about ten inches long, rather flat and slightly curved. Fine for use as a snap-sort, being entirely stringless when young. If pods are picked before maturing, vines bear till frost. If pods are allowed to mature, they produce a good sized white bean for winter use.

35 Ohio Wax Pole—Pods usually 7 inches long, solidly meaty and entirely stringless; commences to bear when scarcely higher than the bush variety, and keeps on producing until killed by frost.

36 Golden Cluster Wax—One of the best Wax podded pole snap beans. The vines are large, strong growing, vigorous and hardy. Pods 6 to 8 inches long, borne in clusters and vary in color from golden yellow to creamy white. The seed is medium size, flattened, oval, dull white.

LIMA BEANS

DWARF OR BUSH VARIETIES

(See Page 4 for Prices)

These are preferred in small gardens, as they can be grown like Dwarf Beans, and without the use of poles. They are not quite so prolific as the Pole Limas, but are earlier and continuous bearers throughout the season. The beans can be gathered much easier than the Pole Limas and they can be grown closer together.

Culture—All Lima Beans are tender and the ground should be dry and the weather warm and settled before planting. They do best in good light soil, and if not rich, an application of sheep manure or other good fertilizer will be well repaid. Plant in drills $1\frac{1}{2}$ to 2 feet apart, dropping the beans 4 to 5 inches apart and covering about 2 inches deep. Cultivate often until they commence to flower, but only when the leaves are dry.

1 pint of Small Seeded Limas plants 100 to 125 feet and is sufficient for an ordinary garden. 1 quart of other sorts plants about the same space. For succession, make two plantings four weeks apart. Mature in 75 to 90 days from planting.

37 Burpee's Improved Bush Lima—Pods and beans are both larger and thicker than Burpee's Bush Lima, and fully eight days earlier. Plant is a vigorous grower with heavy foliage. Even when of full size the enormous beans are of the most luscious flavor.

38 Fordhook Bush Lima—A very vigorous and erect growing variety, bearing its pods well above the ground in large clusters. Pods are medium green, about 5 inches long and contain 4 to 5 large thick beans of exceptionally fine quality. We consider this one of the best of the large seeded kinds.

39 Burpee's Bush Lima—A bush form of the Large White Lima type. Plants are somewhat dwarf but very productive. Pods are medium green, broad, containing 3 to 4 very large flat beans of the best quality. Seed large, flat, white, slightly greenish tinge.

40 Henderson's Bush Lima—An exceedingly productive variety of dwarf habit. Commences bearing very early and continues to grow and set pods until stopped by frost. The vines are without runners, somewhat dwarf, very productive. Beans small, white and most excellent quality either for green shelling or as dry beans.

POLE LIMA BEANS

Large seeded sorts require 1 quart to 100 poles, $\frac{3}{4}$ bu. to an acre. Small Limas require about one-third the quantity.

Culture—These are to be treated like other Pole Beans excepting they should be planted one or two weeks later. Where soil is very stiff, it is best to plant the beans with the eye downward, as they will come up more rapidly.

41 Ford's Mammoth Podded—The result of 20 years' selection by a market gardener near Philadelphia. It far surpasses in size and productiveness many other sorts and has become very popular throughout all sections. Pods are very large, usually containing 4 to 6 beans. Vines vigorous, setting the beans early and very productive. Beans medium size, excellent quality.

42 King of the Garden—A favorite sort on account of its large size and abundant yield. The beans are of greenish color, very tender and delicious.

43 Extra Large White Pole Lima—A choice variety of the Large Lima. Pods and beans of large size and a good cropper. Quality unsurpassed.

44 Small Lima or Sieva—Also called Butter or Carolina. Not as large as the other varieties but a good bearer and about 10 days earlier.

Ford's Mammoth Podded

Fordhook Bush Lima

Any crop that grows its seeds in pods will give two to five times the yield if inoculated with Acme Inoculation.
See page 64.

BEET

TABLE VARIETIES

(See Page 4 for Prices)

These are popular in all gardens and as a rule a very profitable crop for market gardeners. Beets fresh from the garden are always more tender and delicious than those that are shipped. They can be sown in succession for different seasons and if too many are produced for table use, make excellent food for poultry and stock.

Culture—A deep loamy or sandy soil is best suited to beets. If wanted very early they can be sown in hot beds and transplanted in the open ground when the weather has moderated, but the outer leaves should be trimmed off when transplanting is done. The earliest outdoor sowing is done in March or April, in rows 15 to 18 inches apart, thinning or transplanting the plants to 3 or 4 inches apart in the rows. For winter use, sow in June or July. Roots can be stored in pits or cellars covering with sand to keep from wilting.

One ounce sows 100 feet of drill. 7 lbs. one acre. Ready for use 60 to 75 days after sowing.

45 Crosby's Improved Egyptian—An improved sort which is very popular with market gardeners on account of its quick growth, extreme earliness and general good qualities. The tops are small, roots flattened but slightly globe shaped and very smooth. Exterior bright red and inside deep vermilion red zoned with a lighter shade. It is one of the very best, sweet and tender varieties, of excellent quality and popular both with the market gardener and for home use. It becomes fit to use earlier than any other variety and is much superior to some of the older sorts.

46 Detroit Dark Red—Very early and becomingly popular. Produces medium size globe-shaped roots which are very smooth and of dark blood red color. Very desirable for bunching. Comparison of this with other varieties proves that **Detroit Dark Red** is the most uniform beet in size and most attractive in color. It is splendid for market or home gardens on account of its uniform deep red color and most desirable for canning.

47 Early Eclipse—This has long been a popular variety for home gardens and market growing. The tops are small, roots bright deep red, smooth, round or slightly top-shaped with a very small tap root. It is splendid for bunching; is very sweet, crisp and tender, especially when young.

48 Norwood Blood Turnip—A superb early main-crop Beet. Both for market and the home garden. The roots are of neat turnip shape, growing three or four inches in diameter, smooth, and entirely free from small rootlets. Flesh deep blood-red, tender, and of rich flavor. Foliage is small, of a rich bronze color.

49 Extra Early Egyptian—An old well-known popular variety which has long been a favorite with market gardeners. It is the earliest sort and largely used for forcing. Has very small tops and produces flat, medium size roots which are very dark red, moderately thick and distinctly flat on the bottom. Flesh is dark, purplish red, firm, crisp and tender.

50 Extra Early Bassano—An early quick growing variety which is excellent for table; the leaves are especially adapted for use as greens. Roots are large,

Crosby's Improved Egyptian

very light red and flattened; turnip shaped. Flesh pink, very sweet and tender when young. Called in some localities **Sugar Beet** on account of its sweet taste.

51 Edmand's Early Blood Turnip—A dark red, nearly round variety which is slightly flattened. Exterior, dark red; interior, purplish red with a little zoning. Crisp, tender, sweet and one of the best for main crop, being an excellent keeper.

52 Improved Early Blood Turnip—A selected stock of this old and very popular variety. It is deep red color, zoned with lighter shade; roots round, slightly flattened and excellent for summer and autumn use.

54 Dewing's Blood Turnip—A medium early sort which is very tender and sweet and a good keeper. Roots are dark purplish red, turnip shape with a medium size tap.

55 Long Smooth Blood—A splendid late variety producing large, smooth, rather slender roots which grow largely under ground. It has few side roots and is good shape and color, exterior being dark purple, almost black, with delicate red flesh which is tender and sweet. It is an excellent sort for main crop or pickles. Produces very good crops so that it is a profitable grower for stock feeding.

56 SWISS CHARD—This variety is grown for its tops only which are boiled like spinach. It does not make edible roots but produces white leaves; the stalks should be cooked and served like asparagus. Makes a splendid summer vegetable and is becoming popular. Known also as the Silver or Spinach Beet.

BEETS

FOR STOCK FEEDING

(See Page 4 for Prices)

Too little attention is paid to this important crop for winter feed for stock. They yield enormously, sometimes making fifteen tons to the acre; are very nutritious, not only improving the general condition of stock but greatly increase both the quantity and quality of milk in cows. A variety of feed is always beneficial to all animals and Mangel Wurzel and Sugar Beets afford one of the best crops for this purpose as they are superior in feeding qualities to turnips and are a much larger yielding crop. All farmers and especially stock raisers should grow them extensively.

Culture—Sow in the latter part of April, May or June at the rate of 6 lbs. to the acre, in rows 2½ to 3 ft. apart and thin to 8 inches apart. If the seed is soaked 24 hours before sowing, it germinates more quickly but it should be put in when the ground is moist. The crop is harvested before frost and packed away in barns or cellars. They can also be put into piles or ridges five or six feet high and covered with straw or litter to keep from freezing too much. When the winter weather comes, throw on a layer of four to six inches of earth. A protection of boards to shed heavy rains is also desirable.

57 Mammoth Prize Red Mangel—Particularly suited to deep soils but succeeds on any medium or heavy soil. The roots are very large, uniform, and are enormously productive. Flesh is white, tinged with red. One of the best for general purposes.

58 Golden Tankard Mangel—A variety which produces very large roots, oval shaped, the bottom being larger than the top. It is light grey above ground; deep orange yellow below, flesh yellow zoned with white. A splendid sort for shallow soil and produces enormously on rich ground.

59 Yellow Globe Mangel—Grows almost entirely above ground and especially desirable for shallow soils. Roots are globe shape, tapering to a tap root and of large size. It is easily pulled and a good variety for general purposes.

60 Lane's Imperial Sugar—A very popular variety for stock and one which will succeed well in this latitude. The roots grow to a large size and it is more like a Mangel Wurzel in character but the flesh is sweeter and more tender, being finer grained. Especially valuable for poultry.

Yellow Globe Mangel

BRUSSELS SPROUTS

(See Page 4 for Prices)

A vegetable of the Cabbage family, which is largely used in the fall. It produces stalks about 2 feet high, which are covered with small, miniature heads, resembling small Cabbage. These are cooked and served like Cabbage and are very tender and delicious.

Culture—Same as for late Cabbage, but plants are set closer together.

63 Perfection—A semi-dwarf variety and one of the best.

STIMUPLANT
Makes a
WONDER GARDEN

CABBAGE

FINEST AMERICAN STOCKS

(See Page 4 for Prices)

To raise the best crops of Cabbage, it is of the utmost importance that select seed stock be used. The varieties we list below are saved from the very best stocks and will give excellent satisfaction. We particularly call attention to Copenhagen Market and ~~MC~~ Late Flat Dutch, as being the leading sorts of the types. All home gardens should plant some Savoy Cabbage, as it is so much more delicious in flavor than the ordinary sorts. 1 oz. for 2,500 plants.

Culture—For earliest plants the seed is sown in hot beds from January to March. To make the best plants, sow early and transplant to cold frames. Then at the end of March or first of April, transplant to the garden. One ounce makes about fifteen hundred good plants. Six ounces makes plants enough for one acre. For summer use, sow in the open ground in April and for late use, sow in May or June. There is no crop that repays so

well, heavy fertilization and constant cultivation. When plants are planted in the field, apply sheep manure either in the drills or around the plant, mixing with the soil.

Insect Remedies—For Flea Beetle, dust with Tobacco Dust, Slug Shot or spray with Tobacco Extract. The principal enemy of Cabbage is the cabbage worm for which dust with Slug Shot or Paris Green. For cabbage lice, spray with Tobacco Extract.

STIMUPLANT
Makes a
WONDER GARDEN

CABBAGE

(See Page 4 for Prices)

FIRST EARLY SORTS

64 Golden Acre—This is a new, early, round-headed Cabbage which closely resembles Copenhagen Market in type. As its name implies, it is a money-maker. It is 8 to 10 days earlier than Copenhagen Market but is smaller and can be planted closer. Because of its earliness and fine quality it commands a higher price than any round-headed Cabbage.

65 Early Jersey Wakefield—One of the earliest and by far the surest heading of first early Cabbages. Most gardeners depend upon it entirely for their extra early crop. It is exceedingly hardy, resists cold and unfavorable conditions and is the most likely to yield satisfactory results. Plants are compact, with erect conical shaped heads and few outer leaves. Stems short; heads of medium size, very solid and of excellent quality.

66 Early Winningstadt—One of the best conical or sharp heading sorts which is compact and of excellent quality. Quick maturing. It is the hardiest, not only as regards frost but will suffer less from excessive wet, drought, insects or disease than any other sort of its class.

68 Copenhagen Market—The earliest round-head or flat Cabbage yet introduced. The heads are exceptionally large and it has a very short stem and few outer leaves—a most excellent sort for home gardens and market gardeners. On account of extreme earliness, it is destined to become one of the leading sorts grown, as a flat cabbage fills barrels or crates faster

Early Jersey Wakefield Cabbage

than sharp head cabbage and will yield the grower more returns. We predict for Copenhagen Market an extensive cultivation. Our stock of this is from one of the best Denmark growers.

SECOND EARLY SORTS

Pkts., ounces and $\frac{1}{4}$ lbs. mailed free at prices. Add 7c per lb. if to be sent by mail.

70 Louisville Drumhead—One of the most popular of the summer varieties, producing large, round heads which are very solid. It has been largely grown throughout the Central sections, and is much esteemed by market gardeners on account of its general reliable qualities. Our stock of this is extra choice and will give the best satisfaction.

72 All Seasons—One of the largest and a thoroughly satisfactory second early sort. Plants are vigorous, sure heading; leaves large and smooth. This is a first

class sort both for early and late planting and is especially adapted for kraut. It is well adapted to stand the hot sun and adverse conditions.

73 Early Dwarf Flat Dutch—A variety which has long been popular among growers, both for home use and market. The heads are borne on short stems and are very large, solid and nearly flat on the top. Practically nearly every plant will form a good, solid head, which will mature earlier than Late Flat Dutch.

74 Henderson's Early Summer—An excellent second early Cabbage, which is a vigorous, strong grower, producing moderately large heads. It has rather spreading outer leaves, which are somewhat frilled and the stem rather short. The heads are round, solid and a trifle earlier than other summer sorts, and in addition will stand longer without bursting than most others.

75 Allhead Early—A popular sort which has been much planted in the East and produces good, round heads, similar to Early Summer. Its growth and characteristics are also about the same.

JMC Late Flat Dutch Cabbage

CABBAGE—LATE SORTS

(See Page 4 for Prices)

77 JMC Late Flat Dutch—A very superior strain of this well-known popular Cabbage which is exceptionally reliable for main crop planting. It is short stemmed; has rather large early leaves, very showy heads and produces uniformly large, flat, deep solid heads of splendid quality. It is an excellent keeper and can be relied upon as thoroughly satisfactory.

CABBAGE

(See Page 4 for Prices)

CABBAGE—LATE SORTS—Cont'd

78 Large Late Drumhead—One of the oldest and most popular of late sorts, producing large rounded heads. It has been grown for many years and our stock is an improved stock. The heads are somewhat more globe shaped than the Late Flat Dutch. Leaves large, loose, spreading. An excellent keeper.

79 Danish Ballhead or Hollander—A variety though introduced but a comparatively short time has become one of the standard sorts in the Cabbage growing districts in the north. It produces very large, solid heads, which are globular in shape, has few but rather large, thick, bluish green leaves. Heads are borne on short stems, medium size, round, very solid and stands shipment better than any other late sorts. It is one of the very best keepers and is much desired for kraut. Our stock is Denmark grown and very select.

81 American Perfection Drumhead Savoy—Too little attention is paid to the Savoy Cabbage in this locality, as for home gardens it is unquestionably the most desirable of all Cabbages. It is used almost entirely for late planting and attains its greatest perfection in flavor after frost, when it becomes as tender

and even more delicious than Cauliflower. The heads are of medium size, borne on short stems and not as large as the ordinary late Cabbage, hence will stand closer planting. Our stock of this is American grown and will produce uniformly large heads for this variety. We strongly recommend it to be more extensively grown both for home use and market.

82 Red—A variety used mainly for pickles and sauerkraut. It is highly esteemed.

83 Pe-Tsai—This delicious Chinese vegetable belongs to the Cabbage family and closely resembles a well grown Cos lettuce, but is heavier. We advise that the seed be sown about August 1 (not earlier). Either start in frames and transplant, or simply sow where the plants are to remain in rows, 2½ feet apart, thinning to 12 inches apart in the row. The light green, crumpled-leaved heads are very tender and of a delicious flavor.

CABBAGE PLANTS

We can supply nearby customers with Early and Late Cabbage Plants which we grow on our farms. We do not send these plants by mail.

CARROT

FINEST FRENCH STOCKS

(See Page 4 for Prices)

An easily grown, useful and most healthful vegetable which should come into more extensive use. In Europe they are extremely popular, and as they add flavor to soups and meats, besides being healthful, delicious and to an extent ornamental, should be more largely used. In addition to their table uses, they make excellent pickles, and any that are left over are nutritious food for all kinds of stock and poultry.

Culture—Carrots do best in rich, light loamy soil, and where the soil is shallow or stiff, select the short growing varieties, rather than the longest rooted sorts. For early crop sow in March; for main crop in April or May, in rows 18 inches apart, cultivating and weeding as soon as the plants are up. Continue in cultivation until maturity. Cover the seed half an inch deep and see that the soil is pressed firmly, thin 4 to 6 inches apart.

One ounce sows 200 feet of row. 3 or 4 lbs. per acre.

87 French Forcing—A short rooted sort which is the earliest variety in cultivation and desirable for forcing or earliest crop. Tops small, roots reddish orange, nearly round when forced and somewhat longer in shape when grown outdoors. When fully matured, from two to two and a half inches long.

88 Early Scarlet Horn—One of the best for early planting out of doors. Roots orange red, about 3 inches long, top shaped tapering abruptly, matures in about 45 days.

89 Oxheart (or Guerande)—A short, thick growing variety, especially adapted to stiff or hard soils. Roots four and a half to five inches long, very thick, ending abruptly in a small, tapering root. Flesh bright orange, finest quality, an excellent sort for market, home use and fine for stock feeding and poultry.

90 Chantenay—A medium early variety, orange red color, crisp and tender. Roots smooth, thick, five and a half to six inches long, uniformly stump rooted but tapering slightly. One of the best in quality and productiveness for either home garden or market and especially desirable for heavy soils, because it can be harvested easily.

91 Half Long Danvers—A deep orange, tender variety, producing roots of medium length, six to eight inches long, tapering uniformly to a blunt point. They are very productive and well adapted to nearly all classes of soil for main crop planting.

Carrot Chantenay

92 Nantes or Half Long Scarlet—A handsome variety, producing roots of medium size, slender with small necks. Roots usually five to six inches in length, sometimes longer. A good sort for moderately early planting.

93 Improved Long Orange—A well-known popular sort, well adapted for loamy or deep soil, on which are produced very large crops. Roots deep orange color, usually about twelve inches long, three inches in diameter at the crown, tapering to a point. An excellent sort for table use, markets and particularly adapted for stock feeding. Roots tender and of good quality.

94 Large White Belgian—Used entirely as a field crop for stock or poultry. Produces enormous creamy white roots three and a half to four inches at the top, tapering to a point. The carrots are among the best of root crops; and we strongly advise more extensive planting of White Belgian.

CAULIFLOWER

(See Page 4 for Prices)

One of the most delicious vegetables in cultivation but on account of its difficulty in growing, not so general in the average garden as it should be. Any one, however, can be reasonably sure of success if good seed is obtained and cultural instructions given below followed.

Culture—For early spring or summer crop sow the seed in January or February in hot beds. When the plants have four leaves, transplant to cold frames for development. Toward the end of March or early part of April, set in open field and cultivate the same as cabbage. If the soil gets very dry, water well when possible. When the plants are set in the garden, the ground should be rich; if not so, a little sheep manure or well rotted manure should be worked into the soil before the plants are set out. The plants should be thoroughly worked during the growing season and when the heads commence to form, the leaves should be tied over the flowers to protect from the sun and make them white. For fall use, sow at the same time as for late cabbage and treat in the same manner. Cauliflower will not head in very hot weather—hence, for fall use, too early sowing is not desirable.

Insect Remedies—For the cabbage worm, dust with Tobacco Dust. For lice, spray with Black Leaf 40.

$\frac{1}{4}$ ounce produces about 500 plants. Three ounces will make enough plants to set one acre.

Cauliflower Plants Supplied in Season. Early Snowball and Early Dwarf Erfurt. We do not send these plants by mail.

96 Early Snowball—Unquestionably the earliest maturing strain of short leaf type of Cauliflower. It is well adapted for forcing or winter use for early crop and is one of the most popular of all sorts both for the market gardener and home use. The plants are compact, leaves small, and can be adapted for close planting. Produces large size flowers pure white, of most excellent quality. Our strain of this is selected Denmark grown and can be relied on as one of the most satisfactory of all.

97 Early Dwarf Erfurt—Similar in general characteristics to Early Snowball but not quite so early and somewhat larger in growth.

CELERY

(See Page 4 for Prices)

This is one of the most profitable crops for market gardeners where the acreage is small. It is popularly supposed to be a difficult crop to grow but this is not

true if ordinary preparation and care are taken. It requires rich soil, heavy manuring, plenty of water and careful attention.

Culture—For earliest crop the seed should be sown in hot beds from the middle of February to the end of March. For main crop sow in open ground March or April, according to the weather, in rows 15 inches apart. The seed is sometimes slow to germinate, and in dry and hot weather water well. Careful weeding by hand will have to be done until the young plants get started. Seed sown in beds should be transplanted. When the plants are set in the open field, trim the tops off and put in rows about 5 feet apart, setting plants 6 to 8 inches apart. Cultivate constantly during the growing season, and as the crop matures it must be earthed up or blanched. Sometimes this is done by placing two boards upright, close to the plants and filling in dirt both on the sides and in between the plants. The stalks are handled by hand but the soil must not be allowed to get in the center. Sometimes, Celery is set in beds about 4 feet wide, 6 inches between plants and 12 inches between rows, the earth being thrown out on each side of the bed. Then as it grows it is earthed in for blanching. A new method of growing Celery, which is sometimes used, is to plant a plot completely over, setting plants about 6 inches apart. This enormous growth shades the young stalks so that they turn white but it requires exceedingly rich, heavily manured soil, deep and well drained and plenty of water for irrigation. An ounce sown in about 100 feet produces 5 to 8,000 plants. 4 to 6 ounces produce plants enough to set one acre, which matures in 120 to 150 days according to the kind and location.

100 Improved White Plume—An extra early and very handsome sort which is very popular with market gardeners, especially for very early crop. Leaves are light, bright green at the base, shading nearly white at the tip. As plants mature the inner stem and leaves turn white and consequently require less earthing and blanching before they are in condition to use or market. While it is very attractive and the earliest sort, its quality is not nearly so good as that of most other varieties, being somewhat stringy and not so tender.

101 Golden Self Blanching—This is not only a very early variety but one of the best for home use or market. It is not quite so early as White Plume but so much finer quality that it is generally preferred as a main crop sort. Plants are medium size, compact and stocky with yellowish green foliage. As they mature, the inner stem turns a beautiful yellow golden color and blanching is easily accomplished. Being of handsome color, very crisp, tender, free from stringiness and of fine flavor, it is the leading sort grown.

102 Giant Pascal—A green leafed variety of the Golden Self Blanching type, from which it was developed, and one of the best for fall and early winter use. It blanches a beautiful yellowish white, is very solid and crisp and has a fine nutty flavor. Stalks of medium height, thick, solid, flattening towards the base and one of the best for main or late planting.

Golden Self-Blanching Celery

CELERY—Cont'd

(See Page 4 for Prices)

105 Celeriac or Turnip Rooted Celery—Very popular with the French and Germans and is used for its roots only, which have a fine sweet, nutty celery taste. It is used either boiled or raw, has a delightful flavor and can be used in soups, salads or as a table vegetable. Culture about the same as for Celery.

Celery Plants supplied in season. (June, July, August.) **Varieties**, White Plume, Golden Heart and Golden Self Blanching. We do not send these plants by mail.

COLLARDS

(See Page 4 for Prices)

One of the most popular Southern vegetables; largely used in place of cabbage. It is hardier and easier to grow than cabbage, can be grown on poorer soil and withstands insect attacks better. Although often sown during the spring and summer, the principal sowings are made in June, July and August, transplanted 2 feet apart in the row and given frequent cultivation. A

most excellent vegetable for the late fall, winter and early spring. The flavor is improved by frost. Cultivate like late cabbage.

109 True Georgia or Southern—Stands cold weather and adverse conditions splendidly and grows on land too poor to make a crop of cabbage.

CORN**GARDEN SORTS**

(See Page 5 for Prices)

Adams Extra Early Corn

Packets and half pints postage paid.

For pints remit 7c, for quarts 10c, if to be sent by mail.

One pint plants about 200 hills, six to eight quarts to an acre. For succession planting about every two weeks from April to end of July; ready for the table 60 to 90 days from planting.

Culture—Extra Early dent corn can be planted at the end of March or early in April. Sugar corns are more tender and should not be planted until warm weather is settled and ground becomes warm. Cultivate frequently and keep the ground free of weeds.

SEED CORN TREATMENT REDUCES DISEASE DAMAGE

Seed disinfection with **Improved Semesan, Jr.**, will help greatly to prevent damage by diseases to the roots, stalks and ears of Field and Sweet Corn. It protects seed against rotting, permits earlier planting, increases germination, controls blight and increases crop yields. See page 82.

EARLY DENT GARDEN CORNS

These are not Sugar Corns but valuable for their hardiness as they can be planted earlier and will mature quicker than Sugar Corns—hence, usually very profitable for market gardeners.

110 Extra Early Adams—The earliest variety and extensively used for first early table Corn in the South. Stalks about 4 ft. high with few leaves and without suckers. Ears short, very full, 12 to 14 rows, kernels white and smooth; an extremely hardy sort; can be planted close together and usually popular.

111 Early Adams—A little larger and later sort of about the same characteristics as Extra Early Adams. Stalks about 6 ft. high, ears 12 to 14 rows and a good variety for second early or very late planting.

YELLOW SWEET CORN

112 JMC Selected Northern Grown Golden Bantam—The most popular variety of yellow Sweet Corn ever offered; also one of the earliest and hardiest. It can be planted safely earlier than other varieties. The plants rarely grow over 3½ feet in height, and usually bear at least two ears, 5 or 6 inches long, on

each stalk. Many people assert that Golden Bantam is the sweetest of all Corns; its plump, rich, cream-yellow kernels are tender, milky and delicious. All our Golden Bantam seed is Northern grown, making it especially valuable for early planting.

CORN—GARDEN SORTS—Cont'd

(See Page 5 for Prices)

Golden Bantam

113 Wonder Bantam—There has been an ever increasing demand for an early Sweet Corn having all of the good qualities of Golden Bantam Sweet Corn, together with a larger ear and having about the same maturing season. To accomplish this, Wonder Bantam has been introduced by the crossing of Early Wonder and Golden Bantam Sweet Corn. The stalks grow from 5 to 6 feet in height and have ears 8 to 10 inches

in length filled with 8 rows of rich golden colored kernels. It is a variety that will appeal to the critical market and home gardener.

114 Bantam Evergreen—A cross between Golden Bantam and Stowell's Evergreen and is a most excellent sort of fine quality. The ears average 8 inches long and are 12-rowed, the grain is rather broad and deep and of a rich golden-yellow color.

EARLY SWEET CORN

Sweet or Sugar Corns are so much superior for table use to the ordinary dent or field varieties, that they should be planted exclusively for this purpose except for very earliest crops. They are very prolific, producing in many cases 3 to 4 good ears to the stalk. As a market crop, corn is very profitable, as an acre produces from 800 to a 1000 dozen ears which sell readily at good prices.

115 Whipple's Early—Of the narrow-grained Evergreen type, but ready for use much earlier. Ears 8 to 9

inches long, 16 to 18 rows of pearly white grains. The chief distinction of this variety is that it is by far the earliest of the narrow-grained Evergreen types and has a larger sugar content.

116 Early Evergreen—An early strain of Evergreen of great value. This variety resembles the Stowell's Evergreen, but is ready for use much earlier, and remains in good condition equally as long. The ears grow to a good size, usually about 7 inches long, and contain from 16 to 18 rows of deep, sweet grains.

CORN—SWEET OR SUGAR

(See Page 5 for Prices)

117 Black Mexican—For home use we consider this one of the best second-early sorts where tenderness and sweetness are the qualities most desired. The stalks grow about 6½ feet high, producing ears usually 8 inches long and 8-rowed. The dry grain is dark bluish black. The ripe Corn on the cob is also bluish black but, if used young, this Corn cooks remarkably white. This is an interesting variety.

118 Mammoth White Cory—One of the best, extra early Corns producing very large ears for so early a variety. Stalks about 4 ft. high, generally bearing 2 large finely shaped ears which become fit for use very early. Grains large, broad, very white, of fine quality and usually 12 rows to the cob. A splendid sort for private gardens and probably the most profitable for early market gardens.

119 Early Mammoth—Resembling the well-known Late Mammoth in general characteristics but 10 days to two weeks earlier and slightly smaller in size.

120 Howling Mob—A variety a little later than Mammoth White Cory. Ears measure seven to nine inches in length, twelve to fourteen rows; white grains. Stalks strong, of vigorous growth, four and a half to five feet in height, have abundant foliage and usually produces two good ears to the stalk.

122 Kendel's Early Giant—A remarkably large eared second-early sort which is very popular in some sections. Ears are 8 to 9 inches long, 12-row; grains broad, rather shallow but the quality is good.

SWEET CORN—MAIN CROP

Country Gentleman Corn

124 Country Gentleman—Probably the most popular of all sorts for home gardens on account of its sweetness, tenderness and delicious flavor. Ears 7 to 8 inches long, round, medium size. Grains zigzag or staggered, small in size but set close on the cob and very deep.

125 Stowell's Evergreen—One of the standard main crop sorts which has long been popular with commercial growers, canners and one of the best for home gardens. It is hardy, thrifty, productive, very tender and sugary and remains in edible state longer than most other sorts. Ears 7 to 8 inches long, having 14 to 20 rows of very deep grain. Stalks 8 to 9 ft. high, bearing 2 or 3 large ears.

126 Zig-Zag Evergreen—A development of the Stowell's Evergreen which has become very popular.

The rows instead of being straight are irregular; the grains set very close on the cob. Ears are 8 inches long, large grains, very deep, sugary, tender and of fine flavor. This is becoming a very popular sort and in many sections is superseding the well-known Stowell's Evergreen.

127 Late Mammoth—The largest and latest of all Sugar Corns, producing ears which are about 11 inches long, 16 to 18-rowed. Grains are broad, somewhat short, but of good flavor, sweet, tender and delicious. One of the best sorts for late crop, especially for market.

128 Club Zig-Zag Evergreen—A late variety of Zig-Zag Evergreen Corn, the ear generally being twice the size in diameter of any other sort and of a fine, sweet flavor.

Stowell's Evergreen Corn

POP CORN

(See Page 5 for Prices)

A very profitable crop in many sections and grown in enormous quantities. It is popularly "the boys' crop" and all gardens should have a small quantity.

129 Rice—A well-known white sort with pointed grains; very highly prized for popping and most satisfactory.

130 White Pearl—A smooth grained sort making fair sized ears; grains pearly white reliable for popping.

CORN SALAD

(See Page 5 for Prices)

An excellent salad for winter and spring. The seed is sown in August or September, in drills one foot apart. Press on the soil to make it firm and it will germinate better. As freezing weather approaches cover with straw or coarse litter. Seed can also be sown very early in the spring if on rich soil.

132 Large Seeded—Round leaved, the best variety.

Corn Salad

CUCUMBER

(See Page 5 for Prices)

Usually a profitable crop for market, as if not salable for table uses, finds a fair market with pickle factories. All home gardens should grow Cucumbers, as they are useful as a salad or for pickling. Cucumbers fresh from the garden are much superior to those purchased, which are often wilted.

One ounce plants 50 hills; two pounds to one acre. Plant in April or May for early crop; ready for the table 50 to 75 days from planting.

Culture—Rich soil or one containing plenty of well rotted manure is best; hence, hills are usually made about 4 feet apart using manure or sheep manure well mixed with the soil. For very earliest crop the seed may be started in hot beds, in pots, small paper boxes, or pieces of sod, grass side down, so that they can be readily transplanted to open ground without disturbing the roots. For earliest crop outdoors plant 8 to 10 seeds in hills or drills 4 feet apart. On cold nights or threatened frost they can be protected by pieces of paper weighted with earth; after danger of frost and destruction by insects, thin the plants to about 4 to the hill. For late crop plant from the end of May until July. Cultivate occasionally keeping the grass and weeds out, and when the fruit is ready for use, pick whether wanted or not, as it will extend the life and productiveness of the vines.

Insect Remedies—For the Yellow Striped Beetle, dust with Tobacco Dust or Slug Shot. Sometimes covering with dry earth will be beneficial. For the Cucumber Borer which bores into the cucumber, hand-picking and destroying the infested cucumber is the only remedy.

134 Longfellow—The Longfellow is a White Spine type, developed so that it would have the slender, dark-green appearance of a hothouse Cucumber but which could still be grown outdoors. Vines are vigorous and productive. Fruits 12 to 14 inches long and 2½ inches in diameter. Can be grown in the garden or greenhouse and stands shipping well.

135 Improved Early White Spine—One of the best sorts for table use and probably the most popular sort grown by market gardeners and truckers. The vines are vigorous, producing fruit early and abundantly. Fruits are uniformly straight, about 8 inches long, vivid green color changing to and streaked a whitish green at the tip.

136 Improved Long Green—One of the most popular sorts for home gardens and in country districts for home markets. Fruits are very long, often 12 inches, slender and uniformly dark green color. It is rather late maturing. The vines are very vigorous and fairly productive. The matured fruits are excellent and tender for table use and both large and small can be used for pickling.

137 Davis Perfect—A development by crossing the Improved Long Green with an English Frame Variety. It is dark, rich green color, slightly tipped with white at the end; has very few seeds and excellent for slicing. Fruits are often 12 inches long, very slim and showy. Particularly fine for home gardens.

138 Early Frame—A well-known short, green variety, producing quite abundantly, uniformly straight, moderate sized fruit. Valuable for very early planting or for late use for pickling as it is more prolific than the large fruited sorts.

140 Early Fortune—The finest type of White Spine yet produced. Early and very productive; fruits grow 9 inches long, slightly tapering, flesh white, firm and crisp with very few seeds; color dark green. Quality is excellent, either when sliced for use at the table, or for making pickles.

141 Jersey Pickling—A variety shorter than Long Green, slender and produces very abundantly. Vines are vigorous and productive. A very popular main crop sort for market and commercial uses.

143 Nichol's Medium Green—A variety intermediate in length between the White Spine and Long Green, producing straight, medium sized cylindrical fruits of dark green color, which are most excellent for slicing and extremely popular for pickling. Vines, vigorous, productive. A very profitable variety for canners and commercial growers for late crop.

144 Early Green Cluster—Short and prickly; bearing in clusters; prolific; fine for bottling.

145 Cool and Crisp—The beautiful green color is all that can be desired. Excellent for pickling or slicing.

146 Japanese Climbing—A variety having very strong vines which throw out numerous tendrils and can be trained upon trellises or poles. The skin is smooth, dark green, turning to brown and netted when ripe. The flesh is pure white, crisp, and of mild flavor. Fruits 12 to 16 inches long. It is an abundant producer of long, straight handsome large fruits.

147 Gherkin or Burr Cucumber—Grown exclusively for pickles and especially for mangoes and sweet pickles. The fruits are small, oval, prickly and produced abundantly. Vines are longer and more vigorous than cucumber vines—hence, requires a little more space. The seed is distinctly smaller than other Cucumbers.

Improved White Spine Cucumber

EGG PLANT

(See Page 5 for Prices)

A well-known popular vegetable which produces large purple fruits. It is served mostly fried. Seed germinates slowly and should be started in hot bed.

One ounce produces 1500 plants. Four ounces will produce enough to set one acre. Ready for table in 120 days from sowing.

Culture—Sow in February or March in warm hot beds. When the plants have two rough leaves, transplant to 3 or 4 inches apart or into small pots; after all danger of frost is past, say about the middle or end of May, transplant to the garden, setting plants about three feet apart each way. It is desirable to protect the young plants from very hot sun at first.

148 Black Beauty—Ten days to two weeks earlier than New York Improved Purple. Fruits slightly longer and darker than this variety, being rich dark purple, large and symmetrical. It is very desirable for market as it holds its color a long time. It is entirely free from spines; splendid for early crop or very late planting.

149 New York Improved Purple (Spineless)—This has long been a general favorite both for market gardeners and home use. It is the largest variety in cultivation and one of the best. The plant is robust, usually producing 4 to 6 large, oval fruits of splendid, dark purple color.

Plants—Ready in May. We do not send these plants by mail.

Black Beauty Egg Plant

ENDIVE

(See Page 5 for Prices)

One of the best salads for fall and winter use and sometimes used for greens, flavoring soups and stews. It may be grown at any season but is more generally planted for fall.

Culture—For early use, sow about April 15th; for late use, sow in August, in drills 18 inches apart, and when large enough thin out to about one foot apart. When nearly grown tie the outer leaves together over the center in order to blanch up the heart. By covering fresh plants every few days a succession may be kept up. $\frac{1}{2}$ -oz. to 100 ft. row.

Green Curled Endive

150 Green Curled—One of the hardiest and best varieties for general use. It has deep green leaves, beautifully cut and curled and is early blanching; is very crisp, tender and of fine flavor.

151 Broad Leaf Batavian (Escarolle)—A variety having broad, more or less twisted, waved, bright green leaves with thick white mid-ribs. It is much larger in growth than other sorts and has a flavor all its own.

The inner leaves form a very solid, clustering head; are blanched a beautiful deep, creamy white; crisp, tender and of fine flavor. Very highly esteemed by the French and popular wherever used.

152 Moss Curled—A compact growing variety forming large dense clusters, finely divided, medium green leaves. When properly blanched is rich creamy white and tender. An ornamental variety for salads.

GARLIC

(See Page 5 for Prices)

A bulbous rooted plant of the Onion family, with a strong penetrating odor; very desirable for flavoring both cooked vegetables, soups, etc., as well as salads. Garlic does not have seed and is planted from small bulbs only. Plant same as Onions in rows 8 to 12 inches apart; set bulbs 4 inches apart in the row, covering 2 inches deep. When the leaves turn yellow, take up the bulbs, dry in the shade and store in a dry loft as you would Onions.

HERBS

(See Page 5 for Prices)

Most of these should be sown in April and can be transplanted when large enough. The seed is small and should be sown in drills and firmed down. Keep clean of weeds. Most of them are to be cut when in bloom, wilted in the sun, and dried thoroughly in the shade.

Caraway Seed for Flavoring, 1 lb., 20c.

157 Dill—A popular aromatic Annual Herb which is largely used for seasoning pickles, sauces, soups, etc.

158 Fennel (Sweet)—A hardy perennial, the seeds of which are used for flavoring sauces, especially for fish; as well as confectionery and cakes. **Fennel (Sweet) for Flavoring, per lb., 30c.**

161 Sage—One of the most extensively used plants for seasoning. It is a hardy perennial growing about 15 to 18 inches high.

Blue Poppy for Flavoring, per lb., 25c.

Yellow Mustard for Flavoring, per lb., 25c.

KALE

(See Page 5 for Prices)

A popular crop for fall, winter and spring use as greens. In the South it is boiled with bacon. Excellent for garnishing. In addition to its table uses it is a splendid soil improver and very nutritious as a grazing crop for cattle, hogs or sheep.

Culture—In this section it is usually sown broadcast from the middle of August to the middle of October at the rate of 3 or 4 pounds to the acre. Scotch Kale is sown earlier and when very early is usually sown in drills. In the spring seed can be sown in February, March and April. Spring sown Kale requires 5 to 6 pounds to the acre and Smooth Kale should have 6 to 8 pounds to the acre. The ground should be prepared cleanly and harrowed as finely as possible. Seed can be covered with a smoothing harrow or roller but not covered too deep.

164 Dwarf Green Curled—An old standard winter variety in this section. Leaves are light green in color, tinged with purple, beautifully curled, and when properly cooked make a very palatable dish of greens. In this locality, will stand the winter.

165 Dwarf Curled Siberian—A vigorous growing sort of spreading habit, its green foliage having a distinctive bluish tinge or bloom. Very hardy and a favorite in many sections both for greens and extensively grown for forage.

Dwarf Green Curled Kale

166 Dwarf Green Curled Scotch—A finely curled, spreading, low growing variety, which is very popular around many trucking centers, especially in the East. The leaves are attractive, bright green color and beautifully curled which make it excellent for garnishing. It must be sown earlier than other sorts; usually from July until end of August or can be sown in March. Can be sown either in drills or broadcast.

167 Tall Curled Scotch—Leaves green, beautifully curled and wrinkled—grows about 2 feet in height; hardy, being improved by frost.

KOHL-RABI

(See Page 5 for Prices)

White Vienna Kohl-Rabi

A vegetable intermediate between a Cabbage and a Turnip which combines the flavor of both. It forms a turnip-shaped bulb above ground which is boiled and served like Turnips. If used when young is tender and a very desirable vegetable.

Culture—For early use sow in hot beds and transplant. Out of doors sow in open ground the first part of April in rows 18 inches apart; thin out or transplant to 6 inches apart in the row. Cultivate same as Cabbage. It can also be sown the latter part of June or in July for fall use. One ounce will sow 300 feet of drill.

168 Early Purple Vienna—Very early with small tops, bulbs good size. A variety of good quality.

169 Early White Vienna—An excellent sort for general use, has white tender flesh of pleasant flavor.

LEEK

(See Page 5 for Prices)

Generally considered superior to Onions for flavoring. Leaves flat, stems very large, cylindrical and bulbous.

Culture—Sow as early in the spring as the ground will permit, in rows 12 to 15 inches apart, covering about ½-inch deep. Thin out to 6 inches apart and draw earth to them in cultivating. Leek can be transplanted like onions if desired. For very white and tender Leek transplant when six inches high, setting 4 inches apart in trenches about 2 feet apart and earth like celery. One ounce will sow about 100 feet of drill.

170 Large American Flag—A hardy variety of good quality which is popular in all sections.

LETTUCE

(See Page 5 for Prices)

Black Seeded Simpson Lettuce

CURLED OR LOOSE-HEAD VARIETIES

172 Grand Rapids—The most popular variety for green house forcing, especially for shipping. It is of quick growth, hardy and not liable to rot; remains in good condition several days after being fit to cut. Plants are upright and uniform; leaves finely crimped at the edges. It is the heaviest loose-headed sort, will stand shipping better and is a very attractive variety.

173 Black Seeded Simpson—The best sort for nearby markets and for home gardens on account of its superior quality. It forms a large, loose head, very bright green, nearly white and is exceedingly tender. Is largely used for forcing under glass and a superior sort for earliest crop.

174 Early Curled Simpson (White Seeded)—Makes a large, loose curled head similar to Black Seeded Simpson. Particularly adapted for sowing thickly and cutting when the plants are young. Leaves light green, slightly frilled, much blistered, crisp, sweet and tender.

175 Early Curled Silesian—An old and very popular variety which is probably the earliest and quickest sort grown. Plants loose, not quite so large as Black Seeded Simpson. Popular for outside.

176 Early Prize Head—A large clustering, non-heading sort, most excellent for home gardens as it is very early. It is too tender for shipping. Leaves are finely curled and crumpled, bright green tinged with brownish red; very crisp and tender.

A popular crop in all small gardens and one of the most profitable for market gardeners, both for winter forcing and for summer growing providing the weather is seasonable or irrigation can be done.

Culture—For Winter Forcing—Sow from September to February, the curled varieties about every four weeks apart or the heading sorts about six weeks apart. As one crop is cut, another should be ready for planting.

Out of Doors—For early spring crop, plants can be started in hot beds and transplanted to rows one foot apart, setting the plants 6 to 8 inches apart in the row. Later sow seed in rows 12 to 15 inches apart and thin out or transplant if desired leaving the heads to stand 6 to 8 inches apart in the row. A succession of varieties should be kept up from early summer until late fall.

One ounce sows 300 feet of drill. Three pounds one acre. One ounce produces about 4000 plants; an acre requires about 50,000 plants set 8 x 15 inches.

Insect Remedies—For the green lettuce worm and green measuring worm, which eat the leaves, spray with a solution of Hellebore in water, at the rate of 1 lb. of Hellebore to 15 or 20 gallons of water. For green lice, spray with a solution of Tobacco Extract. In green houses fumigation with Nico-Fume Liquid or Tobacco stems, will be effective. In frames, fumigation with Nico-Fume Paper is best. Tobacco stems or Tobacco dust applied on the soil or around the beds, is an effectual preventative of green lice.

CABBAGE OR HEADING VARIETIES

177 May King—An early, fine variety for spring and fall use in the open garden, also for growing in cold frames during the winter months. The heads are 6 to 7 inches in diameter, with light green outer leaves. The inner leaves are blanched to a golden yellow.

178 Iceberg—A beautiful lettuce, with large curly leaves of a bright, light green, with a very slight reddish tint at the edges. Handsome heads, unusually solid because of the natural tendency of the large, strong leaves to turn in which also causes thorough blanching. Crisp, tender and fine flavor.

Top Notch Lettuce

LETTUCE

CABBAGE OR HEADING

SORTS—Cont'd

(See Page 5 for Prices)

179 Top Notch—A distinctly improved variety of Big Boston and one of the very best for forcing or out of door culture. Under favorable conditions the heads will measure 10 to 12 inches across; are bright, lively green color without the brownish marking of Big Boston. The heart and inner leaves are pure white. It is deliciously flavored, very tender, of splendid quality and highly recommended for extensive market growing or home use as it will be found thoroughly reliable in heading and the most profitable of this type.

180—Big Boston—This has long been a favorite sort with market gardeners and truck growers and in some sections is planted almost exclusively. It forms a large compact head, forces well in frames and thoroughly satisfactory for outdoor crops in the spring or very late head crop in the fall. Leaves are broad, comparatively smooth, color bright light green. The heads slightly tinged with reddish brown.

181 California Cream Butter—A splendid sort for second early crop which has glossy, deep green leaves, the outer ones slightly splashed with brown, it forms a large, very solid head, rich light yellow in color, very tender and buttery. A reliable sort for market or home gardens.

182 Improved Hanson—A splendid summer heading sort and probably the most popular of its class in this section. The plant is compact, forming a large cabbage like head which remains in good condition a long time. The outer leaves are yellowish-green, somewhat crumpled with a large distinctive mid-rib. The inner leaves white, sweet and tender. This variety is a little coarse in quality, but on account of its large size and general reliable summer heading qualities, is profitable and desirable for summer use.

Improved Hanson

California Cream Butter

183 New York Lettuce—Blanches beautifully. Crisp, tender and free from bitterness.

It produces immense heads, often 15 and 16 inches across, and weighing enormously. The interior is beautifully blanched, creamy-white, crisp, tender and delicious, being absolutely free from any trace of bitterness. It is a very large, robust growing variety, rooting deeply, resisting hot, dry weather, very slow to run to seed and a sure header under most trying conditions.

MUSK MELON OR CANTALOUPE

(See Page 5 for Prices)

These can be successfully grown in nearly all gardens. If the soil is very rich and heavy, Salmon-fleshed sorts will produce the best. If light or loamy, Green-fleshed sorts will succeed admirably. Among green-fleshed sorts the "Rocky Ford" is one of the best. In salmon flesh sorts, "Burrells' Gem", "Tip Top" are among the best.

One ounce plants 50 hills; two pounds to one acre. Plant in May for early crop; in June for late crop.

Culture—Seed is planted in hills 6 ft. apart, putting 10 to 12 seeds to the hill and covering one inch deep. If land is not rich, use well rotted manure or a little sheep manure mixed with the soil. When danger of insects is over, thin out to 4 plants to the hill.

Insect Remedies—For the striped beetle which is troublesome, dust plants lightly with Slug Shot, air-slacked lime, tobacco dust or even dry road dust. If the plants get too rank, pinch off the end of the vines after they have set fruits. Cultivate shallow and often. Green flesh melons will become more netted if about 200 lbs. of salt are broadcasted to the acre.

Packets, ounces and $\frac{1}{4}$ lb., mailed free; for pound, 7c extra if to be sent by mail.

MUSK MELON OR CANTALOUPE

GREEN FLESHED VARIETIES

(See Page 5 for Prices)

189 Honey Ball—This new melon is one of the most prolific and earliest grown, as it matures in approximately 105 days. It is round as a ball and the green meat is similar in texture to the Honey Dew, about 1½ inches thick and covered by a smooth, thin rind, fairly well netted. Its color is greenish white until it is fully ripe, when it turns a creamy white or bright yellow. It has a high sugar content and a delicious flavor. It is a favorite among melon growers.

190 Honey Dew—Its name has been well chosen, as it is about as sweet as Honey. The average size is about 6 inches in diameter, and they weigh five to six pounds. The skin is smooth with little netting and of creamy yellow when ripe. The flesh is a beautiful green next to the outside rind shading to light green at the center. It is very thick, fine grained and can be eaten almost to the rind and the seed cavity is quite small.

191 Rocky Ford—The flesh is green, thick, with small cavity, very sweet and has that spicy flavor that makes a cantaloupe so delicious. The melons are oval shaped, slightly ribbed, well covered with fine netting, and are uniform in size and shape.

192 Netted Gem—A variety which has been introduced nearly 30 years and still retains its great popularity. The fruits are medium size, oblong, ribbed, netted, very firm, solid, and stand shipping remarkably well. Vines vigorous and productive.

193 Green Nutmeg (or Jenny Lind)—Fruits small, somewhat flattened, deeply ribbed and netted. Flesh green, exceedingly sweet. An extra early variety and on account of its size, a desirable table melon. Vines vigorous and productive.

194 Acme or Baltimore Market—Similar in shape to Rocky Ford but larger. Flesh is thick, green, well flavored and sweet. Very productive and a sure cropper. One of the most desirable of the large or medium size melons.

195 Extra Early Hackensack—Two weeks earlier than the Large Hackensack and produces medium sized fruit, somewhat flattened, evenly deep ribs with coarse netting. The flesh is green, slightly tinged with yellow, juicy and sweet.

196 Large Hackensack (or Turk's Cap)—An old and well-known sort which produces very large green-fleshed fruits which are nearly round and flattened. Flesh green, thick, juicy and sweet.

Rocky Ford

198 Burrell's Gem—Similar in size and shape to the well-known Rocky Ford. Has thick, deep salmon flesh, tender, juicy and sweet. One of the most popular sorts for shipping and a favorite with large growers as it produces well, being exceedingly vigorous and productive.

199 Emerald Gem—An early yellow fleshed melon of small to medium size which is one of the very best for home gardens. Vines vigorous and productive. Fruits globe shaped, flattened, somewhat irregularly ribbed and very slightly netted. Outer skin dark green when young, becoming slightly tinged with yellow. Flesh, deep salmon yellow, thick, melting and very highly flavored.

SALMON FLESHED VARIETIES

197 Pollock's No. 10-25—Best described as a salmon tinted Rocky Ford, being identical in every way except color of flesh, which is a light salmon in color at the center, shading into a light green midway to the rind. It is rapidly superseding the green fleshed variety in the large melon growing districts of the South and West.

MUSK MELON OR CANTALOUPE—Cont'd

SALMON FLESHED VARIETIES—Cont'd

(See Page 5 for Prices)

200 Tip Top—A popular sort with market gardeners, producing very large sized melons, ribbed but almost smooth skin. Flesh salmon, very deep, a little coarse but exceedingly sweet and luscious. Especially desirable for very rich soil and one of the most profitable for market.

201 Paul Rose (Petoskey)—A yellow fleshy sort of excellent quality. Fruits are oval, slightly ribbed and densely netted, somewhat resembling Netted Gem but larger. Flesh is orange yellow, very thick, firm and sweet and highly flavored. Vines vigorous and productive.

202 Osage or Miller's Cream—A medium salmon fleshed melon of excellent quality. Fruits are oval, dark green, slightly ribbed, tinged with grey. Flesh salmon color, thick and highly flavored. A splendid sort for late or main crop, especially for market.

203 Banana—A long, smooth skinned variety, growing something in the shape of long squash. Fruit about 12 inches long, salmon flesh, which is very sweet, luscious and tender. Much esteemed in some localities.

Paul Rose Cantaloupe

WATERMELON

(See Page 5 for Prices)

Watermelons do best on old, rich soil, which is not too freshly manured, hence when making the hills, well rotted manure should be used, and it is better to prepare them some time ahead before planting the seed. If manure cannot be obtained, use good commercial fertilizer or sheep manure mixed with the soil. Some of the largest and best crops we have ever seen were produced on sod land, using 200 lbs. of fertilizer per acre in the hills.

One ounce plants 20 hills. 4 lbs. per acre. Plant early in May or for later use, in June.

Culture—Treat as for Musk Melon, but give more room, 10 or 12 feet apart each way.

Insect Remedies—Same as for Musk Melon.

204 Ribault—Long and thick in shape, measuring 24 to 30 inches long. The color is dark green, indistinctly striped, mingled with lighter green. The rind is medium

thick and stands shipping well. The meat is red and sweet, free from hard centers. Very prolific and of splendid quality.

205 Stone Mountain or Dixie Bell—A melon of finest quality and claimed to be the sweetest of all the large melons. It is almost round and has a dark green, medium thick rind. Flesh, rich scarlet. It is not unusual to grow Stone Mountains weighing 70 to 80 pounds. For home use and nearby markets it is unexcelled.

206 Excel—Will produce more large, marketable melons under the same conditions than any of the other sorts of the long variety and its carrying and keeping qualities are unsurpassed. Fruit oblong in shape, dark green color with tracings of light green. Flesh deep red, crisp and tender. Weight, 35 to 60 pounds.

Halbert's Honey

WATERMELON—Cont'd

(See Page 5 for Prices)

207 Tom Watson—A long, dark green melon, which has become exceedingly popular on account of its large size and general fine qualities. Vines are vigorous and productive. Flesh rich bright red, very juicy and sweet. Most suitable for nearby markets, family gardens, and a favorite with truckers, as it stands shipping well and retains its color and good quality a long time.

208 Kleckley's Sweet—One of the best flavored melons in cultivation and one of the best for home use or nearby markets. It is long, very dark green with thin rind. Flesh deep red, of fine delicious flavor.

209 Florida Favorite—A well-known popular sort which has long been a favorite for home use and market. Ripens early, has dark green rind, striped with light green. Flesh light crimson, exceedingly sugary, fine and tender. Very delicious and highly recommended either for home market or family use.

210 Kolb's Gem—One of the older sorts producing oval melons and all large size. The rind is exceedingly hard and firm, being irregularly marked with mottled stripes of dark and light green. Flesh is bright red, solid, a little coarse, but sweet. One of the best round sorts for shipping as it will handle better than almost any other sort.

211 Sweetheart—A very popular shipping sort particularly in the South. Fruits are very large, oval, very heavy with thin rind which is of light green color, slightly veined with darker shade. Flesh bright red, firm, very sweet and the fruits remain in condition a long time after ripening. A splendid sort for market or main crop being of fine appearance and sells readily.

212 Peerless or Ice Cream—A splendid early sort for home or market gardens. Vines moderately vigorous, hardy and very productive. Fruits are oblong, medium size, bright green finely veined with darker shade. Flesh bright scarlet, crisp and very sweet.

213 Gray Monarch or Long Light Icing—Fruits uniformly long and large, oblong in shape. Color light green slightly veined with darker shade; flesh deep rich red of splendid quality.

214 Gypsy (or Georgia Rattlesnake)—One of the most popular of the older sorts especially in the South. Fruits are large, very long, of light green color distinctly striped and blotched with darker shade. In the South it is very highly esteemed and especially desirable for growing and shipping. The rind is remarkably thin though very tough; hence, it stands shipping well. Flesh most tender, sweet and luscious. Fruits are uniformly good quality.

215 Halbert's Honey—A long dark green melon of moderate size but such splendid quality that it is especially desirable for market or home use. The rind is very thin. Flesh bright crimson and so crisp and tender that ripe melons will split ahead of the knife in cutting. We especially recommend this for general planting as it is very productive, of excellent quality and a splendid seller.

216 Dark Icing—A round or oval shape which has long been a favorite for home use and in nearby markets. Melons are medium sized, oval, dark green in color with bright red flesh which is extremely tender and sugary. A splendid early sort and highly desirable for home use or for early crop for market.

217 Irish Gray—The size is uniform and large. Color of rind yellowish-gray and almost as tough as that of the Citron. Ripens earlier than Watson and will keep in good condition for a long time after picking. Very prolific and a good shipper. A fine market sort.

218 Dixie—A variety similar in marking and general characteristics to Kolb's Gem but instead of being oval it is long—hence, more desirable on the general markets. It has all of the good characteristics as a shipper. Vines vigorous and productive.

MUSTARD

(See Page 5 for Prices)

Quite popular in the Southern States for boiling as greens. The Southern Giant Curled is becoming popular for shipping. White Seeded is used for pickles and medicinal purposes.

Culture—Sow broadcast or in drills 12 inches apart in March or April or in the fall in September or October. Cut when 3 inches high. One ounce sows about 80 feet of drill. An acre requires 4 to 6 lbs.

220 Southern Giant Curled, or Chinese—A large growing sort with succulent, pungent leaves of sweet flavor. The best variety for use as greens.

221 White—Used for greens and the seed largely used for pickles and flavoring.

MUSHROOM SPAWN

Mushrooms can be grown in cellars, sheds, under benches in green houses or hot beds. They are also planted outside in pastures or sod. It is a very profitable crop both for forcing or a field crop. Our cultural instructions are somewhat limited but we can furnish a booklet of more extended information on "How to Grow Mushrooms." Price, 10c.

Mushrooms in a Bed

One brick will spawn about ten feet square.

Culture—In preparing a mushroom bed, take three parts fresh stable manure, free from straw, and one part of good pasture soil. Mix thoroughly together and let it stand until the heat has sunk to about 90 degrees. Make the bed from this mixture about four feet wide, eight inches deep and any desired length. As soon as the temperature of the bed is about 70 or 80 degrees, the spawn may be inserted in pieces about the size of a walnut, and six inches apart each way. When the spawn is diffused through the whole bed, which will be in about ten days from planting, cover with two inches of fine loam and press down firmly. Over this place a layer of straw about four inches thick. Do not water unless the surface

gets extremely dry, and then only with water at a temperature of 80 degrees. When gathering the crop, twist them off at the roots and do not use a knife. Cover the hole with soil to keep insects away from the root. Mushrooms can be grown in a great variety of situations; under the benches in a green house, a dark room, cellar, stable or elsewhere.

English Mushroom Spawn—Well-known and popular. Put up in bricks weighing about 1¼ lbs. Per brick, 25c; 5 bricks, \$1.00.

OKRA OR GUMBO

(See Page 5 for Prices)

One of the most popular Southern vegetables and largely used for flavoring soups, stews, gravies and canned tomatoes.

Culture—Sow in drills 2½ feet apart after the weather has become settled and warm. Thin out to 18 inches apart in rows. To keep for winter, slice the pods when young in narrow rings and string or hang in the shade to dry.

One ounce sows about 100 feet. 10 lbs. per acre. Plant in April or May. Matures in 60 to 70 days from planting.

224 White Velvet—An early maturing and very productive variety growing about 3½ feet high. Pods white, long, smooth and very tender. This is not so deeply ribbed as the green sorts and is very popular in some sections.

225 Dwarf Prolific—One of the most popular sorts in the South, growing 3 feet high, producing large pods deeply ribbed, tender, fine flavor.

226 Perkins' Mammoth—Plant dwarf; are very attractive. Producing long, slender, deep green pods, which remain tender a long time.

White Velvet Okra

ONION SETS

There are three distinct classes of these. **Potato or Hill** onion sets can be planted in the fall from August to November and produce both green spring onions, large onions and sets. **Perennial or Egyptian Top** onion sets are planted in the fall or very early in the spring and produce green spring onions early in the spring. **Bottom Sets** or regular onion sets of commerce are small onions which were previously grown from seed. These, set out early in the spring or in the South in the fall, produce one large onion from each set, towards the end of June or first of July. Pickling onions (which is a larger size bottom set) are used in some localities for fall planting to produce early green spring onions. All onion sets are hardy and can be set in the open ground as early as the weather will permit. They are usually planted in rows 15 inches apart—4 inches apart for small sets and 6 to 8 inches apart for potato sets. Potato onion sets can also be planted in the spring. It takes about 16 bushels of bottom onion sets per acre, and 20 to 25 bushels of potato onion sets, according to the size and distance apart. Cultivate with hoe until maturity.

If to be sent by mail, add 7c per qt. for postage.

Prices of onion sets are subject to market changes. Prices on application.

Yellow Danvers—Probably the most largely planted of all onion sets, producing an early crop of fine quality onions.

White or Silver Skin—Pure white of mild flavor and usually preferred for private gardens.

Australian Brown—A very hardy variety of medium size which is extremely early and of good quality.

Yellow Potato or Hill—A mild, yellow variety, producing several large onions and clusters of sets.

Egyptian or Perennial Tree (Called Top Onion Sets)—For spring or summer green onions.

ONION

(See Page 6 for Prices)

One of the most nutritious and healthful of vegetables, having excellent medicinal qualities and most useful for flavoring salads, soups, meats, etc. It can be produced easily from either sets or seed and is one of the most satisfactory vegetables in the garden.

A good crop of onions is 400 to 800 bushels per acre.
A good crop of onion sets 300 to 400 bushels per acre.

Culture—Growing Large Onions from Seed—Seed is sown in rows 15 inches apart as early in the spring as ground can be worked and covered about $\frac{1}{2}$ inch deep. The Planet Junior Seed Sower is the implement for this and it requires 4 to 5 pounds per acre. Cultivate with a wheel hoe as soon as plants are up and hand-weed. After getting a good start thin onions to about 4 inches apart. Constant weeding and cultivation are required throughout the season. Rich soil, most heavily manured is required to grow large crops of onions. The mucklands of Ohio, Indiana and Illinois are particularly suited to this crop but fertilization has to be kept up to produce a large and profitable crop. Onions grown from seed mature much later than those grown from sets.

Growing Sets—To produce commercial Onion Sets known as **Bottom Sets**, the seed is sown in rows 11 to 12 inches apart in fine clean soil at the rate of 40 to 60 lbs. per acre. Cultivate with a wheel hoe and hand-weed. The sets are ready for pulling in July and are cleaned and stored in an airy loft. For pickling onions, one ounce sows 150 ft.; 15 lbs. per acre.

Prizetaker

230 Large Red Wethersfield—A splendid red variety, very popular in the East. Bulbs somewhat flattened, thick and very large. Skin deep purplish red, flesh white tinged with purple, moderately fine grained, strong but pleasant flavor. It is medium early and well suited to rich soils. Is a good keeper and productive.

231 Yellow Flat Danvers—An early or main crop variety of medium size, light coppery yellow color. Bulbs flattened but are quite thick with small necks. Ripen down evenly and keep well. This is the standard and most popular sort sown for yellow sets.

233 Yellow Globe Danvers—One of the most extensively grown yellow onions. Bulbs are of large size, uniformly globe shape with small necks. Ripen evenly. Flesh creamy white, crisp, mild and excellent flavor. Onions have a yellow coppery color, showy and handsome.

234 Ohio Yellow Globe—A very much esteemed and popular sort grown extensively in this state. Particularly suited to rich soils. Onions somewhat more flattened at the base than Yellow Globe Danvers and more blunt at the top. Color rich yellow tinged with

orange. Flesh creamy white, mild and fine flavor. One of the best for main crop planting and shipping as it is an excellent keeping sort.

236 Prizetaker—The true Prizetaker is globe shape, has pale yellow skin and white flesh, which is very mild and of delicate flavor. It is strictly "fancy", and will be found on fruit stands during the fall, where it is sold as Spanish Onion. No sets are required, as the large onions are grown the first year from seed sown during early spring.

237 Silver Skin or White Portugal—A well-known and favorite variety making medium size onions of mild flavor with beautiful, clear white skin. Largely used for sets and pickling onions. Mature 10 days earlier than White Globe. Bulbs are nearly round when of bunching size but somewhat flattened when mature. One of the best flattened sort for general use.

238 White Globe—A fine early or main crop sort for home gardens. Flesh is firm, fine grained, white, mild and more desirable for cooking than the yellow or red sorts. Bulbs are globe shape, full at the shoulder, round at the base, keep well and a good market variety.

PARSLEY

(See Page 6 for Prices)

Easily grown and useful for so many purposes, such as garnishing, seasoning salads and for ornamental purposes. Grown in the garden as edging it is both ornamental and profitable.

Culture—Seed is sown in rows $\frac{1}{2}$ inch deep and one foot apart. Cover firmly but not deep. As it is slow to germinate, usually taking 3 to 4 weeks, soaking in water is desirable. One ounce sows 150 ft. of drill. For winter growing it can be sown or transplanted to cold frames or to hot beds and is usually profitable.

239 Champion Moss Curled—A beautifully curled and crimped variety which is much preferred. It is vigorous, compact in growth and excellent for garnishing—a handsome decorative plant. One of the most popular for market and home gardens.

240 Hamburg or Rooted—This produces an edible root resembling a small parsnip both in color and shape. Flesh white, flavor similar to Celeriac. Foliage is about the same as plain parsley. Roots are extensively used for flavoring soups and stews and can be dug late in the fall and stored in sand for winter use.

Moss Curled Parsley

241 Plain—A hardy variety having very dark green leaves which are flat, deeply cut but not curled. It is a little stronger in taste and much esteemed for flavoring soups, stews, as well as for drying.

PARSNIPS

(See Page 6 for Prices)

A popular vegetable for fall and winter use and of wonderful value for stock feeding. On rich loamy soil produces immense crops, more nutritious than turnips and very valuable for dairy cattle. It will remain in the ground without protection all winter and can be dug as required until it begins to go to seed in the spring; or if desired, store in pits or cellars.

Culture—Sow in April in drills 18 inches apart, covered lightly. When the plants are about 2 inches high, thin out from 4 to 6 inches apart. One ounce will sow 200 ft. drill. 5 to 6 lbs. to the acre.

242 Sugar or Hollow Crown (Guernsey)—One of the best and most popular varieties for the table. Roots long, uniform in shape, have a smooth white skin, tender and of good quality.

243 Long White—This variety is very hardy and will keep well throughout the winter without protection. The roots are long, smooth, creamy white, tender and fine flavor. Splendid for table use and suitable for stock feeding.

Sugar Parsnip

PEAS

GARDEN VARIETIES

(See Page 6 for Prices)

One of the most popular crops in the home garden and usually a profitable one for market gardeners where labor for picking can be readily obtained. One pint sows 75 ft., $1\frac{1}{2}$ bu. per acre. The earliest sorts can be planted just as soon as the ground is in condition to work. Wrinkled varieties a little later as they are tender. For succession, plant different sorts. For fall crop sow in August.

One pint planted every two weeks will yield a succession and is enough for a medium sized garden.

Culture—Peas succeed best in light, rich, loamy soil which has been manured the previous season. Sheep manure or good commercial fertilizer in the drills mixed with the soil will give excellent results. Sow about one pt. per 100 ft. or 120 lbs. per acre. The early dwarf varieties can be planted in rows 2 feet apart. The tall varieties in rows 3 ft. apart. Peas can be staked with sticks or wire netting on stakes. Tall varieties yield more abundantly than dwarf. Cultivate and keep clean, working the earth toward the vines rather than away from them.

Packets and $\frac{1}{2}$ pints postpaid. If to be sent by mail add 7c to pint prices and 10c to quart prices.

For Zone Rates. 1 pint weighs about 15 oz., 1 qt. about 30 oz.

PEAS

(See Page 6 for Prices)

EARLY ROUND OR SMOOTH

244 Maud S—The earliest and most prolific pea known. The pod is of a dark green color, of a full, round shape and of strong texture which especially fits it for shipping long distances. For a late fall crop it has few equals and is the market gardener's favorite for all seasons. The far northern point at which our peas are grown renders them almost proof against cold and the best for early spring or late fall crop. Thousands of market gardeners have pronounced this pea unequalled in earliness, yield and regularity of growth. Make first planting as early in the spring as the ground will permit and cover well.

245 JMC Extra Early—One of the best strains of extra early peas; producing abundantly. Vines grow 2 to 2½ ft. high; pods 3 to 3½ inches long, well filled with fine delicious quality peas. Not only is this probably the earliest of all garden sorts but its yield is so abundant that it is the most profitable variety of all for market gardeners, in addition to being the best early sort for home gardens. Seed is white, smooth, medium size. Vines thrifty, vigorous, robust and extremely productive.

Gradus or Prosperity Peas

JMC Extra Early Peas

246 Alaska—A favorite sort with Southern truckers, producing long straight pods which will stand shipping, remain green longer than white seeded sorts. The seed is blue, medium size. Vines about 2½ ft. high, fairly vigorous and usually produce good yields. Pods long, straight and attractive appearance. This has long been a popular sort, is of fair quality and well-known.

EARLY WRINKLED SORTS

(See Page 6 for Prices)

These are of very much finer and superior quality to the smooth sorts, consequently are much to be preferred for private gardens or market uses, except for very earliest crops. They are not quite as hardy as the smooth varieties—hence, should be planted just a little later.

250 Gradus (or Prosperity)—One of the very best early wrinkled large podded peas. The pods are fully as long as Telephone. Vine similar in appearance and does not grow so tall, being of medium height about 3 to 3½ feet. The pods are 4 to 4½ inches long, pointed, handsome and one of the most attractive of the early wrinkled sorts. Peas very large, splendid quality and a beautiful light green color. This has become one of the most popular varieties in cultivation.

PEAS

(See Page 6 for Prices)

EARLY WRINKLED SORTS—Cont'd

251 Thomas Laxton—A comparatively new early wrinkled sort of superior merit. Vines vigorous, growing about 3 ft. high; have dark, vigorous foliage, similar to Gradus but hardier and more productive. Pods about 4 inches long, square ends, similar to Champion of England but larger, longer and darker. Peas are fine quality and it is destined to become one of the most popular of the early sorts on account of its productiveness.

252 Laxtonian—One of the largest podded of the dwarf wrinkled peas. Pods are about 4 inches in length, of a beautiful dark green color, similar to Gradus in shape, of splendid quality and mature a little earlier. Vine averages 15 to 18 inches in height, vigorous, productive and has dark green foliage.

253 Little Marvel—An extra early dwarf wrinkled sort particularly suited to home gardens. Vines average 15 to 18 inches high, vigorous, dark green foliage. Peas are borne together in pairs of twos. Though comparatively a new sort it has become exceedingly popular on account of its large productive yield.

254 American Wonder—A favorite dwarf, early, wrinkled pea which is highly esteemed and splendid for

family use. Vines about 9 inches to 1 ft. high, covered with well filled pods medium size, about $2\frac{3}{4}$ inches long, containing 5 to 8 large, exceedingly sweet, tender peas.

255 Nott's Excelsior—A few days later than the American Wonder. Pods about one-quarter larger. It is remarkably hardy and can be planted almost as early as smooth sorts. Height, 1 to $1\frac{1}{2}$ ft. One of the best for home gardens and a profitable variety for market gardeners.

256 Sutton's Excelsior—A very large podded dwarf variety. It is exceedingly vigorous, unsurpassed in quality; pods mature nearly as early as Nott's Excelsior but are broader and about the same length. Height, 15 to 18 inches.

MEDIUM CROP VARIETIES

(See Page 6 for Prices)

257 Premium Gem—This has long been a favorite among early dwarf peas. It matures a little later than American Wonder, is somewhat taller in growth and a little more prolific. Vines vigorous and productive, growing 15 to 18 inches high; pods $2\frac{3}{4}$ inches long, crowded with peas of fine quality.

259 Daisy or Dwarf Telephone—Similar in general characteristics to the well-known Telephone. Pods $4\frac{1}{2}$ to 5 inches long, dark green; peas large; of superior quality, tender and sweet. Vines about 3 ft. high.

LATE OR MAIN CROP SORTS

(See Page 6 for Prices)

260 Telephone—One of the leading peas with market gardeners on account of its vigorous, tall growth and productiveness. Vines about 4 ft. high, foliage light green, producing an abundance of pointed pods, very large and light green. Peas large, tender, very sweet, excellent flavor. A splendid sort for home gardens and profitable for market.

261 Alderman—A new pea like the Telephone, only better. The vine is extra vigorous, and the pods of Alderman are dark green and always well filled with fine large peas. For a pea which should be staked there is none quite so good as Alderman. It is one of the finest of the large-podded summer varieties. The haulm grows five feet in height and is of a rich, dark green color, as are also the large pods. Pods frequently measure nearly six inches in length and contain from ten to twelve very large peas of superior flavor.

263 White Marrowfat—Vines about $3\frac{1}{2}$ ft. high. Vines exceedingly productive. Pods long, well filled; peas smooth, rather coarse quality. Sown in many localities for market but not satisfactory for home gardens.

264 Melting Sugar (Edible Pods)—These are used in the same manner as Snap or String Beans, the pods and peas being sliced and boiled. Pods very large, $4\frac{1}{2}$ inches long, broad, curved and twisted. They are when young, very tender, stringless and fine flavored. Vines

Alderman

For Field Peas See Page 66.

PEAS

LATE OR MAIN CROP VARIETIES—Cont'd

are tall, $4\frac{1}{2}$ to 5 ft. high, with light foliage; are very strong growing and prolific. We strongly recommend more extensive planting of these fine quality peas. They are very popular in Europe and should become more generally known in this country.

Inoculation for Peas—Excellent results will be obtained by treating the seeds of peas with Inoculation Bacteria before planting. It can be easily done. We have it put up in convenient size for small gardens. (See Page 64.)

PEANUTS

(See Page 6 for Prices)

Peanuts should be shelled before planting. They should be planted in May or early June, in rows about 2 to 3 feet apart dropping the nuts 8 to 10 inches apart, 1 in a hill. Cover 1 or 2 inches deep. Cultivate 3 or 4 times with a cultivator, so as to loosen the earth and keep down weeds, and at the last working, with a small turn-plow throw the dirt to the nuts. Do not cultivate too late in the season, as late cultivation is likely to injure the formation of the nuts. It is also advisable

to make an application of lime, scattering it on top of the row just after planting. The use of lime as above mentioned is recommended by the most successful growers.

In harvesting, plow the peanuts and then stack around stakes with the leaves outside.

265 Improved Virginia—Large size nuts which are very popular and a fine productive strain.

STIMUPLANT
Makes a
WONDER GARDEN

PEPPER

(See Page 6 for Prices)

STIMUPLANT
Makes a
WONDER GARDEN

Culture—For earliest crop sow in hot bed in February or March and transplant to open ground in May, setting plants about 15 inches apart in rows $2\frac{1}{2}$ ft. apart. Later crops can be sown in cold frames. Cultivate and keep free of weeds. Sheep manure or some good commercial fertilizer applied broadcast around the plant and hoed in when they are about 6 inches high will produce an enormous increase and improvement in yield.

One ounce makes from 1200 to 1500 plants.

267 Chinese Giant—An enormous variety sometimes attaining 6 inches in diameter. It is very even in shape, flesh thick and sweet. Very handsome and of superior quality for stuffing. Plants are vigorous and fairly prolific. Very highly recommended for home use and one of the most profitable to grow for market purposes.

268 Large Bell or Bull Nose—A large early sort of mild flavor. Plant vigorous, 2 feet high, very productive, and ripens its crop early and uniformly. A splendid sort for salads, mangoes and for stuffing purposes. Color deep green which becomes bright crimson when ripe.

269 Ruby King—A very large and attractive sort, deep green color when young, bright red when ripe. Flesh thick and mild flavor. One of the best table sorts.

270 Ruby Giant—A variety of Mango Pepper, which is of a desirable size and shape for stuffing. A cross of Ruby King and Chinese Giant grows to large size and is very mild.

271 Long Red Cayenne—A well-known medium early sort, having slender, twisted and pointed fruits about 4 inches long. Extremely strong and pungent—hence, valuable for seasoning. Generally known as Lady Finger Pepper.

272 Sweet Mountain (or Spanish)—Late maturing and an attractive sort. Fruits very large and long, frequently 7 inches in length and 2 inches in diameter; flesh mild, very thick and excellent quality.

273 Golden Dawn—A handsome sweet, mild, yellow variety; fruit pendent, one and a half inches long and about the same in diameter.

275 Red Chili—Pods about 2 inches in length, $\frac{1}{8}$ to $\frac{1}{2}$ inch in diameter, tapering to a sharp point. Exceedingly pungent—hence, valuable for flavoring and for Tobasco Sauce. The small bright red pods are borne in great profusion, making it an ornamental plant for the garden.

276 Pimento—The fruit is of good size, medium length and attractive color. The flesh is thick and solid, mild and of fine flavor. Desirable for salads and stuffed peppers. The plants are vigorous and upright, about two to two and one-half feet high, with short, broad, dark green leaves. The fruit is deep green when young, becoming deep red as it matures.

Chinese Giant Peppers

PUMPKIN

(See Page 6 for Prices)

These make excellent food for stock and can be grown in corn fields at practically no extra expense. We urge larger planting, as they are very nutritious and afford a change in ration.

Culture—Generally planted in corn after the last working and gathered after corn has been shocked. For field crop plant in May or June in hills 8 feet apart, about 8 to 10 seed to the hill and cultivate until the vines get strong; then thin out leaving 2 or 3 of the strongest plants in each hill.

One ounce plants 20 to 30 hills according to the size of the seed. Two or three pounds to the acre.

King of the Mammoths

280 King of the Mammoths—An enormous flattened variety sometimes attaining 100 lbs. in weight. It is especially desirable for exhibition purposes, Halloween parties and will find ready sale in most large cities at good prices.

281 Japanese Pie—Fruit medium size. Skin light yellow, covered with fine grained netting. Flesh salmon, very thick, sweet, fine flavor and one of the best sorts for cooking.

282 Tennessee Sweet Potato—Medium size of creamy yellow color with light green stripes. Flesh thick, fine grained, dry, brittle and of excellent flavor. Unsurpassed for pies and custards.

283 Cushaw Crook-neck Striped—Fruit fairly large with crooked neck. Skin creamy white with green stripes. Flesh yellow, very thick, rather coarse but sweet. A productive and popular sort in most sections.

284 Golden Cushaw—One of the best varieties. Is a yellow crook-necked sort, and is nearly all flesh, having a very small seed cavity.

285 Large Cheese—A popular sort in this section for table uses and stock. Fruits somewhat flattened; skin mottled light green and yellow. Flesh yellow and of tender quality.

286 Small Sugar—One of the best for the home garden. An excellent variety for pies. Nearly round, 10 to 12 inches in diameter; rich orange color. Flesh thick, fine grained and very sweet.

287 Connecticut Field—Used for planting in corn for stock feeding and also for making pies. Fruits often 15 inches in diameter; smooth reddish-orange ribbed skin with orange-yellow flesh.

288 Kentucky Field—Grown generally throughout the central section for stock feeding. Fruits very much flattened, creamy yellow color; flesh orange. Very productive.

SELECT SEED POTATOES CHOICE NORTHERN GROWN STOCKS

These are grown for us in the extreme northern parts of Minnesota, Wisconsin and Michigan and can be relied on as being true to name and first quality.

Prices on Potatoes are constantly changing, subject to market fluctuations. Please write for current market prices when ready to purchase.

Culture—Potatoes are planted in rows 36 to 40 inches apart, dropping the potatoes 12 to 16 inches apart in the rows. Sheep Manure or some other good commercial fertilizer should be used in the drills even if the land is heavily manured as it will pay wonderfully well. It takes about 1 pound of fertilizer to 30 to 40 feet of drill, 400 to 600 lbs. per acre. It takes 9 to 12 bushels to plant an acre according to size of potatoes and distance of rows apart. Plant for early crop as soon as the ground can be gotten in condition. For late crop, in July or 1st of August is best.

Many potato diseases, particularly the more important ones, such as scab, black leg, black rot, stem rot, etc., were formerly treated by the old-fashioned methods which required soaking of the seed for long periods and creating a disagreeable task.

The introduction of Semesan Bel has vastly improved these conditions by giving the grower a

modern, instantaneous and effective method of disinfection at a reasonable cost that is far superior in all respects to even the best of those previously employed. See page 82.

Early Ohio—10 days earlier than Early Rose. The tubers are oval, have few eyes, rather shallow. Smooth skin, white, slightly flushed with pink. It is an extra fine quality cooking potato; makes good sized yields and is a favorite in this section and many others, especially where planted on light and loamy soil.

Early Rose—An old favorite sort which has long been popular for family use and still planted in many sections as the main variety for early crop. Tubers are oblong, light pink at the bud end but mostly white. It is of finest quality, cooks very mealy and one of the best for family use.

Early Triumph—About 10 days earlier than the Ohio. The potato is of good size, squared at the ends. Skin bright red. It is very productive.

POTATOES—Cont'd

Irish Cobbler—This has become an exceedingly popular and profitable variety for growing for market. Tubers are oval with smooth white skin, have few eyes rather deep. Grows to large size and produces enor-

mous yields. Vines are thrifty and a reliable heavy yield can nearly always be expected. An excellent sort for market purposes and produces good crops both early and late.

SWEET POTATOES

We carry in stock the best sort of seed grown by reliable planters. Varieties, **Yellow and Red Jersey, Red Ber-**

muda and Southern Queen. Prices variable. Write for quotations. Cannot be shipped until about April 1.

RADISH

(See Page 6 for Prices)

FINEST SEED STOCKS

One ounce sows 100 ft. of drill. If broadcasted requires 10 to 12 lbs. per acre. For forcing in frames sow in January or February. Out of doors, sow from March to June for early and summer crop. For late, sow from July to September. Early sorts mature and are ready for the table in 21 to 30 days from sowing.

Culture—Quick growth is essential for tender, crisp radishes. Hence, rich soil and plenty of moisture are essential. They can be sown at intervals of ten days to two weeks for early use or grown as a catch crop between rows of beets, lettuce, onions, etc. When forced they require plenty of ventilation and moisture.

Early White Tip Scarlet

ROUND VARIETIES

290 Early White Tipped Scarlet—One of the handsomest of the turnip varieties and a general favorite in nearly all large markets. It is excellent as a forcing sort or for earliest planting outdoors. Roots nearly round, slightly flattened on under side. Color very deep scarlet with distinct white tip. Flesh white of best quality. We strongly advise more extensive planting of this sort in this locality.

291 Early White Turnip—Similar to Early Scarlet Turnip but little more flattened and slightly earlier maturing. It has very small tops, is of quick growth, suitable for forcing or early planting. Color clear white; flesh crisp and tender.

292 Golden Globe—A splendid sort for second early crop as it does not get pithy easily and produces tender, crisp roots. Skin golden yellow, flesh white. Roots uniformly globe shaped, 2 inches long and 2¼ inches in diameter when mature.

293 White Giant Stuttgart—A splendid summer sort, producing large roots often 4 inches in diameter, top shaped. Skin is white, flesh white and crisp and does not become pithy until very late. Valuable for both early summer and fall crops.

294 French Breakfast—A small olive-shaped variety about 1½ inches long, which is very quick growing. Color beautiful deep scarlet shading to white at the tip. Top small. Quick maturing and splendid for very earliest crop.

295 Crimson Giant—This variety is suitable both for forcing or early planting out of doors. A remarkable feature of this radish is that it will grow double the size of other round red forcing radishes and still remain solid. The ordinary forcing radish,

after growing to the size of 2 inches in circumference becomes pithy, while the Crimson Giant will grow to 6 inches in circumference, and still remain solid and juicy, free from all signs of becoming soft.

296 Early Scarlet Turnip—A well-known sort producing round or oval roots of bright scarlet color. Flesh white, crisp and tender. Tops medium, quick growth and desirable for early planting.

297 Extra Early Scarlet Globe—One of the very best and most showy radishes for earliest forcing or growing outside. Roots are slightly olive shape, rich bright scarlet color; flesh white and tender. It is fit to pull very early and is especially desirable for market gardeners on account of its showy qualities.

Early Scarlet Turnip

White Icicle Radish

RADISH—Cont'd

(See Page 6 for Prices)

LONG VARIETIES

298 Cincinnati Market—A popular sort in this section and has long been a favorite with market gardeners as it commands ready sale and good prices on this and nearby markets. It is a brilliant crimson color with white slightly tinged flesh, exceedingly sweet and tender. Grows 6 to 7 inches in length, straight and smooth and does not become hollow and pithy until very old. A remarkably fine sort for either market or home use.

299 Long Scarlet Short Top—An old standard sort which is excellent either for home gardens or market. Tops short and small. Roots smooth, tender, uniform in shape; an attractive bright red color.

300 Long White Icicle—The earliest of the long white varieties which is popular for forcing and earliest outdoor or early summer crop. It is productive and of excellent quality, crisp and tender. Roots are usually 5 to 6 inches long and about $\frac{1}{2}$ inch in diameter with small tops.

301 White Strasburg—One of the most popular and desirable of all long white radishes for second early or summer crop. Even when comparatively small it is fine quality and remains crisp and tender much longer than other early varieties. Roots when full grown are $1\frac{1}{2}$ to 3 inches thick and 5 to 6 inches long, tapering. Tops medium; roots smooth, crystal white color, handsome, showy, crisp and tender and especially desirable for market or family use.

302 Long White Vienna—An excellent second-early variety producing roots 6 to 7 inches long, moderately thick, crisp and tender. Matures a little later than Cincinnati Market.

FALL RADISHES

(See Page 6 for Prices)

303 Long Black Spanish—A favorite late sort producing long, thick, almost black roots, with white flesh of fine texture. Decidedly pungent but well flavored. Roots are usually 7 to 9 inches long, 2 to 3 inches in diameter and it is one of the best of the long sorts and especially adapted for winter use.

304 Round Black Spanish—Roots top shaped, 3 to 4 inches in diameter; skin black, flesh white; excellent quality. Similar in characteristics and quality to the long sort but better suited for shallow or heavy soils on account of its shape.

305 Rose China Winter (Scarlet China)—A popular sort producing cylindrical roots, stub-rooted, blunt at both ends. Is bright, deep rose color shading to white. Skin smooth, flesh white, crisp, tender and pungent. Roots usually 4 to 5 inches long, $1\frac{1}{2}$ to 2 inches in diameter. A splendid sort for fall and winter.

306 White Chinese or Celestial—A large stumprooted radish with white skin and flesh. Can be sown from July 1 to August 15, and will keep in prime condition a long time; mild in flavor, brittle and never woody. Fine for market gardeners.

307 California Mammoth White Winter—A giant fall and winter variety. Roots from 9 to 12 inches long and 2 to 3 inches through, tapering regularly to the tips, smooth and cylindrical in form; skin and flesh white, tender and crisp.

Long Black Spanish Radish

Remember The J. Chas. McCullough Seed Company's Location:

STORE AND SALES DEPARTMENT
228-230-232 East Fourth
Street

WAREHOUSE AND SEED CLEANING PLANT
Eggleston Ave., Third to Fourth Sts.
Office: 720-728 E. Third St., near Penna. Station

TELEPHONE, MAIN 5640
Connecting all
Departments

RHUBARB

(See Page 6 for Prices)

This is ready to use very early in the spring and has fine medicinal qualities in addition to being delicious for making pies or as stewed rhubarb.

Culture—Strong roots planted in the fall can be used in limited way the following spring. If planted in the spring had better remain one year to establish growth. Seed sown early in spring in drills 15 inches apart, will produce fair roots by next season. A rich, moist soil is desirable. When a few inches high, thin out or transplant 12 inches apart. The following fall transplant to deep soil, manured well, 4 feet apart each way and protect with litter or leaves. Never allow Rhubarb to go to seed as it weakens the plant.

One ounce sows about 75 ft.; 6 lbs. to one acre. About 12 roots are sufficient for an ordinary garden. Plant roots in March or April. Sow seed in April.

308 Victoria—A favorite sort for general purposes. Very large and tender.

STIMUPLANT
Makes a
WONDER GARDEN

SALSIFY

(See Page 6 for Prices)

STIMUPLANT
Makes a
WONDER GARDEN

A desirable winter vegetable which should be more extensively used throughout the Central States. Roots are palatable and can be served boiled or as fritters.

Culture—Sow in April in rows 18 inches apart, thinning out to 4 to 6 inches. Cultivate deeply and often. It is hardy and will remain out all winter, but if desired can be dug before winter and stored in earth or sand to keep it from wilting.

One ounce sows 100 ft.; 6 to 8 lbs. are required per acre.

309 Mammoth Sandwich Island—The best sort which is much larger and a great improvement over the old-fashioned long sort.

Mammoth Sandwich Island Salsify

SPINACH

(See Page 6 for Prices)

Has long been one of the most popular of all greens for market gardeners and truck growers and in some sections is grown in enormous quantities. In this locality Spinach is sown broadcast in March or April for early crop and from July to September for fall and winter crop at the rate of about 10 to 15 lbs. per acre. It can also be sown in drills 12 to 15 inches apart and cultivated.

One ounce sows 100 ft. of drill. 10 to 15 lbs. per acre in drills. 15 to 20 lbs. per acre, broadcast. One-half pound is sufficient for a medium garden.

310 King of Denmark—The New Evergreen Spinach. This variety is superior to all others for spring planting, under the same circumstances, in the matter of standing a longer time before going to seed. Has an abundance of dark green leaves of large size and very much crumpled and of fine quality. It is fit for use in thirty days from time of sowing, and remains in good condition fully two weeks after other varieties have started seed-stocks.

311 Bloomsdale Savoy (or Norfolk)—A very early sort especially desirable for fall use. Plant is upright, having glossy, thick, crimped, green leaves, pointed. A favorite sort for market gardeners and truckers.

312 Round Thick Leaf—One of the best sorts for spring sowing as it is somewhat slower to go to seed than Bloomsdale. Plant upright, vigorous; leaves large, thick, fresh bright green color.

313 New Zealand—An especially desirable sort for summer use as it thrives during hot weather in any soil, rich or poor. It has tender shoots of good quality which may be cut throughout the summer. Plant becomes very large and spreading, leaves small, broad and pointed. Plant 3 or 4 seed in hills 2 ft. apart each way. Germination will be hastened by soaking in warm water 24 hours before planting.

Bloomsdale Spinach

SQUASH

Called Cymling in the South

(See Page 6 for Prices)

Summer squash requires one ounce to 30 hills. Winter varieties one ounce to 15 hills and 3 to 4 lbs. per acre.

Culture—Plant when the weather has become settled and the ground fairly warm. Bush varieties are planted 3 x 4 ft.; running varieties 6 x 8 ft.; about 4 to 6 seeds per hill and thin out later leaving the strongest plants about 3 to the hill. Hills similar to those made for Cucumbers with well rotted manure or fertilizer are best. Winter varieties may be stored in a moderately warm dry place of even temperature.

Insect Pests—For the Striped Beetle, see under Cantaloupe. For the Squash Bug, Tobacco Dust is sometimes a preventive.

SUMMER VARIETIES

315 Mammoth White Bush—A well-known early variety, largely planted in the South both for market and home use. Color is creamy white with comparatively smooth surface, somewhat flattened and scalloped. Vines are bush, vigorous and very productive. Known as Patty Pan or Cymling in the South.

316 Golden Summer Crook-neck—An old standard running sort having long fruit with uniformly crooked neck. Color is bright yellow; densely warted surface and very productive.

317 Vegetable Marrow—A variety very much esteemed in England and many parts of the North. Vines are of bush habit, producing elongated fruit about 9 inches long of pale straw color changing to deeper shade. Flesh is white. Young and tender fruit when

Mammoth White Bush Squash

sliced and fried in oil makes a vegetable delicacy highly esteemed. Can be used as other squash; has an especially delicate flavor.

WINTER VARIETIES

318 Hubbard—One of the best winter squashes; flesh bright orange yellow, fine grained, very dry, sweet and richly flavored. Fruit large oval-shaped; skin dark green, rough, covered with warts. Excellent keeper.

319 Golden Hubbard—Similar to the old Hubbard excepting the skin is of a rich orange-red and heavily warted, flesh of extra fine quality.

320 Warted Hubbard—Similar in fruit and shape to Hubbard except that the surface is very much warted. It is very handsome in appearance and extra quality.

321 Mammoth Chili—Rich orange-yellow; flesh thick and of good quality for making pies; grows to an enormous size; a valuable sort for feeding stock.

322 Boston Marrow—Vines strong, of running growth and very productive. Fruits large, orange skin, deep orange flesh, oval with hard shell; a superior winter sort.

Hubbard Squash

TOMATO

(See Page 6 for Prices)

A popular crop in all home gardens and usually profitable for truckers, market gardeners and growers for canning factories.

Culture—For earliest crop sow in a hot bed or shallow boxes in February or March, transplanting when 2 or 3 inches high to small pots, trays or cold frames. When danger of frost is past (usually in this climate the 1st to 10th of May), set in open ground 3 x 4 feet apart. Well rotted manure, sheep manure or other good commercial fertilizer should be used in the hills at the rate of a dessert spoonful per hill or about 200 lbs. per acre mixed with the soil. It is essential for producing good stocky growth that the soil be enriched in this manner as it will have a tendency to prevent blight and add vigor and fruitfulness to the vines. Tomatoes should be staked to keep the fruit from the ground and it will help also to prevent blight, mildew and make them more prolific.

Insects and Blight—For the green worm which eats the foliage, use Hellebore, either dry or in solution, or Paris Green mixed with water at the rate of 1 lb. to 150 gallons and spray. For rot, blight and other diseases, spray the plants with Bordeaux Mixture in solution, commencing early.

One ounce produces about 3000 plants; 2 ounces produces enough plants to set one acre. For early crop sow in February; for late crop sow in open bed in April or May.

WILT RESISTANT TOMATOES

The loss caused by tomato wilt is increasing each year. Wilt is a fungus that lives in the soil and invades the plant through its roots. When diseased tomato vines are plowed under they only serve to increase the infection. In the early stages of the disease the leaves curl; later they turn yellow, beginning at the bottom of the plant which slowly dies, usually about the time the fruits are half grown. No amount of spraying will do any good, the only means of controlling wilt is to grow wilt resistant varieties.

325 Marglobe—Wilt Resistant—Very productive second-early variety. Fruits large, smooth, meaty, red, globular. It will stand up longer after it becomes flushed than any other variety of tomato. Highly resistant to wilt and somewhat resistant to blights.

326 Norton—Wilt Resistant—Norton was developed from the Stone, ripens at the same season, and can be classed as a wilt resistant Stone, but a more abundant bearer and the fruits are more solid. It yields a heavy crop of large smooth solid red fruits that ripen slowly, therefore is a good keeper and a good shipper; it is also remarkably drought resistant. An excellent tomato for home garden, for canning and for the late market.

327 Marvelosa—Wilt Resistant—Very productive second-early variety. Fruits medium large, smooth, pink, globular and very uniform. The foliage is of a dark green color. Highly resistant to wilt and somewhat resistant to blights.

328 Marvana—Wilt Resistant—This variety is commanding attention on account of its remarkable wilt resisting qualities. A first-early red-fruited variety resembling Earliana in earliness, size, shape of fruits and in type of foliage, but its fruits are usually smoother, more crimson and slightly less acid. A heavy yielder of excellent quality.

EARLY VARIETIES

329 Purple King—One of the largest and best of the purplish pink varieties. Vines very vigorous and productive; fruits smooth, uniform in size, nearly globe shaped. It is an extremely early sort and of excellent

quality. We strongly recommend it for market gardens and it will prove one of the best sorts for home gardens for early use. It is especially valuable for shipping. Purple King will become popular wherever grown. It is a very large, early sort and its freedom from cracking and tendency from blight are strong points in its favor.

330 Earliana—A deep scarlet, very early variety which is largely planted by truckers and market gardeners. Fruit is borne in clusters, is medium to large, nearly round, and exceptionally smooth for so early a variety. On account of its extreme earliness and the fact that the crop ripens uniformly and very early it is one of the most valuable of the first of the early sorts.

331 June Pink—An extra early purplish-pink sort similar to Earliana except in color. It is a valuable variety for market gardeners and truckers, especially on markets where purplish sorts find ready sale.

332 Chalk's Early Jewel—A particularly desirable sort with purplish scarlet fruit, nearly round, smooth, of large size and a most excellent quality. Fruit ripens early and not inclined to crack, is early and pickings are extended over a long season. One of the best of the early sorts and unsurpassed for home gardens.

333 Dwarf Champion—An early variety which is very dwarf growing. The vines are so stiff that they are generally self-supporting. Fruits medium size, purplish red and borne moderately early. On account of its strong, upright growth, it is sometimes sold as Tree Tomato and is desirable on extremely rich soil and where tall varieties have a tendency to make too much vine.

334 John Baer—An extra early scarlet fruited variety of superior merit. The vines are very hardy and exceptionally productive. The fruits are the largest of the extra early sorts and are also most attractive in color. They are nearly round, smooth, firm and of excellent quality. It is one of the very earliest to ripen its first fruits and it continues to furnish marketable fruits much longer than other very early varieties.

Marglobe Wilt Resistant Tomato

TOMATO—Cont'd

(See Page 6 for Prices)

Ponderosa Tomato

EARLY VARIETIES—Cont'd

335 Bonny Best—The fruits of this desirable early sort are most attractive in shape and color. The crop ripens more uniformly than any other early scarlet fruited sort, and is of superior solidity and interior color. The vines are vigorous and produce a good crop of exceptionally round and deep fruits, bright deep scarlet in color and of very good quality.

336 Early Detroit—A very productive second early purple tomato, uniform in size of fruit, free from cracks and does not blight easily. Fruit large and smooth. Vines vigorous and quite productive. Quality excellent.

MAIN CROP SORTS

337 Ponderosa—One of the largest and finest varieties for home use. It is purplish pink in color. Vines vigorous, tall, fairly productive. Fruits are very solid and have exceptionally few seeds. It is fairly smooth for so large a variety and sometimes attains such a size that one slice will cover a dinner plate. Very free from acid, has few seeds, is of delicious flavor and most excellent for slicing; ripens about mid-season. On account of its thick meaty flesh and fine flavor it is most desirable for home use, and the large showy handsome fruits are popular sellers for fancy fruit stands.

338 Beauty—One of the most satisfactory and popular sorts. Fruits are purplish pink, ripen evenly, are uniform in size, very solid and finest quality. They are exceptionally smooth and do not crack readily. Vines large, vigorous and very productive, ripening fruits about mid-season.

339 Stone—One of the very best Tomatoes producing large, very smooth, solid fruit slightly flattened, deep red color. It is very popular with all market growers and especially desired by canners. Ripens mid-season. On account of its large yields and general

uniformity in production we strongly recommend it for both market gardens and home uses.

340 Trucker's Favorite—A large, deep purple variety, producing uniform size fruit. It is somewhat deeper color than Beauty; fruit being more globe shaped, largely used for main crop, producing fine yields of large, smooth, solid fruits which command best prices—hence very popular with truckers and market gardeners.

341 Cincinnati Purple—A favorite sort in this locality and one of the very best for market or home use. It is very round, smooth, solid and of splendid flavor. Vines are vigorous and remarkably productive. Fruits of large size, very meaty; have small seed cells and of rich flavor.

342 Golden Queen—A large growing variety bearing abundantly. Fruits are golden yellow color, smooth; well shaped and desirable for slicing as a contrast with red varieties on the table.

SMALL-FRUITED TOMATOES

343 Pear-Shaped, Red—Fruits pear-shaped about 2 inches long and of bright red color. A splendid variety for preserves.

344 Pear-Shaped, Yellow—Fruits pear-shaped about 2 inches long, rich clear yellow color, largely used for canning, tomato preserves and pickling.

345 Red Cherry—Small, round fruit, resembling cherries; used for preserves.

346 Yellow Cherry—Fruits $\frac{5}{8}$ inch in diameter, perfectly round and smooth. A splendid sort for sweet or sour pickles and preserves.

Tomato Plants—Leading varieties in season. We do not send these plants by mail.

TURNIP

(See Page 6 for Prices)

One of the easiest crops to grow and profitable for stock feeding and in most cases for markets.

They cost so little to grow, make splendid nutritious feed and should be much more generally used. A good yield from an acre of Turnips is from 600 to 1000 bushels.

Culture—For early use, sow in March or April either broadcast, or in drills, using preferably Milan or Purple Top Strap Leaf or Globe.

Rutabaga is sown in June or July, preferably in drills 2 feet apart thinning out to 6 inches.

Turnips for main crop are sown from July to September 15th, broadcast $1\frac{1}{2}$ to 2 lbs. per acre.

Turnips for greens, can be sown as late as October 1st and require 3 to 4 lbs. per acre.

347 Early Purple Top Milan—Extra early variety which is very sweet and particularly valuable for sowing in early spring. Roots are medium size, plants purple top flat. Best for private gardens and preferable to grow for early market crop.

348 Early Red or Purple Top (Strap Leaf)—A well-known early sort which is largely used in all sections. Our stock is extra choice.

349 Purple Top White Globe—A very superior strain, producing large smooth roots, which are sweet and tender. One of the best for early or main crop use. Excellent either when young or fully matured.

350 Early White Flat Dutch—Similar to Early Purple Top Flat, excepting that it is white all over. Quick grower, excellent quality and splendid for early crop.

351 Large White Globe—Flesh white, firm and crisp; a very desirable early variety.

352 White Egg—An early, oval variety with smooth, clear white roots, medium size which grow half out of the ground, top small, flesh clear white, fine grained, sweet. Excellent either when young or fully matured.

353 Long White Cow Horn—These often grow 12 to 15 inches long and are a valuable crop for stock feed, flesh is white, well flavored and good for table use.

354 Yellow Aberdeen—A globe shaped variety with purple top, flesh yellow, sweet, somewhat coarse grain, an excellent sort for stocks, producing large crop.

Early Red or Purple Top Turnip

355 Amber Globe—A globe shaped variety with orange yellow flesh and green top, valuable for stock feeding.

356 Seven Top—Used entirely for greens and very popular in the Southern States.

357 Rutabaga, American Purple Top—Our stock of this is extra choice and can be depended on by the most critical growers. Rutabaga besides being best food for stock, is the sweetest of all Turnips for table use.

French Turnip—(See Kohl-Rabi.)

TOBACCO

(See Page 6 for Prices)

Saved from crown shoots only and grown for us by practical growers.

Culture—The seed is sown from February to April in open beds. Ground must be clean, very finely pulverized, raked fine and smooth. It is customary to burn over the top of the bed by piling brush or litter to destroy weed seeds and add fertility for the young plants. After sowing, beds are protected with thin cotton cloth similar to cheese cloth to protect them from tobacco flies. About June 1st it is set in rich or highly fertilized ground in rows $3\frac{1}{2}$ x 3 ft. Cultivate often and destroy worms by applying Paris Green or Arsenate of Lead.

One ounce sows 50 sq. yds., sufficient to set 2 or 3 acres, sheep manure will give most excellent results on this crop and should be applied in hills two to three hundred pounds per acre.

358 White Burley—A standard sort which is more largely grown in Blue Grass region of Kentucky, Ohio, Tennessee and Missouri than any other sort. It is a large growing sort having very broad leaves of finest quality and largely used for fine bright leaf, especially for cigarette tobacco, fine bright mixing tobacco and

outside wrappers for plug. Commands highest prices on the market and where soil is suitable the most profitable of all sorts.

359 Stand-up Burley—Has all the good qualities of White Burley but superior to that variety in many respects. The leaves instead of drooping have a more erect position on the plant, turning upward rather than down—hence, the name "Stand-up". It is fast becoming the most popular type of Burley and largely grown by planters in all Burley sections.

360 Connecticut Seed Leaf—A popular sort with northern and eastern growers on account of its early maturity and extra fine quality. Plants are short and stocky, leaves moderately long, of good width and make excellent filler.

361 Havana—A fine strain of Americanized Havana used for cigars and adding flavor to smoking mixtures.

THE ROCK GARDEN

In the whole history of gardening there has never been so much interest taken in the cultivation of rock plants as there is to-day. Not very many years ago it was quite exceptional to find a rock garden worthy of the name in any but the largest of our private gardens. To-day, however, a garden no matter how small, is not considered complete unless it contains a portion devoted to the cultivation of Alpines.

- Achillea ("Ptarmica The Pearl")
—White, 2 ft. See Page 44.....15c
- Agrostemma coronaria—Red, 2½
3-ft. See Page 44.....10c
- Alyssum Saxatile Compactum—
Yellow, 1 ft. See Page 44.....10c
- Aquilegia, Mrs. Scott Elliott's
Strain. See Page 45.....15c

A Rockery Development

Arabis Alpina—White, 6 inches.....	See Page 45.....	10c
Armeria (Sea Pink or Thrift).....	See Page 45.....	15c
Aubretia Bougainvillei (Blue Rock Cress).....	See Page 45.....	15c
Aubretia Leichtlini (Pink Rock Cress).....	See Page 45.....	15c
Cheiranthus Allioni (Siberian Wallflower).....	See Page 48.....	10c
Dianthus Alwoodi (Perpetual flowering Pink).....	See Page 49.....	50c
Dianthus Plumarius (Pinks).....	See Page 49.....	10c
Geum (Mrs. Bradshaw)—Orange scarlet, 18 inches.....	See Page 50.....	15c
Geum (Lady Stratheden)—Golden yellow, 18 inches.....	See Page 50.....	15c
Gypsophila Repens—White.....	See Page 51.....	15c
Iberis Sempervirens—White.....	See Page 51.....	10c
Iberis Gibraltarica—Lilac, shading to white.....	See Page 51.....	10c
Linum Perenne—Blue, 18 inches.....	See Page 52.....	10c
Myosotis Palustris Semperflorens—Everblooming, 10 inches.....	See Page 53.....	10c
Primula Vulgaris (English Primrose).....	See Page 55.....	15c
Poppy—Iceland—Baker's Sunbeam.....	See Page 55.....	15c
Saponaria Ocymoides.....	See Page 55.....	10c
Veronica Spicta (Blue Speedwell)—1½ ft.....	See Page 59.....	10c
Viola Cornuta (Tufted Pansy)—6 inches.....	See Page 59.....	10c

The entire above collection of seeds for the Rock Garden, 23 varieties, \$3.20 value for \$2.50

HOW TO BUILD A ROCK GARDEN

The site chosen for the Rock Garden, should be naturally picturesque and in harmony with its surroundings. There should be no formality about the arrangement, of plants. Aim at attaining a natural appearance by selecting rocks that have a weather-beaten surface.

The proper construction of the rock garden should be made step by step, placing both rock and soil together, which eliminates the possibility of pockets between the rocks. The pockets should be large enough to allow ample space for soil, and in places where roots can grow unobstructed between the rocks. Place all stones with the surface slanting to the inside as much as possible so the water will lead into instead of away from the crevices. An annual top dressing of granulated peat moss *aids in keeping the weeds down as well as being beneficial to the plants.

Rock walls are made attractive by the addition of a few perennials: We carry a full line suitable for this purpose

A limited number of shrubs and dwarf evergreens should be planted throughout the rockery so as to attain a pleasing winter effect. *For prices on Peat Moss, see Page 85.

NEW FLOWERS AND VARIETIES OF RECENT INTRODUCTION FOR YOUR 1929 GARDEN

ASTERS

SINGLE GIANTS OF CALIFORNIA

A new single type Aster developed out of the Double Giants of California type. The flowers are large, measuring three to four inches across, with stems 18 to 24 inches in length. The petal has a slight twist, which adds a piquant touch to its beauty. The white blossoms resemble Shasta Daisies in appearance, but their greater length of stem makes them more graceful and better adapted to florists' use. In the garden, they add a charming note of simplicity among the fuller types of Asters.

566	White—Pkt.....	25c
567	Rose—Pkt.....	25c
568	Light Blue—Pkt.....	25c
569	Purple—Pkt.....	25c
570	Lilac—Pkt.....	25c
571	Delicate Flesh—Pkt.....	25c
572	Superb Mixed—Pkt.....	25c
573	Collection, one pkt. each above 6 colors.....	\$1.25

DELPHINIUM

631 Wrexham Hybrids (Hollyhock Strain)—New. These gorgeous new Delphiniums were originated by Mr. Watkin Samuel of Wrexham, England, and first shown by him at the London flower exhibitions where they took the flower lovers as well as the experienced growers by surprise so massive and effective were they. Visitors continually exclaimed: "Why, they are like Hollyhocks!"

The strain is conspicuous for its broad-based tall spikes, carrying largest individual flowers that run largely to the rich deep shades, much prized by experienced growers. Pkt.....50c

632 Blackmore & Langdon's Hybrids—This collection of Delphiniums is one of the finest in England. The seed we offer is saved from their choicest varieties. 1/8-oz., \$1.00. 3 pkts., 50c. Pkt.....25c

DIANTHUS ALLWOODI

This is an important addition to our list of perennial plants. They are perfectly hardy and flower continuously from early spring until late in the autumn; the flowers are much more substantial and larger than the old type of Hardy Pinks, and are borne on long stems suitable for cutting; deliciously clove-scented.

638 Superb Mixed—Pkt. (25 seeds).....50c

GAILLARDIA

656 Portola Hybrids—A superb new variety bearing flowers of immense size on long stems. The colors range through shades of bronzy red with golden tips; very robust. Hardy perennial. Pkt.....25c

HOLLYHOCK

669 Exquisite—Flowers very large, beautifully fringed and curled petals, extremely double. Each white-margined petal is adorned by a large blotch, suggesting the markings of the Pelargonium. Supplied in mixture only, containing following colors: Rose, light rose, carmine rose, violet and dark purple. Pkt.....25c

PETUNIA

726 Ruffled Monsters—This is a half dwarf type of erect and robust habit. The flowers are very large and ruffled with open shallow throats. The colors are mostly the desirable red and dark shades richly marked and veined. Pkt.....25c
(See illustration above.)

LILIUM REGALE

694 Regale Lily—Pkt.....25c
For complete description, see page 52.

LUPINUS

702 Downers Hybrids—Perpetual flowering new hybrids. Pkt.....25c

PANSIES

721 Baths Empress—A choice English mixture of world-wide fame. Pkt.....50c

PENTSTEMOM

755 Gloxinoides—Pink shades. Pkt.....15c
756 Gloxinoides—"Sensation". Pkt.....15c
For complete description of Pentstemom, see page 55.

TWO NEW GIANT SCABIOSAS

(Annual Type)

775 Peach Blossom (New)—"Highly commended" by the Royal Horticultural Society of Great Britain. A beautiful shade of peach blossom pink, large size and long stem. An excellent cut flower. 3 pkts., 50c. Pkt.....20c

776 Shasta (New)—A pure white of enormous size, the flowers measuring three and a half inches across with extremely long stems. 3 pkts., 50c. Pkt.....20c

NEW EARLY FLOWERING SWEET PEAS

798 Early Springsong—Pkt.....35c
799 Bright Light—Pkt.....20c
800 Giant Rose—Pkt.....25c
801 White Harmony—Pkt.....15c
For complete description, see page 57.

NEW SUMMER FLOWERING SWEET PEAS

813 Pinkie—A 1928 introduction which is by comparison the largest of all we have ever seen of the deep pink varieties. A most vigorous grower, producing on long stout stems well waved, nicely placed flowers of beautiful rose pink shade. Pkt.....25c

VIOLA

840 Jersey Gem (New)—Pkt.....35c
For complete description, see page 59.

CHOICE FLOWER SEEDS

With Cultural Instructions and Information.

We take pleasure in presenting to our customers, this season, the following list of flower seeds which will be found to contain many old favorites, as well as the new novelties. We have purposely omitted many varieties because they are being improved upon each year.

This season we have added various sorts of new flower seeds not previously catalogued, which we offer to our customers who wish to entrust us with an order.

Flower seeds are divided into three classes: Annuals, Biennials and Perennials.

Annuals are those flowers that bloom from seed the first year, then die. Among these are Asters, Marigolds, Nasturtiums, Zinnias and many other sorts.

Biennials from seed generally bloom the second year, then die. Some varieties will bloom the first year if planted early.

Perennials are those that endure our winters with little or no protection, depending upon the variety and location. A large majority of the Perennials will bloom the first year from seed, especially if sown early, or they can be sown in August or September. They will bloom the following year and will sometimes live indefinitely.

ACHILLEA (Ptarmica, "The Pearl")

501—A hardy perennial attaining height of about 2 ft., which bears an enormous amount of pure, double, white flowers in close heads. It is one of the best plants for cemetery uses and a most decided adjunct to gardens. 2 Pkts., 25c. Pkt.....15c

ACONITUM (Monkshood)

Bold spikes of hood-shaped flowers, valuable for cutting; very effective in flower borders and shrubberies, thriving anywhere. Do not plant near vegetable gardens. Roots are poisonous.

502 Napellus—2½ ft. July-August. Fine, rich blue flowers. Pkt.....10c

503 Wilsoni—5 ft. September. Violet-blue flowers. Pkt..15c

ACROCLINIUM

An "Everlasting," growing about 15 inches high, bearing white or rosy-pink flowers, which, when cut in the bud state, can be dried and used in winter bouquets. Half-hardy annual.

504 Double Mixed—Pkt.....10c

AGERATUM (Devil's Paint Brush)

A beautiful hardy annual which bears in dense clusters attractive feathery flowers which are very useful for bouquets or decoration. It grows in bush form and is desirable for outdoor bedding and borders, bearing profusely and covered with blooms nearly all summer.

505 Blue Perfection—A splendid dwarf bedding variety, the darkest of all blue ageratum. ¼-oz., 50c. Pkt.....10c

506 Imperial Dwarf White—Height, 10 inches. ¼-oz., 75c. Pkt.....10c

507 Imperial Dwarf Blue—Height, 10 inches. ¼-oz., 75c. Pkt.....10c

AGROSTEMMA (Mullein Pink)

508 Coronaria—Silvery foliage and bright crimson flowers; free-flowering hardy perennial of easy culture; blooms the first season; fine for cutting; 2½ to 3 feet; June to August. Pkt....10c

ALYSSUM

A hardy annual, which is useful for borders, edgings or massing in small beds. It blooms very early and is almost covered with clusters of trusses of small white flowers which are sweet scented having a peculiar, delicate fragrance.

509 Carpet of Snow—The dwarfest of all Alyssums. Of creeping habit, forming a dense carpet of beautiful white flowers. Height, 4 inches. Pkt.....10c

510 Sweet—Height, about 8 to 10 inches but spreading. Oz., 30c. Pkt.....10c

511 Tom Thumb—A splendid sort for edges, borders, or rock work. Height, about 6 inches. A compact mass of bloom 12 to 15 inches across. Oz., 50c. Pkt.....10c

512 Lilac Queen—Is of dwarf, compact habit and the deep lavender-like flowers are borne in profusion. ¼-oz., 25c. Pkt. 10c

PERENNIAL ALYSSUM

513 Saxatile Compactum (Basket of Gold)—Showy, bright yellow flowers, hardy perennials; excellent for rock work; 1 ft. ¼-oz., 40c. Pkt.....10c

AMPELOPSIS VEITCHI

Boston Ivy—See page 60.

ANCHUSA

514 Capensis (Cape Forget-me-not)—A fine free-growing annual variety about 18 inches high with sprays of lovely Forget-me-not blue flowers; blooms all summer. ¼-oz., 25c. Pkt..10c

515 Italica Dropmore Variety—A hardy perennial with Forget-me-not like flowers of rich gentian blue. It blooms in great abundance during the entire season and attains a height of from 3 to 5 ft. ¼-oz., 50c. Pkt.....10c

ANEMONE (Windflower)

516 St. Brigid—A very pleasing perennial, producing large, Irish poppy flowers; few plants compare with them in beauty; fine for bouquets. ¼-oz., 75c. Pkt.....10c

All 10c Packets are 3 Packets for 25c.

ANTHEMIS (Hardy Marguerite)

517 **Kelwayi**—A most satisfactory hardy perennial, bearing all summer daisy-like golden-yellow blossoms; excellent for cutting; 2 ft. Pkt.....10c

ANTIRRHINUM (Snapdragon)

Well known, showy border and bedding plants of long blooming season. The spikes have curious shaped tubular flowers with spreading lobes and finely marked throats. They are fragrant, brilliant colors and most desirable for cutting in addition to being one of the most ornamental bloomers for garden uses grown from seed. Succeed in any good garden soil, growing 1½ to 2 ft. high. If sown early and transplanted will bloom the first season.

TALL GIANT VARIETIES

Bearing large spikes of enormous flowers in many brilliant colors. Our strain is extra choice.

- 518 **Apple Blossom**—A delicate apple blossom pink with a touch of light yellow on the lip. ½-oz., 60c. Pkt.....10c
 519 **Canary Bird**—Canary yellow. ½-oz., 60c. Pkt.....10c
 520 **Indian Summer**—Velvety copper scarlet. ½-oz., 60c. Pkt.....10c
 521 **Old Gold**—Deep golden yellow; ½-oz., 60c. Pkt.....10c
 522 **Snow Flake**—White with light yellow lip. ½-oz., 60c. Pkt.....10c
 523 **The Rose**—Rose pink. ½-oz., 60c. Pkt.....10c
 524 **Finest Mixed**—All colors. ¼-oz., 50c. Pkt.....10c

HALF DWARF VARIETIES

This class of snapdragons attains a height of 18 inches, has a great range of color, and is suitable for bedding.

- 525 **Crimson Queen**—Deep velvety crimson. ½-oz., 40c. Pkt.....10c
 526 **Fascination**—Pale pink tint of yellow on lip. ½-oz., 40c. Pkt.....10c
 527 **Golden Queen**—Bright yellow. ½-oz., 25c. Pkt.....10c
 528 **Philadelphia Pink**—Bright pink. ½-oz., 60c. Pkt.....10c
 529 **Purity**—Glistening pure white. ½-oz., 40c. Pkt.....10c
 530 **Silver Pink**—A very fine shade. ½-oz., 60c. Pkt.....10c
 531 **Finest Mixed**—All colors. ¼-oz., 25c. Pkt.....10c

AQUILEGIA (Columbine)

One of the most pleasing of hardy perennials which is very desirable, easily grown and excellent for borders. It is an old-fashioned perennial, forming large permanent clumps which bloom profusely early in the season and remain in bloom for a considerable period. Flowers are of peculiar shape, pendant, exquisite form, often with long spurs.

- 532—**Mrs. Scott Elliott's Celebrated Strain**—A renowned English strain, which enjoys a world's reputation for the choicest flowers in the greatest possible array of colors. 2 Pkts., 25c ½-oz., \$1.25. Pkt.....15c
 533 **Long Spurred Hybrids**—The most beautiful collection of long spurred Aquilegia which have been wonderfully developed and comprise brilliant and showy flowers from purest white through yellows, pinks, blues, purples and other shades. ¼-oz., 60c. Pkt.....10c

ARABIS (Rock Cress)

534 **Alpina**—A hardy perennial and one of the earliest and prettiest spring flowers. The spreading tufts are covered with a sheet of pure white flowers as soon as the snow disappears. Unequaled for rockeries or edging; withstands the drought and is always neat; 6 inches. ¼-oz., 25c.; Oz., 70c. Pkt.....10c

ARCTOTIS (Blue Eyed African Daisy)

535 **Grandis**—Forms much branched bushes 2 to 3 ft. high; its flowers are large and showy, being pure white on the upper surface, the reverse of petals pale lilac-blue; blooms early in July and continues until hard frost. It delights in a sunny situation. Half-hardy Annual. ¼-oz., 30c. Pkt.....10c

ARMERIA (Sea Pink or Thrift)

Attractive dwarf plants, forming evergreen tufts of bright green foliage, from which innumerable flowers appear in dense heads, on stiff, wiry stems. They flower more or less continuously from early spring until late in the fall. Very useful in the rockery and border edgings.

- 536 **Maritima**—Flowers pale pink, 3 to 6 inches high. Pkt..20c

All 10c Packets are 3 Packets for 25c.

Antirrhinum

AUBRIETIA

(Rock Cress or False Wall Cress)

537 **Leichtlini**—One of the daintiest and most beautiful of all dwarf creeping plants, forming brilliant sheets of rosy lilac in the early spring. Massed on rockeries or in borders with white Arabis and yellow Alyssum, it forms a charming contrast. Hardy perennial. Pkt.....20c

538 **Bougainvillei**—Same as above, only the color of the flowers is dark blue. Pkt.....15c

BALSAM (Touch-Me-Not or Lady's Slipper)

An old-fashioned flower which is generally popular in all gardens. It bears flowers of various shades, white, pink, red, yellow, purple, etc., some of which are beautifully striped and spotted.

- 539 **Double Mixed**—¼-oz., 25c. Pkt.....10c
Balsam Pear or Apple—See page 60.
Bachelors Button—See Centaurea.
Black Eyed Susan—(Thunbergia) See page 60.

BELLIS PERENNIS (English Daisy)

A well known dwarf growing plant which bears massy and very double aster-like flowers. It is very useful for borders or growing for cut flowers. Plants are about 6 inches high and bear in greatest profusion.

- 540 **Giant Red**—Pkt.....15c
 541 **Giant Rose**—Pkt.....15c
 542 **Giant White**—Pkt.....15c
 543 **Double Mixed**—Large, double flowers, various shades, pink, red, white and other colors. ¼-oz., 75c. Pkt.....15c

BROWALLIA

A free blooming plant producing masses of bright blue flowers which continue in bloom during the summer and autumn. Grows about 6 to 8 inches high. Annual.

- 544 **Mixed**—Various shades of blue. Pkt.....10c

ASTERS

One of the most satisfactory of all annuals and unsurpassed for bedding, cutting and decoration. Asters are in many and diversified sorts, comprising various sizes, colors and forms. They bloom usually in mid-summer at a time when good cutting flowers are scarce. Plants are of vigorous growth and hardy, sometimes standing slight frost without serious injury. We recommend that various sorts be sown for blooming at different seasons. They can be easily grown without the assistance of hot bed. For earliest blooming, seed should be started in boxes or hot beds or little later they can be sown in beds in the open and transplanted where they are to bloom, allowing from one to one and a half feet between plants. Sheep manure will give good results on Asters and should be mixed with the soil before the plants are set out. We do not recommend Asters to be planted in the same soil two seasons as sometimes they suffer from disease on this account.

Our strain comprises the best of classes and of most select stocks. We advise sowings of earliest as well as late sorts for a succession of bloom.

Diseases—Bacteria and Fungi, popularly known as blights, rots, wilts and damping off. Treat seed with Semesan before sowing, also dust the rows with Semesan when the plants are set in the open ground. For further information and prices on Semesan, see page 82.

Insect Remedies—For the black bug which sometimes eats the flowers, spray with Evergreen, see page 80.

CALIFORNIA GIANTS

A Novelty of Merit

A new variety of the Crego type, with the robust habit of growth and long stems of the Beauty type. The flowers are much larger and more substantial than the Improved Crego. They measure 5 to 6 inches in diameter and stand up well when shipped as cut flowers. Their immense size and beauty, as well as their long and sturdy stems make them very attractive.

545	White— $\frac{1}{8}$ -oz., 50c.	Pkt.....	20c
546	Peach Blossom— $\frac{1}{8}$ -oz., 50c.	Pkt.....	20c
547	Light Blue— $\frac{1}{8}$ -oz., 50c.	Pkt.....	20c
548	Deep Rose— $\frac{1}{8}$ -oz., 50c.	Pkt.....	20c
549	Dark Purple— $\frac{1}{8}$ -oz., 50c.	Pkt.....	20c
550	Mixed Colors— $\frac{1}{4}$ -oz., 80c.	Pkt.....	20c
551	Collection, one pkt. each, above 5 colors, 80c.		

ROYAL ASTERS

The Royal Asters are of comparatively recent introduction. They represent a most valuable branching type, blooming during midseason. The flowers come in after the Queen of the Markets have passed and for many weeks are the main type of Asters found in the cut-flower markets. It is their long blooming season and excellent habit which has given them this foremost place.

The blooms are borne abundantly on long, strong stems. The habit of the plants assures them a place in the home garden, where they are wanted for beds or borders. The bushes grow 2 feet tall and branch freely near the ground, so that all the flowers can be cut with long stems.

552	Lavender— $\frac{1}{4}$ -oz., 55c.	Pkt.....	10c
553	Purple— $\frac{1}{4}$ -oz., 55c.	Pkt.....	10c
554	Lavender Pink— $\frac{1}{4}$ -oz., 55c.	Pkt.....	10c
555	Deep Rose— $\frac{1}{4}$ -oz., 55c.	Pkt.....	10c
556	Shell Pink— $\frac{1}{4}$ -oz., 55c.	Pkt.....	10c
557	White— $\frac{1}{4}$ -oz., 55c.	Pkt.....	10c
558	Finest Mixed— $\frac{1}{4}$ -oz., 40c.	Pkt.....	10c
559	Royal Collection—One pkt. each of the above 6 varieties.....		50c

EXTRA EARLY EXPRESS

These are the earliest blooming Asters. Flowers large and full, of the Comet type.

560	Mixed Colors— $\frac{1}{4}$ -oz., 55c.	Pkt.....	10c
-----	--	----------	-----

Sunshine Aster

THE SUNSHINE ASTER

Improved Anemone Flowered

A new semi-double type, introduced in England several years ago, but greatly improved by additional color selection. A most attractive variety. The plants are sturdy and strong, throwing up long flower stalks, making wonderful cut flowers. Some of the flowers have twisted petals and some have quilled petals; all have a cushion center of tiny quills of a contrasting color which makes a flower look as if it was covered with snowflakes. The blue flowers are dotted with a paler blue and some in white, and the rose in a lighter shade of pink or white. Their delicate beauty is hard to describe. A wonderful cut flower variety, borne on long, stiff stems, and the flowers last a long time after cutting. See illustration.

561	Blue—Pkt.....	25c
562	Lilac—Pkt.....	25c
563	Pink—Pkt.....	25c
564	White—Pkt.....	25c
565	Finest Mixed— $\frac{1}{8}$ -oz., 60c.	Pkt..... 25c

SINGLE GIANTS OF CALIFORNIA

A new single type Aster developed out of the Double Giants of California type. The flowers are large, measuring three to four inches across, with stems 18 to 24 inches in length. The petal has a slight twist, which adds a piquant touch to its beauty. The white blossoms resemble Shasta Daisies in appearance, but their greater length of stem makes them more graceful and better adapted to florists' use. In the garden, they add a charming note of simplicity among the fuller types of Asters.

566	White—Pkt.....	25c
567	Rose—Pkt.....	25c
568	Light Blue—Pkt.....	25c
569	Purple—Pkt.....	25c
570	Lilac—Pkt.....	25c
571	Delicate Flesh—Pkt.....	25c
572	Superb Mixed—Pkt.....	25c
573	Collection, one pkt. each, above 6 colors, \$1.25.	

QUEEN OF THE MARKET

These well-known, early flowering Asters are of a branching habit, about 18 inches high, coming into bloom directly after the Early Express, and are one of the most useful types for early market purposes.

574	Mixed Colors—Comprising all shades blended in splendid proportions. $\frac{1}{4}$ -oz., 35c.	Pkt..... 10c
-----	--	--------------

HARDY PERENNIAL ASTERS

575 Mixed—(Michaelmas Daisies). Single fall flowering hardy herbaceous plants, thriving in any good garden soil. If sown early they will flower the first season. 3 feet. $\frac{1}{8}$ -oz., 70c. Pkt..... 15c

Coreopsis Lanceolata Grandiflora

CANTERBURY BELLS (Campanula)

A hardy, herbaceous biennial, of branching growth which blooms profusely. It is excellent for beds and backgrounds, producing long racemes of bell or saucer shaped flowers of rich colors which are very effective and valuable for cutting.

Seed can be started early indoors, or sown in the fall. Height, 2 to 4 ft.

586 Calycanthema (Cup and Saucer)—Large single flowers; white, lilac, rose and purple. One of the best sorts. $\frac{1}{4}$ -oz., 50c. Pkt.....10c

Cardinal Climber—See page 60.

Canary Bird Flower—See page 60.

CANDYTUFT

Hardy annuals growing 12 to 15 inches high, of branching habit and producing in profusion large clusters of flowers which are splendid for cutting. They are excellent for borders or to plant in masses; also can be used for rockeries.

587 Giant Hyacinth-Flowered or Improved Empress—A wonderfully improved strain of the popular Empress Candytuft, forming much branched plants about 18 inches high. Makes a very effective white bed or border and is invaluable for cutting. Oz.....40c

588 Rose Cardinal—Bright carmine rose. $\frac{1}{4}$ -oz., 25c. Pkt.10c

589 Flesh Pink—Light pink. $\frac{1}{4}$ -oz., 25c. Pkt.....10c

590 Crimson—Rich deep shade. Pkt.....10c

591 Lavender—Delicate shade of rosy-lavender. Pkt..10c

592 Finest Mixed—Comprising all colors and shades. Oz., 25c. Pkt.....10c

Perennial Candytuft—See Iberis, page 51.

CARNATIONS

593 Marguerite—A very early blooming sort which sometimes blooms in four months from sowing. Flowers are large, double, deeply fringed, very fragrant. Plants semi-dwarf, good for bedding and desirable for cutting. Annual. Finest mixed colors. Pkt.....10c

594 Hardy Border Double Mixed—A good hardy strain for outdoor culture, flowering the second season and producing a mass of flowers in a great variety of colors; 2 ft. Pkt..15c

CALENDULA (Pot Marigold)

A hardy annual, which will grow and succeed in almost any garden. It produces a brilliant effect in beds and borders, being extremely free blooming and commencing early and continuing in greatest profusion until frost.

576 The Ball—Bright orange flowers, very large with long stems uniformly double. A great favorite on the cut-flower market. $\frac{1}{4}$ -oz., 50c. Pkt.....15c

577 Orange King—A beautiful rich orange. Full double flowers, borne abundantly throughout the season. Oz., 25c. Pkt.....10c

578 Lemon Queen—Beautifully imbricated, very large, double flowers. Petals light yellow, delicately edged with orange. Desirable for beds, borders and back-ground. Height, 2 ft. Oz., 25c. Pkt.....10c

579 Prince of Orange—A very distinct variety, has large, double, golden yellow flowers. Petals shaded, dark orange. Produces in great abundance. Grows about 1 ft. high. Valuable for borders and edgings. Oz., 25c. Pkt.....10c

CALLIOPSIS OR COREOPSIS**ANNUAL SORTS**

One of the best annuals for beds or borders, producing attractive and graceful flowers on long stems which are most effective and artistic for decoration. They commence blooming early and continue in profusion until early fall. Seeds are usually sown outdoors where they are to bloom but they can be sown inside and transplanted if desired.

580 Golden Wave—Bright golden yellow flowers with dark centers. Oz., 40c. Pkt.....10c

581 Tinctoria—Brilliantly colored flowers with large dark centers. Outer petals vary from clear yellow to brown, the dark colors predominating. Height, 2 to 3 ft. Oz., 40c. Pkt.....10c

582 Mixed—A splendid mixture comprising many varieties and a great range of colors. Oz., 35c. Pkt.....10c

PERENNIAL

583 Lanceolata Grandiflora—A hardy perennial blooming the first year from seed and producing on very long stems a constant succession of rich, bright yellow flowers, 2 to 3 inches across. Highly desirable and ornamental for borders or beds and exceedingly valuable for cutting and decorating purposes. Can also be sown in the fall outdoors. Oz., 60c. Pkt.....10c

584 Lanceolata Grandiflora Fl. Pl. (Double Flowering Coreopsis.) This new double and semi-double form is just as easy to grow as the single and the extra petalage adds a further charm to the flower. $\frac{1}{4}$ -oz., 50c. Pkt.....15c

CANNA

585 Crozy's Hybrids—Saved from a brilliant collection of best blooming sorts and comprising many varieties and shades of colors. Oz., 40c. Pkt.....10c

Canna Roots—See Summer Flowering Bulbs.

Giant Hyacinth Flowered or Improved Empress

All 10c Packets are 3 Packets for 25c.

CELOSIA OR COXCOMB

An extremely ornamental summer bedding plant, bearing large comb-like purplish red heads. Seed can be started in boxes and transplanted or sown later in open ground. Half hardy annual.

595 **Glasgow Prize**—Dwarf growing and bearing immense deep purplish red combs; foliage dark but not abundant. Pkt. 10c

596 **Chinese Wool Flower**—Plants grow 2 to 3 ft. high, branching freely, each branch terminating with a large roundish head like a ball of wool or chenille of a rich, bright scarlet color. They bloom early and continue until frost, retaining their rich color. Pkt. 10c

CENTAUREAS

Under this name is included such popular annuals as the Cornflower, Sweet Sultans, etc. They are favorites in all sections of the country, are perfectly hardy, will grow and do well almost everywhere, and are much in demand as cut flowers.

DOUBLE CORNFLOWERS (Centaurea Cyanus)

These are also known as Bachelor's Buttons, Blue Bottle, Ragged Sailor, Bluet and sometimes as Ragged Robin, but which name belongs to one of the Lychnis and frequently results in confusion. It is always best to order by the botanical names. They are well known to every flower lover and always included in old-fashioned gardens. We have discarded the old single-flowering type, the improved double-flowering sorts offered below being much better in every way.

- 597 Double Blue—Oz., 50c. Pkt. 10c
- 598 Double Pink—Oz., 50c. Pkt. 10c
- 599 Double White—Oz., 50c. Pkt. 10c
- 600 Double Mixed—Oz., 40c. Pkt. 10c

CENTAUREA IMPERIALIS (Royal Sweet Sultans)

This beautiful class is undoubtedly the finest of all Sweet Sultans for cut-flower purposes. The charming, sweet-scented, artistic-shaped flowers are borne on long, strong stems and when cut will stand for several days in good condition.

- 601 Brilliant Rose—¼-oz., 25c. Pkt. 10c
- 602 Delicate Lavender—¼-oz., 25c. Pkt. 10c
- 603 Pure White—¼-oz., 25c. Pkt. 10c
- 604 Purple—¼-oz., 25c. Pkt. 10c
- 605 Amaranthus Red—¼-oz., 25c. Pkt. 10c
- 606 Superb Mixed—¼-oz., 20c. Pkt. 10c
- 607 Collection, one pkt. each of the above 5 colors. 40c
- 608 Montana (Perennial Cornflower)—Hardy perennial variety, grows 2 ft. high, bearing large violet-blue flowers from July to September. ¼-oz., 40c. Pkt. 10c

CHEIRANTHUS

Very pretty dwarf hardy biennial plants, usually handled as annuals, flowering freely through the summer from seed sown in spring; for early spring flowering, sow in late summer. Splendid for rockery.

- 609 Allioni (Siberian Wallflower)—About 12 inches high with heads of brilliant orange flowers. Pkt. 10c

CHRYSANTHEMUM

The annual Chrysanthemums bear little resemblance to the perennial or fall blooming varieties and have a beauty and attractiveness all their own. They are valuable border plants excellent for cutting and comprise many brilliant shades. Bloom very early and will become more bushy if pinched back in early growth.

ANNUAL VARIETIES

- 610 Bridal Robe (Double)—The plants grow about 12 inches high, and are covered the entire summer with their beautiful snow-white double flowers. Pkt. 10c

COSMOS

A hardy annual, which is one of the most beautiful and effective of autumn flowering plants and bears in greatest profusion large flowers having a single row of long petals around yellow centers. Colors vary from purest white through various shades of pink and crimson. Some of them attain large size, being 3½ to 4 inches in diameter. Plants grow 4 to 7 feet high, have finely cut foliage which is very ornamental and form excellent backgrounds in beds. Flowers are borne on long slender stems and are excellent for cutting and decoration.

Giant Flowered Cosmos—These produce enormous sized flowers, rich and varied colors, and is one of the best strains for show Cosmos.

- 611 Giant White—¼-oz., 25c. Pkt. 10c
- 612 Giant Crimson—¼-oz., 25c. Pkt. 10c
- 613 Pink Lady Lenox—A beautiful shade of shell pink, early blooming and very large flowers. ¼-oz., 25c. Pkt. 10c
- 614 Giant Mixed—Comprises all shades. ¼-oz., 20c. Pkt. 10c
- Cosmos. Early Flowered**—These attain a height of about 4 ft. and bloom very profusely. They are 4 to 6 weeks earlier than the Giant sorts or old-fashioned varieties. Flowers are not so large but as they bloom earlier are particularly adapted for late sowing or in northern latitudes where the season is short.
- 615 Early Flowered White—¼-oz., 25c. Pkt. 10c
- 616 Early Flowered Crimson—¼-oz., 25c. Pkt. 10c
- 617 Early Flowered Pink—¼-oz., 25c. Pkt. 10c
- 618 Early Flowered Mixed—A choice mixture. ¼-oz., 20c. Pkt. 10c

DOUBLE COSMOS

These are of recent introduction, are becoming more popular each season. Excellent for cutting.

- 619 Pink Beauty—Pkt. 10c
- 620 Crimson King—Pkt. 10c
- 621 White Queen—Pkt. 10c
- 622 Superb Mixed—Pkt. 10c

CLARKIA

This pretty and easily grown annual has been much improved in recent years, and the mixture offered below is now seen as cut flowers in most of the large cities of Europe; they do well either in sun or shade, growing 2 to 2½ feet high, with leafy racemes of double flowers, which all open in water when cut.

- 623 Elegans Double Mixed—A fine mixture containing all the colors. ¼-oz., 25c. Pkt. 10c

COLEUS

An ornamental tender perennial, with varied colored leaves, which is largely used for bedding and very attractive in vases. The leaves are in many shapes and shades of colors, green, yellow, orange, red and brown, most of them margined veined and striped and comprise a magnificent array of brilliancy.

- 624 Finest Mixed Colors—Pkt. 20c
- Columbine—See Aquilegia.
- Coneflower—See Rudbeckia.

CYCLAMEN

- 625 Persicum Giganteum Mixed—One of the finest strains of large flowered English Cyclamen which comprises the best shades and colors, varying through the various shades of white, pink, crimson and dark red. Pkt. 35c

Cypress Vine—See page 60.

DAHLIA

A popular autumn flowering plant which will bloom the first season from seed if started early. Dahlias are well known and hardly need description. They are very free flowering and bulbs can be lifted in the fall and saved through to the following spring if kept in a place where they will not freeze. Many sports and new varieties are obtained from seed and they can be sown early in the house or greenhouse and transplanted when large enough to pots and set in the open ground when the weather has become settled and warm. Tender herbaceous perennials, 3 to 4 ft. high.

- 626 Cactus, Flowered—Collected from named varieties. 3 pkts., 50c. Pkt. 20c
 - 627 Decorative, Flowered—Collected from named varieties. 3 pkts., 50c. Pkt. 20c
 - 628 Peony, Flowered—Collected from named varieties. 3 pkts., 50c. Pkt. 20c
 - 629 Double Flowered—Collected from named varieties. Pkt. 10c
- (For Dahlia Roots—See Summer Flowering Bulbs.)

Cosmos

DELPHINIUM (Perennial Larkspur)**THE OUTSTANDING BLUE FLOWER FOR THE GARDEN**

Very beautiful hardy plants grown in borders for their stately habit and the handsome spikes of flowers of every imaginable shade of blue. Excellent for cutting, producing a succession of flowers from spring to early autumn, especially if the spikes which have finished flowering be cut down near the ground, fresh growth will then be produced which will bloom. Seed can be sown early indoors and transplanted or in open border where they are to bloom, afterwards thinning to 1½ to 2 feet apart or seed can be sown in August and September where they are to bloom and thinned out the next spring. Height, 3 to 5 ft.

631. Wrexham Hybrids (Hollyhock Strain)—New. These gorgeous new Delphiniums were originated by Mr. Watkin Samuel of Wrexham, England, and first shown by him at the London flower exhibitions where they took the flower lovers as well as the experienced growers by surprise so massive and effective were they. Visitors continually exclaimed: "Why, they are like Hollyhocks!"

The strain is conspicuous for its broad-based tall spikes, carrying largest individual flowers that run largely to the rich deep shades, much prized by experienced growers. Pkt.....40c

632 Blackmore & Langdon's Hybrids—This collection of Delphiniums is one of the finest in England. The seed we offer is saved from their choicest varieties. Mixed colors, ½-oz., \$1.00. 3 pkts., 50c. Pkt.....25c

633 Vanderbilt Hybrids—A Californian novelty of charming beauty. Immense flower stalks with great heads of bloom tapering to the tip. Nearly all flowers open at once and exhibit the greatest combination of colors known. Pkt.....25c

634 Belladonna—This is the freest and most continuous blooming Hardy Larkspur. The clear turquoise blue of its flowers is not equalled for delicacy and beauty. ½-oz., 75c. 2 pkts., 25c. Pkt.....15c

635 Bellamosum—This is a rich, deep blue form of the popular light blue Belladonna, having the same free-blooming and other good qualities. ½-oz., \$1.00. 3 pkts., 50c. Pkt..20c

(See also Annual Larkspur)

DAISY

English—See *Bellis Perennis*.

Orange River—See *Dimorphotheca*.

Shasta—See *Shasta Daisy*.

African—See *Arctotis*.

Dianthus—Various Sorts

Delphinium Blackmore and Langdon's Hybrids

DIANTHUS (Pinks)

Many beautiful and profitable flowers are comprised under this heading, such as Carnations, Sweet William, etc., but the varieties we offer below are mostly hardy annuals. They are old-fashioned favorites, blooming profusely and suitable for bedding borders and cutting. Stems are of good length and strong; colors are brilliant and often sweet scented. Grow about 1 ft. high.

636 Hedewiggi (Single Japan Pink)—A splendid mixture of single flowers of brilliant shades, brilliantly marked. Plants dwarf and very free flowering. Pkt.....10c

637 Hedewiggi, Fl. Pl. (Double Japan Pink)—Very double with deep fringed petals. Colors vary from white to rose, lilac, carmine, crimson, scarlet, purple, brown and almost black, spotted and striped. Pkt.....10c

HARDY PERENNIAL PINKS

638 Dianthus Alwoodi (New) Superb Mixed—Pkt.. 25 seeds.....50c

For complete description, see page 43.

639 Plumarius (Pheasant's Eye Pink)—A semi-double hardy variety clove scented. Flowers bluish white shaded with deep crimson and maroon. ¼-oz., 25c. Pkt.....10c

DIDISCUS (Lace Plant)

This valuable flower deserves large cultivation for florist use. Flowers in clusters, borne on long, stout stems. General appearance not unlike lace and is often referred to as "Lace Plant." Plants about 18 inches high. Annual.

640 Coeruleus—Light blue. ¼-oz., 50c. Pkt.....10c

DIMORPHOTHECA AURANTIACA**(Orange River Daisy)**

A showy hardy annual bearing large bright orange yellow flowers, 2 to 2½ inches across. Plants grow 1 to 1½ ft. in height. Its daisy-like flowers are produced on long stems. They are of brilliant orange color with black center and surrounded by a dark colored disk. It is well adapted for summer flowering in beds or borders. Seed can be sown in open ground in rows 1 to 1½ ft. apart, thinning out to 10 or 12 inches apart.

641 Choice Mixed Hybrids—Pkt.....10c

All 10c Packets are 3 Packets for 25c.

DIGITALIS (Foxglove)

Handsome and highly ornamental hardy plants of stately growth, succeeding under almost all conditions, and with but little attention will give a wealth of flowers during June and July. They are now used extensively with good effect for naturalizing in shrubberies, the edge of woods and other half shady places. 3 to 5 feet.

644 Shirley Strain—A strain of giant Foxglove raised by the late Rev. W. Wilks. The plants attain a height of 5 to 7 ft., with spikes 3 to 4 ft. long carrying flowers of giant size, ranging in color from white to dark rose and handsomely blotched and spotted cream, maroon and chocolate. A very fine, hardy perennial border plant. 1/8-oz., 40c. Pkt.....15c

Gloxiniaeflora—This is a fine strain of the ordinary Foxglove *D. purpurea*, with handsome spotted Gloxinia-like flowers on long spikes.

645 White—1/8-oz., 25c. Pkt.....10c

646 Purple—1/8-oz., 25c. Pkt.....10c

647 Rose—1/8-oz., 25c. Pkt.....10c

648 Mixed—1/8-oz., 25c. Pkt.....10c

ESCHSCHOLTZIA (California Poppy)

Very attractive hardy annuals growing about 1 ft. high which bear large single flowers on fairly long stems which are excellent for cutting. They bloom over a long season and a bed in full flower is very gorgeous. Foliage is finely cut, has bluish tinge of bloom delicate and attractive. Flowers are more or less saucer shape, various shades of yellow, orange and orange crimson.

649 Scarlet Beauty—Deep scarlet. Pkt.....10c

650 Golden West—A very large, bright yellow sort with deep orange at the base of petals. Pkt.....10c

651 Mixed—An excellent mixture including yellows, creamy white, scarlet, orange and crimson shades. Oz., 30c. Pkt....10c

EUPHORBIA

Hardy annual growing about 2 feet high.

652 Variegata (Snow on the Mountain)—Leaves veined and margined with white. Pkt.....10c

EVERLASTING FLOWERS

See *Acroclinium*, *Gomphrena*, *Helichrysum*, *Xeranthemum*.

FEVERFEW (*Matricaria*)

653 Double White—Hardy annual, free flowering. For bedding or pot culture. Showy double white flowers. 18 inches. Pkt.....10c

FOUR O'CLOCK (*Marvel of Peru*)

Old-fashioned flowers which are borne on erect, bushy plants, 2 to 3 ft. high. Flowers are large tube shaped, opening in the afternoon and remaining open all night, and close again in the morning. Very desirable for borders and backgrounds for lower growing plants. Hardy annual.

654 Mixed—Comprises all shades. Oz., 25c. Pkt.....10c

Gaillardia Lorenziana

Eschscholtzia Californica

Forget-Me-Not—See *Myosotis*.

Foxglove—See *Digitalis*.

GAILLARDIA

ANNUAL VARIETIES

A splendid class of showy bedding or border plants which produce in greatest profusion daisy-like flowers 2 to 2 1/2 inches across, comprising mostly yellow and red shades. Blooms are borne on long stems well above the foliage and are excellent for cutting. Single varieties somewhat resemble in shape miniature sunflowers, while the double form dense heads. Height, 1 to 1 1/2 ft.

655 Lorenziana Picta—Gaily colored flowers which are double, and have tubular petals. They bloom profusely from July until frost; splendid for cutting. Colors: yellow, orange, wine and claret. Plants grow 1 to 1 1/2 ft. in height and will usually bloom the full season. Pkt.....10c

HARDY PERENNIAL VARIETY

656 Portola Hybrids (New)—Pkt.....25c

For complete description, see page 43.

657 JMC Hybrids (Grandiflora)—A beautiful hardy perennial blooming the first season from seed. Flowers often 3 inches across with flat petals and comprising mostly orange and scarlet shades. 1/4-oz., 25c. Pkt.....10c

GERANIUM (*Pelargonium*)

The heads of gorgeous flowers, of many shades of color, borne continuously, render this one of the most popular plants grown, either for pot culture in winter or for bedding out in summer. Tender perennial.

658 Single Large Flowering—Mixed. Pkt.....10c

GEUM

Geums have become indispensable border plants. The sorts named below bloom from early summer till late autumn, and the flowers, both for their purity of color and graceful poise, are much prized for cutting. Hardy perennial.

659 Double, Mrs. Bradshaw—The orange-scarlet flowers are very large and full, comes quite true from seed and blooms the first year. This is a great advance over any other Geum seedling. Height, 18 inches. Pkt.....15c

660 Double, Lady Stratheden—Fine rich golden-yellow flowers, which match in other respects the popular scarlet variety, Mrs. Bradshaw, and will become as general a favorite. Height, 18 inches. Pkt.....15c

GLOBE AMARANTH (*Gomphrena*)

Popularly known as "Bachelor's Button." A high class bedding plant; the flowers resemble clover heads and can be dried and used in winter bouquets. Cornflowers and a number of other flowers are also known as Bachelor's Buttons and in ordering it is well to order by number to prevent mistakes.

661 Mixed—2 feet. Pkt.....10c

GYPSOPHILA (Baby's Breath)

Pretty free-flowering plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut flowers.

662 *Elegans Alba* (True Covent Garden Strain)—This is an improved large flowering, pure white form of the annual Baby's Breath. Half-hardy annual. Oz., 30c. Pkt.....10c

663 *Elegans Delicate Pink*—A pretty blush pink form of the above and equally as valuable for cutting. Oz., 40c. Pkt...10c

HARDY PERENNIAL

664 *Paniculata*—White flowers, fine for bouquets; blooms first year if sown early. Hardy perennial. Oz., 60c. Pk...10c

665 *Repens*—A pretty dwarf trailing species for the rockery. It has pinkish white flowers, and is a continuous bloomer. Hardy perennial. $\frac{1}{8}$ -oz., 60c. Pkt.....15c

HELICHRYSUM (Straw Flower)

A hardy annual of the easiest culture; one of our best "Everlasting" flowers, the dried double bloom being very handsome in winter bouquets. 2 feet.

666 Mixed— $\frac{1}{4}$ -oz., 25c. Pkt.....10c

HELIOTROPE

667 *Large Flowered Hybrids*—A mammoth flowering variety having enormous quantities of flowers and trusses sometimes measuring 10 to 12 inches across. Very fragrant. Colors vary from pure white through the various shades of blue and purple to indigo. 2 pkts., 25c. Pkt.....15c

HIBISCUS (Rose Mallow or Marsh Mallow)

Free blooming and desirable plants, 2 to 5 ft; producing flowers of great size, brilliancy and beauty, often 10 inches across.

668 *Giant Flowering Mixed*—Showy, ornamental shrub, growing to a large size and blooming the first year from spring-sown seed. Hardy as an oak and will thrive in any soil. The flowers often measuring 8 to 10 inches across, are gorgeous in colors, and bloom in great profusion from late July to frost. Mixed colors. Pkt.....10c

HOLLYHOCK

Upright and hardy perennials which are well-known. They are largely used as a background for other plants or as a screen, attaining a height usually of 5 ft. The rich double blossoms range from deep yellow, white, pink, red, purple, etc., are very attractive.

The seed we offer produces the best double blooms resembling rosettes. Hollyhocks can be sown in open border, transplanting when the plants are large enough to a permanent position, setting $1\frac{1}{2}$ to 2 ft. apart. They bloom the second season. Seed can also be sown in August.

669 *Exquisite New*—Pkt.....25c
For complete description, see page 43.

670 *Double White*—An improved strain producing perfect double flowers. $\frac{1}{4}$ -oz., 75c. Pkt.....10c

671 *Newport Pink*—It is the finest pure pink, flowers very double. $\frac{1}{4}$ -oz., 75c. Pkt.....10c

672 *Double Scarlet*—Very brilliant. $\frac{1}{4}$ -oz., 75c. Pkt....10c

673 *Double Yellow*—A bright lemon color. $\frac{1}{4}$ -oz., 75c. Pkt.....10c

674 *Double Mixed*—Comprises all shades. $\frac{1}{4}$ -oz., 50c. Pkt.....10c

675 *Allegheny*—Flowers are distinct, having edges of the petals finely fringed. They are large size, come fairly double, and are usually valuable on account of the fringed appearance of the petals. Our strain comprises a good range of soft rich colors. $\frac{1}{4}$ -oz., 40c. Pkt.....10c

676—*Single Hollyhocks*—Mixed. $\frac{1}{4}$ -oz., 25c. Pkt.....10c

Ice Plant—See page 60.

HONESTY (*Lunaria*)

677 *Biennis Alba*—Hardy biennial admired for its silvery seed pods which are used for ornamental purposes; beautiful and curious, 2 ft. Pkt.....10c

IBERIS (Hardy Candytuft)

A low evergreen, shrubby plant. Very valuable for dry, sunny places. Effective in clumps, drooping over rocks or edging the border. Easily raised from seed. Hardy perennial.

678 *Sempervirens*—A profuse, white blooming, hardy perennial, coming in flower early in the spring. 1 ft. $\frac{1}{8}$ -oz., 60c. Pkt.....10c

679 *Gibraltarica*—Large flowers, lilac, shading to white. $\frac{1}{8}$ -oz., 40c. Pkt.....10c

JOB'S TEARS

680 Broad, corn-like leaves and hard, shiny seeds, which are sometimes strung and worn like neck beads. Annual. 2 ft. Oz., 15c. Pkt.....10c

KOCHIA—Trichophylla (Mexican Fire Bush)

(Also called Burning Bush and Summer Cypress)

681 A quick growing foliage or hedge plant which forms symmetrical globe shaped plants about 3 ft. high. The foliage is cypress-like in appearance being finely cut, clean green color. Early in the fall it is covered with innumerable little flowers which cause the plant to take on a reddish tinge—hence, the name Fire Bush. Seed can be started early indoors and transplanted, or sown in open border and transplanted or thinned out. Annual. Pkt.....10c

LANTANA

A pleasing class of bedding plants which grow somewhat in shrub form and produce in late summer or autumn an abundance of Heliotrope like clusters of single flowers which change in color. Afterwards green berries are borne which turn deep blue. Height, 2 ft.

682 *Finest Mixed Varieties*—Pkt.....10c

Hollyhock

LARKSPUR—Annual

TALL DOUBLE STOCK FLOWERED

Plants branch freely, bearing long spikes of beautiful double flowers. Height, 2½ ft.

- 684 **Exquisite**—New. ¼-oz., 50c. Soft Rose Pink. Pkt..10c
- 685 **Dark Blue**—¼-oz., 25c. Pkt.....10c
- 686 **Light Blue**—¼-oz., 25c. Pkt.....10c
- 687 **White**—¼-oz., 25c. Pkt.....10c
- 688 **Finest Mixed**—¼-oz., 25c. Pkt.....10c

LATHYRUS LATIFOLIUS

(Everlasting, or Hardy Sweet Pea)

Showy, free-flowering hardy perennial climbers for covering old stumps, fences, etc., continually in bloom; fine for cutting.

- 689 **White Pearl**—The finest white. Pkt.....10c
- 690 **Pink Beauty**—Rosy pink. Pkt.....10c
- 691 **Mixed**—All colors. Pkt.....10c

LAVENDER (Lavandula Vera)

Well-known, sweet-scented, hardy perennials; should be extensively grown in the mixed border; 3 ft. ¼-oz., 25c. Pkt.10c

LIATRIS (Blazing Star)

693 **Scariosa**—Spikes of deep purple flowers; 3 to 4 ft. August, September. Hardy perennial. Pkt.....15c

LILIUM REGALE

694 **The Regal Lily**—It is absolutely hardy, and is excellent for forcing. The flowers are white, slightly suffused with pink, with a beautiful shade of canary-yellow at the center, and extending part way up the trumpet. It is delightfully perfumed, reminding one of the jasmine, and lacking the heavy, oppressive odor of most lilies. Blooms out-of-doors early in July, and seedling bulbs will flower the second year. Lift the bulblets in fall and replant to greater depth in their permanent location. Pkt.25c

LINUM (Flax)

- 695 **Grandiflorum Rubrum (Scarlet Flax)**—One of the most effective and showy bedding plants, of long duration, having fine foliage and delicate stems, with brilliant scarlet-crimson flowers. Hardy annual. 1 ft. Pkt.....10c
- 696 **Perenne**—Bright blue flowers. Hardy perennial. 18 inches. Pkt.....10c

LOBELIA

697 **Chrystal Palace**—Pkt.....10c

LUPINUS (Polyphyllus)

Most beautiful hardy border plants producing tufts of soft green foliage, from which arise in continuous succession the stately spikes of bloom. Do not disturb plants after they are once established. June-September.

- 698 **Blue**—Pkt.....10c
- 699 **White**—Pkt.....10c
- 700 **Pink**—Pkt.....15c
- 701 **Superb Mixed**—Pkt.....10c
- 702 **Downer's Hybrids**—Perpetual flowering new hybrids. Pkt.....25c

LUPINUS (Annual)

703 **Tall Mixed**—All colors. Pkt.....10c

LYCHNIS

A fine old-fashioned flower, bearing large heads of brilliantly colored flowers, that liven up the border during summer and early autumn.

- 704 **Arkwrighti**—An abundance of large flowers in brilliant colors, varying from orange-scarlet to soft salmon pink. Pkt..25c
- 705 **Viscaria Splendens**—Brilliant red. Pkt.....10c

MARIGOLD

A very popular old-fashioned garden annual which is remarkable for its brilliant display of yellow and orange flowers which are borne in greatest profusion from early summer till frost. The African varieties are tall, usually 2 to 3 ft. high and well adapted for large beds, backgrounds or mixed borders. The French are more dwarf and can be used for borders and bedding. All varieties have finely cut, bright green foliage.

AFRICAN VARIETIES

- 706 **Prince or Orange**—Flowers about 3 inches in diameter imbricated and extremely double, in tints of primrose, orange and gold. Grows 2 to 3 ft. high. ¼-oz., 25c. Pkt.....10c
- 707 **Lemon Queen**—Profuse bloomers, one of the best of the class. Desirable for shrubbery or mixed borders. ¼-oz., 25c. Pkt.....10c
- 708 **African Double Mixed**—Comprises various shades and well adapted for large beds or mixed borders. ¼-oz., 20c. Pkt.....10c

FRENCH VARIETIES

- 709 **French Double Mixed**—Comprising all shades of yellow, orange, brown, striped, etc. Very double. Height. 1 ft. to 18 inches. ¼-oz., 25c. Pkt.....10c
- 710 **Legion of Honor (Little Brownie)**—A single flowering Marigold, forming compact bushes 9 inches high. Begins flowering early, commencing in June, continuing until frost. The flowers are golden yellow, marked with a large spot of velvety crimson at the base of each petal. ¼-oz., 25c. Pkt.....10c

Morning Glory—See page 60.
Moon Vine—See page 60

African Marigold

MIGNONETTE

A popular hardy annual producing dense, cone shaped spikes made up of thickly set flowers, yellow, orange, red, etc.

711 **Allen's Defiance**—An excellent variety for cutting. $\frac{1}{4}$ -oz., 30c. Pkt.....10c

MYOSOTIS (Forget-Me-Not)

Few spring flowers are more admired than the lovely Forget-Me-Nots, which are especially effective when grown in masses. Perennials and hardy if given slight protection through the winter. Seed may be sown any time from spring till mid-summer. The *Alpestris* variety comes into bloom in April, and are largely used for bedding or borders in connection with spring flowering bulbs, Pansies, etc. The *Palustris* sorts do not bloom till May, but continue till fall.

712 **Alpestris Victoria**—Dwarf bushy plants bearing a profusion of large azure-blue flowers. Attains a height of 5 to 7 inches and continues in full beauty for a long period. $\frac{1}{4}$ -oz., 60c. Pkt.....10c

713 **Dissitiflora**—Large-flowered early strain. The most valuable to form a groundwork for spring bulbs. Deep blue. Height, 9 inches. $\frac{1}{8}$ -oz., 65c. Pkt.....15c

714 **Palustris Semperflorens**—An ever-blooming variety, beginning to flower in May and continuing till autumn. Large, clear, blue flowers in pretty spray. $\frac{1}{4}$ -oz., 75c. Pkt.....10c

NASTURTIUM

One of the most popular of tender annuals which is valuable alike for bedding, borders and cutting. Few plants are more easily grown or remain longer in bloom. Flowers are in many brilliant shades ranging from creamy white through rose, light pink and scarlet together with yellow, orange, brown, maroon, etc., and many flowers are brilliantly spotted. Blooms abundantly from early summer until late fall.

Seed is usually sown outdoors as soon as the weather is settled. If desired can be started in the house and transplanted.

715 **Dwarf Mixed**—Comprises all varieties and shades. Oz., 20c. $\frac{1}{4}$ -lb., 50c. Lb., \$1.50. Pkt.....10c

TALL VARIETIES

These are excellent for growing in beds and borders where there is plenty of room for trailing or for light trellises and for hanging baskets, vases and window boxes. Height, usually 4 to 5 ft.

716 **Tall Mixed**—Comprises all shades in splendid mixture. Oz., 20c. $\frac{1}{4}$ -lb., 50c. Lb., \$1.50. Pkt.....10c

NICOTIANA

(Sweet Scented Tobacco Plant)

One of the easiest annuals to raise and one of the most effective. The blossoms in shape are not unlike a *Petunia* blossom, but with a longer tube. The flowers open toward evening and emit a powerful perfume.

717 **Affinis**—Large, pure white flowers of delicious fragrance. If taken up in the fall, cut back and potted they will bloom all winter. Pkt.....10c

718 **Sanderæ Hybrids**—A showy and profuse flowering, half-hardy annual, giving a continuous display of brilliant flowers through summer and autumn. The plant is of branching, bushy habit, 2 to 3 feet high, and carries the flowers in clusters. The flowers measure from 1 to 2 inches across and remain open all day. Many colors, mixed. Pkt.....10c

NIGELLA

(Love in a Mist, or Devil in the Bush)

719 **Miss Jekyll**—Lovely variety giving an abundance of long-stemmed flowers which are of a clear cornflower-blue, prettily set in slender elegant foliage. One of our most attractive annuals. The plants are extremely hardy, and an autumn sowing produces the best specimen for flowering in the following summer. Height, 18 inches. Hardy annual. Pkt.....10c

PANSIES

One of the most charming of all hardy annuals and deservedly popular. Their modest flowers of brilliant colorings, markings and shades are produced extremely early in the spring and when the weather is not too hot, continue to afford a mass of bloom until mid-summer. There is almost an infinite variety of colors.

Seed is usually sown in the fall, wintered over in cold frames and plants transplanted to beds when in bloom very early in the spring.

Seed, however, may be started early in the spring, transplanting to where they are to bloom as soon as the plants are fairly large. Our strain embraces many choice sorts and mixtures as well as the best sorts in separate colors.

720 **JMC Fancy Mixture**—A particularly fine strain comprising all the best shades and brilliantly marked. It is one of the most effective and largest flowered sorts and the flowers are of good substance on stiff stems. Plants are thrifty and extremely free flowering. When properly grown it is of faultless form and wonderfully large. $\frac{1}{8}$ -oz., \$1.00. $\frac{1}{4}$ -oz., \$1.75. Pkt.....25c

721 **Bath's Empress**—A choice English mixture of world-wide fame. Pkt.....50c

722 **Masterpiece (Frisled Pansy)**—A remarkable type, each petal being conspicuously curled or waved. The range of color is very extensive, the rich, dark, velvety shades predominating. 2 pkts., 25c. Pkt.....15c

723 **Giant Trimardeau**—All colors. Pkt.....10c

724 **Choice Mixed Pansy**—A good English strain, comprising many shades and colors. $\frac{1}{4}$ -oz., 45c. Pkt.....10c

GIANT EARLY-FLOWERING PANSIES

This remarkable new race of Pansies flowers four to six weeks earlier than the other varieties. The flowers are of immense size, on long stems. Excellent for greenhouse culture or early spring bedding.

725 **Superb Mixed**—Pkt.....20c

JMC Fancy Mixture

All 10c Packets are 3 Packets for 25c.

PETUNIA

One of the most desirable half-hardy annuals for bedding and particularly effective if massed. It is also desirable for window-boxes or vases.

For earliest blooming outdoors, seed is started in shallow boxes and shifted to pots, then transplanted to beds. Or seed may be sown in open border where they are to bloom, thinning out as necessary or transplanting, usually allowing about 1 ft. to 18 inches between plants.

- 726 **Ruffled Monsters**—This is a half dwarf type of erect and robust habit. The flowers are very large and ruffled, with open shallow throats. The colors are mostly the desirable red and dark shades richly marked and veined. Pkt.....25c
- 727 **Giant of California**—Flowers very large, in great variety of colors and markings, with deep yellow throats. 2 pkts., 25c. Pkt.....15c
- 728 **Double Fringed Mixed**—Many brilliant colors; flowers beautifully fringed. Pkt.....35c
- 729 **Rosy Morn**—Soft carmine-pink with white throat; makes a very dainty and at the same time effective border. ¼-oz., 75c. Pkt.....10c
- 730 **General Dodds**—Velvety dark red, nearly black; a scarce color among Petunias. Dwarf, compact bushes. 2 pkts., 25c. Pkt.....15c
- 731 **Howard's Star**—This grand Petunia has flowers 2 to 2½ inches in diameter, of fine texture, with more or less veining. Ground color a crimson maroon. In the center of each flower is a five-rayed star of light blush pink or white. Height of plant, 1½ to 2 ft. Pkt.....10c
- 732 **Choice Single Mixed**—A fair mixture of good coloring which bear moderately sized flowers and extremely free flowering. Oz., 75c. Pkt.....10c

BALCONY PETUNIAS

A splendid large and free flowering type either for window boxes, vases, hanging baskets, etc., the flowers average 3 inches across and make a very effective display over a long season.

- 733 **Balcony Blue**—Velvety indigo blue. ¼-oz., 50c. 2 pkts., 25c. Pkt.....15c
- 734 **Balcony Rose**—Brilliant rose-pink; very effective. ¼-oz., 50c. 2 pkts., 25c. Pkt.....15c
- 735 **Balcony White**—The pure white form. ¼-oz., 50c. 2 pkts., 25c. Pkt.....15c
- 736 **Balcony Crimson**—Rich velvety crimson. ¼-oz., 50c. 2 pkts., 25c. Pkt.....15c
- 737 **Finest Mixture**—¼-oz., 50c. 2 pkts., 25c. Pkt.....15c

Pentstemon—See next page.

PHYSALIS (Chinese Lantern Plant)

- 744 **Francheti**—An ornamental plant, forming dense bushes about 2 ft. high, producing freely its bright orange-scarlet lantern-like fruits, which can be cut and dried for winter bouquets; highly interesting. Pkt.....10c

PHLOX

Seed can be sown out of doors where they are to bloom, thinning out as may be necessary or they can be started in boxes and transplanted if desired. The perennial varieties can be easily raised from seed and seed can either be sown in spring or in the fall. If sown in the fall they bloom the following season.

PHLOX DRUMMONDI—Grandiflora.

Hardy annuals growing about 2 ft. high, producing the largest size blooms in brilliant display and range of colors.

- 738 **Alba**—Pure white in large clusters. ¼-oz., 50c. Pkt....10c
 - 739 **Salmon**—Even shade of salmon pink. ¼-oz., 50c. Pkt....10c
 - 740 **Crimson**—Brilliant shade. ¼-oz., 50c. Pkt.....10c
 - 741 **Grandiflora Mixed**—An extra choice strain of the best large flowered varieties, unexcelled in profusion and brilliancy of bloom and color. ¼-oz., 30c. Pkt.....10c
 - 743 **Perennial**—These produce large clusters of brilliant colors which remain in bloom quite a long time. Plants usually attain a height of 3 to 4 ft. It is one of the best Herbaceous Perennials for large beds or massing with shrubbery, etc. **Choicest Mixture.** Pkt.....15c
- Pinks**—See Dianthus, page 49.

PHYSOSTEGIA (False Dragon Head)

One of the prettiest hardy perennials, and gaining in popularity as it becomes better known. It forms dense bushes, 3 to 4 ft. high, bearing freely during the summer months spikes of delicate rosy lilac or white tubular flowers not unlike a gigantic heather.

- 745 **Virginica**—Rosy lilac. Pkt.....10c

POPPIES

Well known and popular annuals and perennials which produce flowers varying from moderate sized single cup-shape blooms to very much larger flowers sometimes 4 inches across both single and double. Colors are extremely vivid and brilliant; very graceful, hence, fine for cutting and for home decoration. Grown in beds and masses nothing is more brilliant in the garden and they are of easiest culture.

ANNUAL VARIETIES

- 746 **American Legion**—A greatly improved English Scarlet or Flanders Poppy, with very large flowers of dazzling orange scarlet; 2 ft. Pkt.....10c
- 747 **Shirley**—A beautiful sort which blooms a long season and bears large single flowers of flat but artistic shape. Most petals are very silky texture with an intense sheen. Others plain, some crimped, some like tissue paper and others wavy. Colors range through shades of pink, rose, scarlet, carmine and are generally edged with lighter shades. **Choicest Mixed Colors.** Oz., 40c. Pkt.....10c
- 748 **Double Shirley**—A very beautiful strain with double flowers in the same wonderful range of colors as the Single Shirley. Pkt.....10c
- 749 **Tulip**—One of the most brilliant of poppies, bearing bright scarlet tulip shaped flowers with a dark spot at the base of each petal. It makes a gorgeous display in masses. Grows about one foot high. ¼-oz., 25c. Pkt.....10c
- 750 **Peony Flowered Mixed**—Very large, double poppies with somewhat broader petals in many pleasing shades. Height, about 2 ft. Pkt.....10c

Perennial Poppies—See next page.

PERENNIAL POPPIES

These should be in rows about 1½ ft. apart and 1 ft. apart in the row. Seed may be sown outdoors either in spring or fall.

- 751 **Orientele, Scarlet**—One of the most showy of all Perennial Poppies. Grows about 2 ft. high. Flowers are very large, single, a gorgeous scarlet shading to deep purplish black at the base. Flowers are borne on long stems and splendid for cutting. An excellent sort for mixed beds of Perennials or for borders. ¼-oz., 40c. Pkt.....10c
- 752 **Princess Victoria Louise**—Rich salmon pink. Pkt.....25c
- 753 **Orientele Hybrids Mixed**—¼-oz., 50c. Pkt.....10c

ICELAND POPPIES

- 754 **Sunbeam**—A great improvement on the ordinary mixed. The stems are longer and the flowers larger. 2 pkts., 25c. Pkt..15c

PENTSTEMON (Beard Tongue)

A beautiful perennial plant producing freely large spikes of handsome tubular flowers in almost every shade and color.

- 755 **Gloxinioides**—Pink shades. Pkt.....15c
- 756 **Gloxinioides "Sensation"**—As a bedding plant this takes rank with the Petunia, Phlox, etc. It grows about 30 inches high, every branch being a spike of large, Gloxinia-like flowers in a very wide range of bright colors, including rose, red, carmine, cherry, pink, lilac, purple, etc. 2 pkts., 25c. Pkt..15c

PLATYCODON

(Balloon Flower, or Japanese Bellflower)

One of the best hardy perennials, producing very showy flowers during the whole season. They form large clumps and are excellent for planting in permanent borders or among shrubbery; easily raised from seed, which begins blooming in August if sown outdoors in April.

- 757 **Mixed**—Pkt.....10c

PORTULACA (Moss Flowers)

These are excellent for bedding, vases, rockeries or window-boxes, producing a dazzling display of colors. Single varieties have cup shaped flowers about 1 inch across, range through many shades of white, pink, yellow, orange, red and some are striped. The Double varieties have narrow petals which are set closely and form full heads. Stems and leaves are succulent, creeping and ornamental. They will stand a great amount of drought and bloom through a long season. Height about 9 inches. Hardy annual.

- 758 **Single Mixed**—Comprises a wide range of colors. Oz., 60c. Pkt.....10c
- 759 **Double Mixed**—Many beautiful shades. ¼-oz., 75c. Pkt.....10c

HARDY PRIMROSES

These are among the best of the early spring-blooming plants. Half hardy perennial.

- 760 **Vulgaris**—True English Primrose; canary yellow, fragrant flowers. 2 pkts., 25c. Pkt.....15c

PYRETHRUM

Aureum is the well-known Golden Feather so much used for edging, carpet bedding, etc., while the others are most attractive hardy plants.

- 761 **Aureum (Golden Feather)**—Yellow foliage. Pkt.....10c
- 762 **Hybridum, Single Mixed**—Hardy perennial, bearing large daisy-like flowers, ranging in color from white to deep red, with bright yellow centers; blooms in May and June, and again in the fall; and is one of the most graceful and long-lasting cut flowers; 2 ft. Pkt.....15c
- 763 **Hybridum**—Seed saved from the finest double flowers; only a small percentage can be expected to come double the first year; mixed colors; 1½ ft. Perennial. Pkt.....25c

RICINUS (Castor Bean)

A magnificent sub-tropical plant which attains a great height and is especially desirable for centers of large beds or as backgrounds for other flowers or foliage plants.

The foliage is of various kinds, some light green leaves with light stems and others darker shade and dark stems. It is grown for its foliage almost exclusively as the flowers are insignificant. Height according to soil, moisture and conditions, varies from 6 to 15 ft. Annual.

- 764 **Zanzibariensis**—Grows to immense size. Leaves sometimes measure 30 inches across and range in color from bright green to deep bronze. Choice mixed colors. Oz., 25c. Pkt...10c
- 765 **Mixed Sorts**—A desirable mixture of all varieties. Oz., 20c. Pkt.....10c

RUDBECKIA (Cone Flower)

Showy, free-blooming, fine for cutting.

- 766 **Bicolor Superba**—Large, bright yellow, with dark spots. Annual.....10c
- 767 **Purpurea**—Perennial, 3 ft. Reddish purple flowers...10c

SALPIGLOSSIS

A very showy, half-hardy annual which is desirable both for bedding or border plants. Has richly colored funnel-shaped flowers of many shades including yellow, buff, crimson and scarlet and extend through to purple and almost black.

- 768 **Tall Finest Mixed**—Height, 2 ft. Pkt.....10c

SALVIA (Scarlet Sage)

One of the most useful and effective bedding plants which produces immense masses of brilliant Turkey red flowers from early in the season, continuing in uninterrupted succession until frost. Blooms are borne on long spikes well above the foliage and continue in good condition a long time. Spikes are often 8 to 10 inches long and have 30 to 40 tube-like flowers borne in a feathery manner on each side of the stem.

Seed should be started in boxes, hot beds or greenhouse, transplanted and set out of doors after the weather has become warm. Blooming the first season.

- 769 **Splendens**—Tall growing sort with dark green foliage and bright fiery scarlet blooms. Height, 2½ to 3 ft. ¼-oz., 60. Pkt..10c
- 770 **America or Globe of Fire**—This is the freest and most continuous blooming of all the Scarlet Sages, also the most uniform in habit of growth, which makes it particularly valuable for bedding or planting in lines. ½-oz., 75c. 2 pkts., 25c. Pkt..15c
- 771 **Farinacea**—A perennial variety, but best treated as an annual. Color, light blue; 2 ft. Pkt.....15c

SAPONARIA

772 **Vaccaria (Pink)**—In the flower markets this Saponaria is one of the special favorites. The light graceful sprays of glistening flowers are produced in the greatest profusion. It is so valuable for vase decoration that successional sowings should be made. Charming pot plant for greenhouse. Hardy annual. Height, 2 feet. Oz., 40c. Pkt.....10c

773 **Ocymoides Splendens**—Elegant trailing perennial, with pretty rich rose-colored flowers; suitable for rockeries. ¼-oz., 30c. Pkt.....10c

SHASTA DAISIES

(Chrysanthemum Leucanthemum)

774 **Alaska**—A splendid hardy perennial variety with flowers rarely less than 5 inches across, of the purest glistening white, with broad overlapping petals, and borne on long strong stems; a beautiful cut flower, remaining in good condition a week or more. ¼-oz., 35c. Pkt.....10c

Shasta Daisy

All 10c Packets are 3 Packets for 25c.

SCABIOSA (Mourning Bride)

One of the old fashioned popular annuals which produce an abundance of many colored flowers which are excellent for cutting. The blossoms are borne on long stems, are fragrant, double and somewhat in the shape of a pin cushion. It makes an effective garden plant for bedding or borders.

Seed can be sown in open border and thinned out from 1 to 1½ ft. apart. Grows 2 to 2½ ft. high.

- 775 Peach Blossom (New)—"Highly commended" by the Royal Horticultural Society of Great Britain. A beautiful shade of peach blossom pink, large size and long stem. An excellent cut flower. 3 pkts., 50c. Pkt.....20c
- 776 Shasta (New)—A pure white of enormous size, the flowers measuring three and a half inches across with extremely long stems. 3 pkts., 50c. Pkt.....20c
- 777 Azure Fairy—Clear lavender blue. Pkt.....10c
- 778 Crimson—Rich rosy crimson. Pkt.....10c
- 779 Yellow—¼-oz., 30c. Pkt.....10c
- 780 King of the Blacks—¼-oz., 30c. Pkt.....10c
- 781 Tall Double Mixed—A splendid sort for large beds or borders. Comprise many beautiful colors. Height, 2½ ft. ¼-oz., 25c. Pkt.....10c

PERENNIAL VARIETIES

- 782 Caucasica (Blue Perfection)—3 ft., especially valuable for cutting, the blooms lasting an unusually long time in water Pkt.....15c.
- 783 Caucasica Alba—A large, pure white variety; the flowers, 3 to 4 in. across on long stems, are exquisite for vases, lasting a long time. Pkt.....20c

SCHIZANTHUS

(Butterfly Flower or Poor Man's Orchid)

An attractive hardy annual growing about 20 inches high, which is of neat, compact growth with finely cut foliage. The plant bears very attractive flowers ranging in colors from white to purple and are shaded from their edges to throats with darker colors. Flowers resemble somewhat the butterfly and are borne in clusters or spikes. Seed can be sown outdoors after danger of frost or started earlier indoors and transplanted.

- 784 Finest Mixed Colors—Pkt.....10c

Stocks

Scabiosa

EARLY GIANT IMPERIAL STOCKS

A recently developed strain of early-flowering Winter or Brompton Stocks, forming much-branched plants about 2½ ft. high and having numerous spikes of very large, double, delightfully fragrant flowers, they are of special value as pot plants for greenhouse decoration and for cutting during the dull winter months; for this purpose seed should be sown from July to September; if sown in February or March will produce plants that will bloom out-of-doors from mid-summer till frost.

- 785 Apple Blossom—Blush pink. Pkt.....20c
- 786 Chamois—Ivory tinted old rose. Pkt.....20c
- 787 Fiery Blood Red—Striking. Pkt.....20c
- 788 Rose—Deep rose pink. Pkt.....20c
- 789 White—Pure white. Pkt.....20c
- 790 Golden Ball—Canary yellow. Pkt.....20c
- 791 Violet—Soft violet purple. Pkt.....20c
- 792 Superb—Mixed. Pkt.....20c

STOKESIA (Cornflower Aster)

793 Cyanea—This is not new, but is a rare and beautiful hardy perennial. The plant grows about 24 inches high, each bearing from 20 to 30 handsome lavender-blue cornflower-like blossoms; in bloom from July till frost. One of the choicest subjects for the hardy border and indispensable for cutting. Pkt.10c

- 794 Cyanea Mixed—Containing a number of colors. Pkt...10c

SUNFLOWER (Helianthus)

Hardy Annual

Of easy culture, and the newer sorts are among the most ornamental and effective of all garden annuals. The single flowering sorts are indispensable for cutting. Bloom early and continue until frost.

- 795 Chrysanthemum-Flowered—Fine, perfectly double golden flowers, resembling Japanese chrysanthemums; 6 to 10 inches in diameter. Plants grow to the height of 5 to 6 feet. Oz., 30c. Pkt.....10c
- 796 Red—The flowers are of a chestnut red color, which appears as a ribbon around the centre, while the points of the petals are tipped yellow. Grows to a height of 6 feet. 2 Pkts., 25c. Pkt.....15c
- 797 Stella—Height, 3 to 4 feet. Flowers star shaped, of brightest golden yellow, with dark centers. They are suitable for cutting. Pkt.....10c

SWEET PEAS

EARLY FLOWERING SPENCER VARIETIES

While these are especially adapted for forcing under glass for winter and early spring blooming, they are also valuable for outdoor culture, coming into bloom five or six weeks earlier than the regular Spencer type, and if the flowers are kept cut, they will continue to bloom for a long time.

NEW VARIETIES

The following varieties are offered for the first time:

- 798. **Early Springsong**—Awarded Gold Medal at the New York Spring Show of 1927. Early Springsong is a large salmon-pink on cream ground. The shade of coloring is distinct from all other early pinks. Pkt.....35c
- 799. **Bright Light**—An improved flaming scarlet. Pkt...20c
- 800. **Giant Rose**—The individual flowers are of real giant size produced on very long, strong stems and in sprays of from three to five blossoms. The color is a very popular rose-pink. Pkt.....25c
- 801. **White Harmony**—A black-seeded white Sweet Pea, producing flowers large in size and of fine substance, and bears long stems throughout the season. Pkt.....15c

GENERAL LIST

- 802. **Aviator**—Dazzling crimson-scarlet.
- 803. **Ball Rose**—Rose-pink.
- 804. **Blue Bird**—A splendid rich, deep blue.
- 805. **Burpee's Orange**—Deep orange.
- 806. **Eldorado**—Clear, light orange.
- 807. **Harmony**—Clear lavender.
- 808. **Mrs. Kerr**—A fine shade of salmon.
- 809. **Rose Queen**—Light rose-pink.
- 810. **Snowflake**—Pure white.
- 811. **Zvolanek's Rose**—Deep rose-pink.
- Price—Any of the above except where noted, pkt, 10c. Oz., 60c. ¼-lb., \$1.75.
- 812. **Early Flowering Mixed**—A splendid mixture containing all colors. Pkt., 10c. Oz., 50c. ¼ lb.....\$1.50

SUMMER FLOWERING SPENCER SWEET PEAS

813. **Pinkie**—A 1928 introduction which is by comparison the largest of all we have ever seen of the deep pink varieties. A most vigorous grower, producing on long stout stems well waved, nicely placed flowers of beautiful rose-pink shade. Pkt.....25c

- 814. **Heavenly Blue**—Delphinium blue.
- 815. **Hercules**—Giant pure pink.
- 816. **Jack Cornwell, V. C.**—Dark blue.
- 817. **King Edward Spencer**—The large flowers are waved and crinkled; standard and wings deep rich carmine scarlet.
- 818. **King White**—Giant white.
- 819. **Mary Pickford**—Cream pink suffused with salmon.
- 820. **Matchless**—Clear cream.
- Price—Any of the above, except where noted, pkt., 10c. Oz., 35c. ¼-lb., \$1.00.
- 821. **Best Spencer Mixed**—Comprises the best varieties in all beautiful shades and colors and much superior to that offered indiscriminately as coming from growers. Pkt., 10c. Oz., 25c. ¼ lb.....85c
- 822. **Best Grandiflora Mixture**—A wonderful combination consisting of the best named varieties made up by ourselves and combined in pleasing and harmonious range of colors. Pkt., 10c. Oz., 15c. ¼ lb., 50c. Lb.....\$1.50
- Insect Remedies**—For Aphis and Red Spider, spray with Evergreen. See page 80.
- Sweet Peas Hardy**—See Lathyrus, Page 52.
- Larger flowers on Sweet Peas are sure when the seed is treated with Acme Inoculation. (See Page 64.)

Spencer Sweet Peas

"COLLECTION"
EIGHT SUMMER FLOWERING
SWEET PEAS

Pinkie—Rose-pink.	King Edward—Red.
Heavenly Blue—Delphinium Blue.	King White—White.
Hercules—Pink.	Mary Pickford—Salmon pink.
Jack Cornwell—Dark blue.
(Including Pinkie)	Matchless—Cream.
One Packet each (value 95c).....60c	

NOTICE

Our Annual Fall Bulb Catalogue will be ready for mailing about the 15th of September, furnishing a complete assortment of bulbs and plants for fall planting, also sundries, fertilizer, etc.

If you desire this Catalogue, please send us your name at once

Sweet William (Holborn Glory)

SWEET WILLIAM (Dianthus Barbatus)

A well-known old-fashioned perennial which has long been used for beds and borders. It is one of the most desirable plants in the garden, is easily grown, very hardy and free flowering, continuing in bloom for several weeks. The flowers are borne in heads or clusters, sweet scented, in brilliant colors ranging from pure white through pink, crimson, etc., to deep purple. Most of them have two colors in the same flower. They are borne on stiff stems in graceful profusion and the clusters are often 3 to 4 inches across. Useful for cutting. Height, 1½ ft.

823 Newport Pink—A distinct new color which originated in one of the far-famed gardens at Newport, R. I. In color it is what florists call watermelon-pink or salmony-rose. Strikingly brilliant and beautiful; the flowers are borne in massive heads on stems 18 inches high. For mid-season mass bedding it has no equal. It is also very effective for cutting. ¼-oz., 50c. Pkt..10c

824 Holborn Glory—This strain is a large-flowered selection of the auricula-eyed section, the most beautiful and admired of all Sweet Williams. The individual flowers and trusses are of extraordinary size, while the range of color, all showing a clear, white eye is truly superb. ¼-oz., 30c. Pkt.....10c

825 Scarlet Beauty—Intense scarlet. ¼-oz., 40c. Pkt....10c

826 Double Mixed—A splendid strain of this beautiful perennial comprising a great variety of excellent shades. ¼-oz., 25c. Pkt.....10c

SWEET ROCKET (Hesperis)

Deliciously sweet-scented flower for garden or cutting.

827 Violet—Pkt.....10c

828 White—Pkt.....10c

TRITOMA

(Red-hot Poker, Flame Flower, or Torch Lily)

829 Hybrida—The introduction of new, continuous flowering Tritomas has given them a prominent place among hardy bedding plants. It is not generally known that they are readily grown from seed, many flowering the first year if sown early. Of course, for immediate results it will be better to get plants, but raising them from seed is highly interesting. Perennial. 2 Pkts., 25c. Pkt.....15c

VERBENA HYBRIDA GRANDIFLORA

A magnificent new strain of Verbenas, of robust compact habit and free blooming. The trusses are immense, the individual florets measuring an inch in diameter. These Verbenas are fixed and come true from seed.

Seed can be started in the house and transplanted to the garden when the weather is warm or sown in the open ground, thinned and transplanted. Verbenas from seed are much more thrifty and less liable to rust than from cuttings. Annual 1 ft. high.

830 Blue—Blue, with white eye. ⅛-oz., 45c. Pkt.....15c

831 Coccinea—Scarlet, small eye. ⅛-oz., 45c. Pkt.....15c

832 Lucifer—An improved strain, vivid scarlet. ⅛-oz., 45c. Pkt.....15c

833 Luminosa—Flame pink shading to salmon. ⅛-oz., 45c. Pkt.....15c

834 Pure White—⅛-oz., 45c. Pkt.....15c

835 Rose Stellata—Rose pink with white eye. ⅛-oz., 45c. Pkt.....15c

836 Mammoth Mixed—Comprising a wonderful range of charming colors in every conceivable shade. ¼-oz., 40c. Pkt...10c

Mammoth Verbena

All 10c Packets are 3 Packets for 25c.

Dahlia Flowered Zinnia

VERONICA

838 **Spicata**—An elegant border plant, growing about 1½ ft. high, producing long spikes of bright blue flowers in June and July. Hardy perennial. Pkt.....10c

VINCA (Periwinkle)

Free flowering bedding plants which grow in bushy form and produce round, flat, disk-like flowers, about 2 inches across. They commence to bloom moderately early in the season and the plants are literally covered throughout the summer and fall. Tender annual. Height, 18 inches. Blooming the first season.

839 **Mixed**—White and pink. Pkt.....10c

VIOLA

VIOLA HYBRIDS

840 **Jersey Gem (New)**—This variety of recent introduction possesses the dwarf and everblooming habits of the Viola Cornuta or tufted pansies and the vigorous, bushy growth and roundish foliage of the finest English bedding varieties. Color is pure, rich violet and slightly perfumed. Pkt.....35c

VIOLA CORNUTA (Tufted Pansies)

Perennial. 6 inches. The plants are more hardy than Pansies, and of vigorous growth, forming deep-rooted compact tufted clumps. Planted in masses or lines they form perfect mats covered with myriads of flowers.

841 **Superb Bedding Mixed**—¼-oz., 50c. Pkt.....10c

Woolflower—See Celosia.

"WILD GARDEN" FLOWER SEED

This comprises a mixture of annuals, biennials and perennials and consists of sorts growing at moderate heights. No vines, trailers, or very tall growing plants being used in it.

842 **Large Pkt.**, 10c. Oz., 25c. ¼ Lb., 75c. 1 Lb.....\$2.50

XERANTHEMUM

(Everlasting or Immortelle)

843 **Double Mixed**—Bright and pretty "Everlasting" with silvery foliage and silky flowers in pink, white and purple. Pkt. 10c

ZINNIAS

GIANT DAHLIA FLOWERED ZINNIA

The latest development in Zinnias. This type was awarded the Gold Medal and the Award of Merit by the Royal Horticultural Society of England, at the Chelsea Flower Show in London, England, in June, 1924. It took seven years of painstaking care and selection to produce this type of Zinnia, but it is now recognized the world over as being the largest and most beautiful Zinnia. The Dahlia Flowered Zinnia is a good forcer and money maker for florists. The variety Polar Bear is used as a bunching flower for Mother's Day, while Old Rose, Oriole, Crimson Monarch, Exquisite, Canary Bird and Scarlet Flame are recommended to force as desirable colors for florists for early spring trade. The plants are sturdy and the flowers, often measuring 6 inches in diameter and 4 inches in depth, closely resemble the Show Dahlia. Annual.

844 **Exquisite**—By far the most pleasing of our collection. Truly Dahlia flowered as regards form and size. Color, light rose with center a deep rose. (Tyrian Rose.) Pkt.....15c

845 **Old Rose**—This is adequately described by its name, as it is of the real old rose shade; it is large, and for charm and beauty we consider it ranks next to Exquisite. Pkt.....15c

846 **Illumination**—Similar to Exquisite, but a striking color of deep rose. (Tyrian Rose.) Pkt.....15c

847 **Golden State**—A very rich orange-yellow (Cadmium). Yellow in the bud, turning to an attractive orange when in full bloom. Pkt.....15c

848 **Crimson Monarch**—By far the largest and best of the red shades. Flowers often eight inches in diameter. Plants very vigorous. A marvelous production of extraordinary merit. Pkt.....15c

849 **Giant Attraction**—A distinct shade of brick red (Spectrum Red) which carries its color well from the bud, and forms into an immense ball of color when in full bloom. Pkt...15c

850 **Scarlet Flame**—A large, beautiful, bright scarlet, with a delightful blending of orange throughout the petal. This is not a bicolor. Pkt.....15c

851 **Meteor**—A rich, glowing deep red (Spinel Red) and the darkest of all the red shades. Fine form, with good depth of petal. Very large and more floriferous than other reds. Pkt...15c

852 **Lemon Beauty**—This is next to Crimson Monarch in size and form. It may be described as a golden yellow on brown. Decidedly a pastel shade and should be in every collection. Pkt.....15c

853 **Oriole**—We consider this the most beautiful of its class. It is an immense orange and gold bicolor, changing slightly as it ages, but at all times worthy of the beautiful bird for which it is named. Pkt.....15c

854 **Dream**—A fine, deep lavender, turning to purple (Mallow Purple) a new, desirable shade in Zinnias. Pkt.....15c

855 **Purple Prince**—A fine, deep purple (Rhodanthe Purple) large and well-formed. Pkt.....15c

856 **Polar Bear**—A very large pure white, the best white yet seen in Zinnias. True Dahlia form. Pkt.....15c

857 **Buttercup**—An immense deep creamy yellow. A very desirable flower, which should be included in every collection. Pkt.....15c

858 **Canary Bird**—A delicate shade of primrose, very large and holds its color well until out of bloom. Pkt.....15c

859 **Special Gold Medal Mixture**—A well blended mixture containing all the above novelties. Pkt.....15c

860 **Collection**. One packet each of the above 15 separate named varieties for.....\$1.50

861 **Double Giant Picotee**—A new and distinct class producing the following colors, all tipped with various shades of dark, giving the flowers a very attractive and pleasing appearance, resembling Picotee Carnations. Orange, flesh, lemon, pink and cerise. 2 Pkts., 25c. Pkt.....15c

862 **Tall Double Mixed**—Comprises a wonderful range of the best colors. Very double flowers. Oz., 60c. Pkt.....10c

863 **Dwarf Double Mixed**—Comprises a wonderful range of colors, very attractive. Oz., 50. Pkt.....10c

864 **Dwarf Curled and Crested**—Twisted and curled petals which make very effective flowers. ¼-oz., 25c. Pkt.....10c

All 10c Packets are 3 Packets for 25c.

VINES, CLIMBERS AND TRAILERS

AMPELOPSIS

(Japanese or Boston Ivy) Hardy Perennial

865 **Veitchi**—The leaves are olive green turning to scarlet in the autumn. Perfectly hardy; grows 30 to 60 feet. It clings firmly and permanently to walls, trees, etc. Very desirable. Pkt.....10c

BALSAM—PEAR AND APPLE (Momordica)

Tender annual climbers bearing ornamental fruits of various colors. They grow 10 to 12 ft. high. Have light green foliage, rather large leaves and are very graceful.

866 **Balsam Apple**—Like Balsam Pear with foliage smaller and smaller fruits, very nearly round. Green, striped when young, afterwards becoming scarlet. Pkt.....10c

867 **Balsam Pear**—Fruits oblong, pointed and warted, first green, afterwards changing to bright red. When fully ripe, burst open exposing the seed. Largely used for putting in alcohol or whiskey and used as a poultice or for cuts, bruises and wounds. Pkt.....10c

CANARY BIRD FLOWER

868 **Canary Bird Flower**—A beautiful climber with small beautiful, rich yellow flowers and dark foliage, the leaves resembling palm leaves. It is a quick grower attaining a height of 12 ft. Blooms profusely from July until frost. Pkt..10c

CARDINAL CLIMBER

869 The most brilliant, beautiful and distinct annual climber introduced for many years. Rapid grower with branching habit; flowers all summer; cardinal-red clusters, 15 to 25 feet. Pkt.....10c

COBAEA SCANDENS

An attractive, rapid growing Climber with large bell-shaped flowers which at first are green but gradually change to a deep violet blue. The foliage is handsome, dark green; a great profusion of tendrils is produced and it is valuable for arches, trellises, arbors and attains a height of as much as 30 ft. in a season.

870 **Blue**—Pkt.....10c

CYPRESS VINE

A beautiful rapid growing Climber with delicately cut vivid green foliage and star-like flowers which make a most effective contrast with the leaves.

Seed is usually sown outdoors where the plants are to remain, covering $1\frac{1}{2}$ inches deep. About 15 ft. high.

871 **Mixed**—Mixed scarlet and white. Pkt.....10c

GOURDS

872 **Mixed**—Mixture of small sorts including many curiously shaped and ornamental sorts. Pkt.....10c

HYACINTH BEAN (Dolichos Lablab)

A beautiful tender annual climber bearing large clusters of purple and white flowers which are afterwards followed by ornamental purple seed pods. Height, 15 to 20 ft.

873 **Mixed Colors**—Pkt.....10c

ICE PLANT—(Mesembryanthemum)

874 Valuable for hanging baskets, rockwork, vases and window boxes. It is curious growing, the leaves and stems appearing as though covered with ice crystals. A tender trailing annual growing about 6 inches high and the vines will extend 2 ft. long. Pkt.....10c

MOON FLOWERS (Evening Glory)

The well-known and popular tender perennial so largely used. It grows to an immense height, sometimes 30 to 40 ft. in a single season and is literally covered with large white flowers $3\frac{1}{2}$ to 4 inches across which open in the evening and are very sweet scented. Useful for covering old fences, dead trees, stables, and unsightly places, being extremely rapid growing with a profusion of large leaves.

Seed should be started indoors and transplanted to the open after the weather is warm. As the outer seed shell is particularly hard, a small hole should be filed in it or part shaved off with a knife before planting. Soaking in very warm water 24 hours is beneficial.

875 **Noctiflora**—Pkt.....10c

Moonflower

MORNING GLORIES

The well-known and popular hardy annual climbers which produce large trumpet-like flowers of many brilliant colors. Seed is sown where they are to bloom, thinning as may be desired. Height, 10 to 15 ft.

876 **Heavenly Blue**—Immense flowers of bright sky blue, very beautiful. Pkt.....10c

877 **Japanese**—Flowers of largest size, often 3 inches across, in magnificent colors and brilliantly marked. Oz., 25c. Pkt..10c

878 **Mixed**—A splendid mixture of various shades. Oz., 15c. Pkt.....10c

Nasturtium (Tall)—See page 53.

SCARLET RUNNER BEANS

879 **Scarlet Runners**—A great favorite in England and Europe, not only as an ornamental climber, but for the delicious edible beans which succeed the spray of bright scarlet pea-shaped blossoms. Pkt.....10c

THUNBERGIA (Black Eyed Susan)

An attractive climber growing 4 to 6 ft. long which is largely used for garden vases, window-boxes, hanging baskets, etc. Flowers are about 1 inch across being of creamy white, buff and orange colors with very dark brown throats; very free blooming. A very attractive plant both in foliage and in abundance of flowers.

880 **Mixed**—Colors, creamy white, buff and orange. Pkt....10c

All 10c Packets are 3 Packets for 25c.

GENERAL LIST OF GRASS SEEDS

As the prices of many of the following seeds are subject to weekly and sometimes daily fluctuations we can not give them here but will be pleased to quote lowest market prices at any time.

If orders are entrusted to us they will be filled at the lowest market prices on the day received.

ORCHARD GRASS (*Dactylis glomerata*)

Particularly suited to upland, loamy or moderately stiff soils. It ripens 3 weeks ahead of Timothy and is excellent to sow with Red Clover. It should be cut when in bloom as at that time makes most nutritious hay but if allowed to become old it contains a great deal of woody fibre; usually yields two crops and is one of the most valuable grasses for both pasturage and hay.

If sown alone it requires $1\frac{1}{2}$ to 2 bushels per acre; if with Red Clover, 1 to $1\frac{1}{2}$ bushels of Orchard Grass to 5 to 6 pounds of Red Clover. If for seed the same quantity of Clover and $\frac{3}{4}$ of a bushel to 1 bushel of Orchard Grass.

TIMOTHY (*Phleum pratense*)

Too well-known to need description. It is the most desirable of all grasses for hay but should not be grazed as the tramping of cattle hoofs causes it to die. In this section Timothy is best suited to low, flat or

Orchard Grass

alluvial soils where there is a fair amount of moisture but does not grow well in water sogged soil. Requires alone, 1 pk. per acre; if with Clover, 8 lbs. Timothy and 5 to 6 lbs. of Clover.

RED TOP OR HERD'S GRASS (*Agrostis Vulgaris*)

Particularly suited to low and wet situations and affording a splendid pasturage and fair crops of hay. Ripens at about the same time as Timothy and excellent to sow with this grass if pasturing of meadows is contemplated. It is also valuable to sow on alluvial land liable to wash and when once established and some care taken will last indefinitely.

Fancy (free of chaff) requires 8 to 10 lbs. alone or 3 to 4 lbs. (in mixtures) per acre.

Unhulled (seed with hull on)—1 bu. per acre.

TALL MEADOW OAT GRASS (*Arrhenatherum elatius*)

A very fine grass which is suitable for upland soils and especially valuable for mixture with Orchard grass. It ripens about the same time and does not have a tendency to grow in clumps or tufts—hence, forms a better sod. Cut when in bloom it is very nutritious and it affords wonderful amount of pasturage. Requires alone $1\frac{1}{2}$ to 2 bus. per acre; in mixtures from $\frac{1}{2}$ to $\frac{3}{4}$ of a bu.

To sow cheap seeds to save money, is like stopping the clock to save time.

GENERAL LIST OF GRASS SEEDS—Cont'd

MEADOW FESCUE

(Festuca elatior)

A most valuable grass for permanent pasture. It grows best on low, damp soil, but does not attain its full productive power till the second or third year. (Called Evergreen Grass in some sections.)

Requires one bu. per acre, if alone. In mixture, from $\frac{1}{2}$ to $\frac{3}{4}$ of a bu.

KENTUCKY BLUE GRASS

(Poa pratensis)

A well-known pasture grass which grows well on any stiff or loamy soil in central or northern states. It is indigenous to sections of Ohio, Kentucky and Missouri and in these sections is the main grass depended on for pasture or for stock grazing for which these sections are famous. There is no better or more nutritious pasturage.

Kentucky Blue Grass is also largely used for lawns and when once established lasts indefinitely. It is slow starting, however, and for lawns should be mixed with other quick growing short grasses. For pastures, sow $1\frac{1}{2}$ to 2 bus. per acre; for lawns, 4 to 5 bu. per acre.

Ky. Blue Grass

CANADIAN BLUE GRASS

(Poa compressa)

Closely akin to Kentucky Blue Grass but not nearly so valuable for general purposes. Canadian Blue Grass is particularly well suited to high, dry situations and rocky soil, also under trees where the soil is more or less impoverished and very dry. It does not make a very good turf as it produces a large amount of stems and comparatively little forage. Valuable for mixtures and upland soil for pasture.

PERENNIAL RYE GRASS

(Lolium perenne)

A quick growing grass which is most suitable for mixtures, pastures, hay and lawns. Succeeds well on almost any soil not water sogged and affords good quick, nutritious grazing. If alone, requires $1\frac{1}{2}$ bu. per acre. In mixture, from 2 to 3 pks. per acre.

PACEY'S IMPROVED SHORT RYE GRASS

Similar to above except that it does not grow quite so tall and is superior for lawns and fine pastures to Perennial Rye Grass.

ITALIAN RYE GRASS

(Lolium italicum)

In growth somewhat similar to Perennial Rye Grass but little quicker maturing. It is especially liked in Southern States and in most of the low Delta country yields good crops of very early hay. Valuable for mixture or quick hay crop. Requires same quantity per acre as Perennial Rye grass.

ROUGH STALKED MEADOW GRASS

(Poa Trivialis)

A splendid grass of spreading, thickly matting, stoloniferous rooted species; leaf blades narrow, flat and dark green in color. Forms a fine turf where few other grasses can exist and especially adapted for shady places and under trees. For pastures, sow $1\frac{1}{2}$ to 2 bushels per acre; for lawns, 4 to 5 bushels per acre. (14 lbs. per bushel.)

RED OR CHEWINGS FESCUE

(Festuca Rubra)

A creeping-rooted species, forming a close and lasting turf and especially adapted for dry sandy soils. It resists extreme drought and thrives on poor soils; also valuable for shady places in lawns as well as for golf-courses and particularly on Putting Greens. 40 lbs. to the acre. On Putting Greens sow 8 lbs. to 1000 square feet. (24 lbs. per bushel.)

SHEEP FESCUE

(Festuca ovina)

An extremely valuable pasture grass for high, dry situations or rocky or gravelly soils. It affords excellent grazing and withstands adverse conditions often when many other varieties burn out. The foliage is of fine texture and it has a tendency to grow in tufts and close grazing is desirable. Especially valuable for mixture.

Requires alone $1\frac{1}{2}$ to 2 bus. per acre. In mixture $\frac{1}{2}$ to 1 bu.

CRESTED DOGSTAIL

(Cynosurus cristatus)

Very much esteemed for lawns and mixtures in many of the northern states, producing a quick growth of short grass, which is, however, of little forage and many stems.

BERMUDA GRASS

(Cynodon Dactylon)

A valuable grass for the South and for tropical climates; will not endure frost. Sow 10 to 15 lbs. per acre.

JMC Best Special Mixtures

for

GOLF COURSES, POLO GROUNDS,
ATHLETIC FIELDS,
LAWNS

also

PASTURES and MEADOWS

We put up special mixtures for all purposes and will be very glad to estimate on any special mixture that may be required.

We offer mixtures which can be relied on to be the very highest quality and prices are very reasonable. See page 3 for descriptions.

Constant experimenting has shown that a heavy stand and prolonged growth can only be obtained by sowing a mixture of several kinds of grass seeds. In our special mixtures we use varieties best suited to the different soils and purposes for which they are recommended. Those for permanent pasture are composed of grasses that succeed each other in growth, thus furnishing good grazing from early spring until late fall.

Nothing but our "Acme" JMC Best-grades are used, which means the best obtainable. We will be glad to give you the benefit of our knowledge and experience and advise you as to grasses suitable to your wants.

CLOVER, GRASS AND GRAIN SEEDERS, SEE PAGE 91.

For best results use Acme JMC Best Seeds

Write for current prices

"ACME" BEST CLOVER SEEDS

Prices are so changeable they can not be given here. Will be glad to submit prices and samples at any time.

Bags for Clover Seed holding 2½ bus. extra and must be remitted for on all orders.

RED CLOVER (*Trifolium pratense*)

Too well-known to need extended description. Can be sown either in the spring or fall and requires ¼ to ½ of a bu. per acre alone or 5 to 6 lbs. per acre if in mixture with grasses.

MAMMOTH OR SAPLING CLOVER

Similar to Red Clover but of larger growth and blooms 3 weeks later—hence, more valuable for sowing with Timothy. It also forms better aftermath than Red Clover. Requires same quantity of seed as Red Clover per acre. Current prices on request.

ALSIKE CLOVER (Also called Swedish Clover)

Similar in growth to Red Clover but not quite so vigorous. Blossoms flesh color. Blooms later and at the same time as Timothy. Valuable for hay and more satisfactory for pasturage as it lasts longer and will stand more grazing.

If sown alone requires 5 to 8 lbs. per acre or in mixture 3 to 4 lbs. per acre.

BOKHARA OR SWEET CLOVER

It is suitable for almost all classes of soil and especially desirable on loamy, sandy or alluvial soils. Formerly it was used mostly for waste lands but many prominent stock raisers are using it extensively for both pasturage and hay, in many cases abandoning Alfalfa and substituting Sweet Clover.

Sweet Clover is of vigorous growth and withstands extremes of heat and cold as the tap roots penetrate the soil very deeply; and it does well on both barren hillside as well as bottom lands. Matures early. Can be cut two or three times in a season; has a delightful and sweet scented odor and the blossoms are particularly attractive to bees.

We offer the following classes:

WHITE SWEET CLOVER

A biennial growing 5 to 6 ft. high having white blossoms borne in large panicles and extremely sweet scented. Reseeds itself if undisturbed or not cut in bloom.

Hulled Seed (cleaned seed) requires 12 to 15 lbs. per acre. Bags extra. Current prices on request.

Unhulled (Seed with the hull on).

YELLOW SWEET CLOVER

A biennial not quite so tall growing as the White but more desirable for pasture as the life season is much longer, producing an abundant yield of forage.

GRUNDY COUNTY SWEET CLOVER

A white blossom biennial. The growth starts early in the spring and makes an abundance of early pasture. It is unusually hardy and a good soil builder. The stem and leaves are finer and make a better hay than the Common Sweet Clover.

When grown for seed, the yields are from five to ten bushels to the acre. Unlike the common biennial, it grows to a height of three to five feet and may be harvested with the ordinary grain binder. The seed ripens uniformly earlier than the common.

Sow at the rate of 12 pounds of scarified seed per acre.

HUBAM SWEET CLOVER

An annual Sweet Clover with a growth of 3½ to 6 ft. Is particularly good for bees as it blooms the first year. Also excellent as a green manure crop. Most favorable results are obtained by sowing broadcast. Requires 15 to 18 lbs. per acre.

JAPAN CLOVER (*Lespedeza*)

This Clover is especially adapted for the South because it occupies the same position in pasture mixtures for the South that White Clover does in the North. Will thrive on poor land, and as it grows thickly soon furnishes abundant pasturage. Good stands have been secured by simply sowing the seed broadcast during March, April or May at the rate of 25 to 35 lbs. per acre. This Clover is a half-hardy annual without any objectionable root system. (25 lbs. per bushel.) Current prices on request.

WHITE CLOVER (*Trifolium repens*)

Well known and indigenous to most soils throughout this section. It is largely used for lawns and pastures, producing very quick growth and covering the soil with a bright, vivid green very thickly. Particularly suited to sandy soils and in some localities where grasses do not grow well.

Requires 3 to 4 lbs. per acre alone or in mixtures 1 to 2 lbs. "ACME" Best Grade.

CRIMSON OR SCARLET CLOVER (*Trifolium Incarnatum*)

This Clover grows about two feet high, makes good hay and is excellent for feeding green, the yield being immense; and after cutting it at once commences to grow again, and continues until freezing weather, but being an annual, dies after maturing its seed. Should be sown in August to October, also early spring. (12 to 15 lbs. per acre.)

ALFALFA OR LUCERNE (*Medicago Sativa*)

Alfalfa is being more generally grown, as experience is teaching our farmers the proper methods to follow. Once established, it is such a profitable crop that every farmer can afford to take great pains to obtain a stand. It requires cutting at least twice the first season, even if not large enough to make hay. Cutting destroys any weeds that may come up in it and gives the Alfalfa a chance. Must be sown at the rate of 20 to 25 pounds per acre when sown broadcast. Different soils do not seem so difficult to overcome, especially where they can be properly drained, pulverized, sweetened and inoculated.

Alfalfa does not thrive on acid or sour land.

A liberal dressing of fine ground lime will be found a great benefit to the soil. May be sown from April 1st to June 15th for the early spring sowing, either drilled or sown broadcast. If broadcast, cover lightly with a light drag or with single stroke of a harrow.

Much seeding is now done later and many prefer sowing from July 15th to September 15th. When seeded late it gives the grower an opportunity to have his land clean and free from weeds, and if weather conditions are favorable a crop is almost assured.

Alfalfa naturally prefers a deep, sandy or gravelly subsoil. Roots from 3 to 15 feet deep and a good stand on properly selected land should yield from 3 to 5 cuttings a year. Current prices on request.

Acme Inoculation will insure a sturdy alfalfa stand. Inoculate the seed this year. See page 64

Inoculate *with* "ACME" Inoculation

The Cheapest and Easiest Way of Improving Soil and Increasing Crops

All the legume crops, including Alfalfa, the Clovers, Soy Beans, Cow Peas, the Vetches, etc., are able to capture "free" nitrogen from the air and store it in plant food form if they are inoculated with the right kind of root nodule bacteria. Legumes not inoculated rob the soil; inoculated they feed the soil, grow more quickly and vigorously and contain a higher percentage of valuable feed proteins.

ACME the Easiest and Surest Form of Inoculation

ACME INOCULANT is a scientific pure culture of root nodule bacteria, prepared on special food jelly in bottles with patent stoppers which permit the bacteria to live and breathe and maintain their vigor. Each culture contains plenty of bacteria to inoculate the quantity of seed marked on the bottle. The cost per acre is very small. A bushel size Alfalfa culture, costing only \$1.00 will inoculate seed for 4 or more acres and cause the storage of *over \$100.00 worth of nitrogen plant food.*

Moreover ACME is easiest inoculation to use, requiring no equipment or experience. Takes only a few minutes. Complete directions on every bottle. Results are sure. Each crop or related group of crops require different bacteria. Be sure to specify which crop you are going to inoculate.

Prices for ACME INOCULATION	
For Alfalfa, Sweet Clover, Red Clover and other Clovers (specify which):	
1/2 bu. size.....	\$.60
1 bu. size.....	1.00
5—1 bu. size.....	4.75
For Soy Beans, Cow Peas, Field Peas and Beans and Vetches (specify which):	
1 bu. size.....	\$.50
5 bu. size.....	2.00
For Garden Peas, Sweet Peas, Garden Beans and Limas:	
Garden Size.....	\$.25
Always specify name of crop as well as size of culture wanted.

Soy Bean Nodules

Soy Bean Bacteria

Red Clover Nodules

Red Clover Bacteria

SEED CORN

SEED CORN TREATMENT REDUCES DISEASE DAMAGE

Seed disinfection with **Improved Semesan Jr.** will help greatly to prevent damage by diseases to the roots, stalks and ears of field and sweet corn. It protects seed against rotting, permits earlier planting, increases germination, controls blight and increases crop yields. See page 82.

All our Field Corn Seed is well matured, thoroughly cured and shelled with the greatest care. We test all varieties before sending the seed to our customers that there may be no doubt as to the vitality. To avoid delay when ordering late in the season, it would be well for you to mention your second choice, or state whether we shall send you a sort adapted to your locality, or refund your money, provided we are sold out of your first choice when your order arrives.

Put up in two-bushel cotton, seamless bags. Bags, extra.

Will be glad to quote you prices when planting season arrives and know you will find our prices as low as high-grade seed can be sold.

WHITE VARIETIES

EARLY NORTHERN WHITE DENT

A particularly desirable sort for very early planting or very late planting, as it matures its crop in about 90 days. The ears are 8 to 9 inches long, of 16 to 18 rows, which are well filled. Grains moderate, white, dented.

This is largely planted in many sections for green table corn, as it produces 2 good ears to the stalk and is profitable.

HICKORY KING CORN

An old favorite sort which is well-known in all localities. The ears are rather small but as they are borne 2 to 3 on a stalk it is a fairly good yielder. It has the largest grains and the smallest cob of any white corn ever introduced. So large are the grains that if an ear is broken off and the grain laid over the cob it will almost cover it. It is particularly fine quality and universally satisfactory.

RED COB ENSILAGE

Beyond doubt one of the best fodder corns, either to feed green, to put up for the silo, or to cure for hay. It is sweet, tender and juicy; has short joints and therefore an abundance of leaves, and grows to a fair height, but coarse-stalked. The seed is white and grows on a red cob, thus giving it the name.

SWEET FODDER CORN

For forage purposes, as it is the best of all corns both as green corn for ensilage or to be cut and used dry. Both the stalks and fodder contain large amounts of saccharine matter, which is both fattening and relished by stock.

YELLOW VARIETIES OF SEED CORN

GOLD STANDARD LEAMING

An ideal feeder's corn of light, golden color; ripening in about 100 days; ears slightly tapering and cylindrical. They grow 8 to 10 inches long, 7 to 8 inches in circumference, and are well filled at the ends. The ears are from 16 to 22 rows, there being little space between them. The cob is red, moderate size and the percentage of corn to cob varies from 86 to 90%. The per cent of protein which the grains contain is more than any other corn that we know of, and 4 bushels of Gold Standard Leaming will put as much fat on a hog or steer as 5 bushels of ordinary corn.

OHIO YELLOW DENT

A medium early yellow variety, producing well-filled ears of good length and filling out remarkably well, even under adverse conditions. Stalks of good height, producing one or two good ears, which average 10 to 11 inches long, 14 to 16 rows. Grains flinty deep; slightly dented, rich color, and fine feeding quality. This is one of the most popular varieties of yellow corn and particularly well liked by stock raisers. Ripens in about 100 days.

PRIDE OF THE NORTH

An extra early variety producing very large ears. The grains are deep, narrow and set close on the cob. Ears, 8 to 9 inches long, usually 2 on the stalk. On account of its quick maturing (90 days) and exceptionally fine yielding qualities, it is especially popular in northern sections for a quick maturing sort or for very early or very late planting in this section. Our stock of this is select, fire dried, butted and tipped.

"ACME" BEST SEED OATS

We are very large handlers of these and always sell the most select stocks which have been carefully re-cleaned in our own mills. Do not compare our prices on Seed Oats with the ordinary commercial feeding oats which are so often sold for seeding purposes. Current prices on request.

SWEDISH SELECT

It is an early white variety, producing grain of good weight and quality. Straw is medium in height and strong. Swedish Select, on account of its vigorous root action, can be recommended for a variety of soils, doing well on nearly all. Our stock of Swedish Select Oats is northern grown in a section of the country that has proven itself especially adapted to this crop. One hundred bushels to the acre is not an uncommon yield. Oats grown in a northern latitude are more vigorous, hardier and mature earlier than stocks grown anywhere else.

Gold Standard Leaming Corn

"ACME" THE BEST SEED OATS—Cont'd**WHITE SPRING OATS**

Carefully selected stock thoroughly recleaned in our own mills.

BLACK MIXED OATS

These usually do better on moderate land or thin land as they grow taller and yield a little better. They make more forage than spring oats and are better to cut green. Bags included.

WINTER TURF OATS

Superior to spring oats in some sections of the country. If sown in early spring they grow 4 to 5 ft. high and the straw is very palatable for stock. The husks are very thin with a very heavy grain; often a measured bushel weighing 36 to 40 lbs. Requires 1½ to 2 bushels per acre.

COW PEAS**The Great Soil Improving Crop**

One of the most productive and nutritious crops grown. The feeding value is high and for ensilage they are unsurpassed. As they are practically a sure crop and nitrogen gathering plant there is no surer or cheaper way of improving and increasing the productiveness of the soil than by sowing Cow Peas. They are entirely different from Canada Field Peas, really belonging to the bean family, therefore, must not be sown until the ground is warm. Sow at rate of 1½ bushels to acre.

WHIPPOORWILL

One of the earliest varieties with brown speckled seed which grows in bush form. It is a favorite sort in the West and North on account of its early maturity and ease of cutting and harvesting.

NEW ERA

In comparison with other sorts we consider New Era one of the very best as it produces an abundant growth of vine and exceedingly large quantity of pods and matures earlier than other sorts. Reports of 40 bushels per acre have been made us and the peas, while smaller than Black or Whippoorwills are fully as nutritious. Seeds are dull, lead-colored and require less per acre than other sorts.

MIXED COW PEAS

A mixture of Clays, Whippoorwills, Blacks, etc., which are somewhat lower in price than the straight sorts and they are just as satisfactory for soiling or hay.

VETCH**HAIRY OR SAND (Vicia Villosa)**

It is a winter annual and is especially well adapted to sandy soil and will do much to build up any poor soil. Withstands cold weather. Should be sown from latter part of August to middle of September.

SPRING VETCH (Vicia Sativa)

Used for sowing with oats for producing a spring crop of hay.

CANADA FIELD PEAS

Grown with oats will make a fodder or hay which doubles the production of milk. Current prices on request.

They should be sown in March or early April, two bushels of peas and two bushels of oats to the acre. The peas should be sown first and plowed under about 4 inches deep; the oats then sowed and harrowed in. They will be ready for cutting about the end of June, when the oats are in milk and the pods formed on the peas. Prices variable.

SUNFLOWER (Mammoth Russian)

The best variety for the farmer. Drill in seed at the rate of about 7 lbs. to acre. It is much relished by poultry and horses. Current prices on request.

"Any crop that grows its seeds in pods will give two to five times the yield if inoculated with "Acme" Inoculation. See page 64."

SOJA BEANS IMPROVE THE SOIL AND INCREASE CROP PRODUCTION

Soja Beans do equally well on both light and heavy soils and in addition to their value as a forage crop, they make a most desirable land improver, not only improving the condition, but adding considerably to the humus and nitrogenous content of the soil, and considerably increasing the productivity for crops to follow. There is no crop that will clean land better than Soja Beans. It is almost impossible for any weeds to grow or thrive where a crop of Soja Beans is sown, and for effectively eradicating wire grass or obnoxious weeds from the soil, we do not know of anything better.

SOJA BEANS PARTICULARLY VALUABLE FOR HOGS

Soja Beans are also particularly valuable to plant for hogs. They can be planted by themselves for this purpose, or in the corn rows, and the hogs turned in to feed on the beans after the corn is harvested. Soja Beans contain more protein and fattening qualities than corn.

Prices on Soja Beans fluctuate like those of Cow Peas. Current prices on request.

EARLY YELLOW

Plants, stout, erect and bushy, maturing in about 115 days.

ITO SAN

This small yellow bean is one of the best known varieties. It is a heavy seed producer, grows to a height of about 24 inches and matures in about 105 days. Owing to its early maturity it is excellent as a catch crop. A good variety to sow with corn for hogging down. Although rather short it ranks as a hay-producer.

VIRGINIA

On account of its abundant growth and large yield of beans, this has become one of the best known varieties for both hay and silage. It probably makes a higher growth than any other kind, the plants being slender, with vining tendrils. Matures in about 130 days.

MAMMOTH YELLOW

This is a standard commercial late variety, and is very popular in the South, where it yields an enormous quantity of beans and is satisfactory for both grain and forage.

MEDIUM YELLOW OR A. K. SOJA BEAN

A yellow seeded, medium-maturing variety, especially noted for its upright growth and abundance of leaf development with medium stem. Used largely for hogging off with corn. Matures from 100 to 125 days.

MIDWEST OR HOLLYBROOK EARLY

The earliest yellow seeded variety, making a quicker growth and matures its crop 2 to 3 weeks earlier than Mammoth Yellow Soja Bean. An erect growing plant.

EARLY BROWN

Seed about the size of the Mammoth Yellow, crop being produced earlier. It does not grow as tall, or make as large a yield of either forage or beans as the Mammoth Yellow.

SOJA BEANS—Cont'd

MANCHU

Among the early maturing varieties this stout, erect, bushy growing bean is only second to the Ito San in popularity. It is just a little later, maturing in 105 to 110 days. It is a large seed yielder and excellent for early hay and forage.

WILSON BLACK, BLACK EBONY, BLACK SABLES

Most of these have fine stems and leaves and are desirable for hay and for silage. Experiment Station reports vary greatly as to time of maturity but the average is from 110 to 120 days.

"ACME" ~~AND~~ BEST MILLET

Largely used as a summer hay crop and particularly adapted for rich or bottom soils; also very useful for cleaning rich, foul lands of weeds as its quick, abundant, luxuriant growth smothers most weeds.

Price fluctuates. Ask for current prices.

GOLDEN MILLET (Choice Tennessee Cultivated)

The most popular of Millets and if properly grown makes large and excellent crops of nutritious hay. It should be sown thickly and cut when the heads are in bloom and if for hay never allowed to get old or seed to form as this causes a great drain on the soil, besides materially injuring the quality of the hay.

Tennessee Cultivated Millet is far superior to the common Western stocks. It will produce large crops of hay in 6 to 8 weeks from sowing.

Sow 1 bushel per acre in May, June or July. Two crops can be seeded on the same land a year if desired.

WHITE WONDER MILLET

Produces a very large head similar to the Tennessee Millet. Under certain growing conditions it is quite difficult to distinguish it from the cultivated millet. The heads will run from six to eight inches. A very desirable feature is its earliness; the foliage is also very heavy and the leaves broad, resembling Golden Millet. It produces an immense amount of excellent fodder which cures very readily.

On account of the earliness, the immense yield of hay and the very vigorous growth which leaves the ground clean, we recommend the sowing of White Wonder Millet.

HUNGARIAN

Specially adapted to rich or alluvial soil. It makes a finer quality of hay than Millet on very rich soil as it does not grow so coarse. Cut at the right time, which is in bloom, and cured properly it makes as nutritious hay as Timothy; is especially popular with dairymen.

Sow from $\frac{3}{4}$ to 1 bushel per acre in May, June or July. Current prices on request.

"Any crop that grows its seeds in pods will give two to five times the yield if inoculated with "Acme" Inoculation. See page 64.

KAFFIR CORN

A favorite grain crop in the West growing similar to Sorghum. Foliage and stalks, however, do not contain saccharine matter—hence, are not so valuable for feeding but the enormous yield of grain makes it very profitable. The grain is very largely used for poultry and stock feeding, containing a high percentage of starch. Current prices on request.

ROSEN RYE

(Michigan Grown)

Grain unusually large and yield surpasses the old standard sorts.

BARLEY

Barley needs a rich land and lighter than that adapted to Wheat. It should be cut before fully ripe (unless intended for seed), as it is then of better quality and less liable to shell. Sow $1\frac{1}{2}$ to 2 bushels if drilled; 2 to $2\frac{1}{2}$ bushels broadcast. (48 lbs. per bushel.)

Spring Barley, Beardless Barley—Current prices on request.

BUCKWHEAT

A splendid soil improving crop for very poor land besides being largely grown for grain in northern and mountainous sections. It is also largely used for bees.

Culture—Sow in June, July or August at the rate of $\frac{3}{4}$ of a bu. to 1 bu. per acre broadcast, covering with a smoothing harrow. It does not mature its grain until the cool nights—hence, too early sowing is not desirable.

Japanese—This produces the largest yield of finest and largest kernel buckwheat. Superior to all other sorts. Current prices on request.

Silver Hull—Much improved over the common Buckwheat. Grains, however, smaller than Japanese but yielding abundantly. Current prices on request.

DWARF ESSEX RAPE

One of the best crops that can be grown for sheep or hog pasture. One acre will furnish enough feed for a dozen sheep for a period of two months. It can be planted from April to August—three pounds to the acre when drilled in, five pounds when sown broadcast. If planted in corn after the last cultivation, it will furnish a fine feed for grazing after the corn is cut. Current prices on request.

SUDAN GRASS

Sudan Grass though of comparatively recent introduction into the United States has spread like wildfire over many sections. It produces an immense yield of hay which is nutritious and can be cut twice in a season. In appearance it resembles Johnson Grass; grows when broadcasted 3 to 5 ft. high, or if cultivated 6 to 10 ft. high, but is more nutritious than Johnson Grass, containing larger amounts of protein and fattening qualities. Its principal value is that it is adapted to almost any kind of soil and succeeds in nearly all climates, but produces the largest yield in warm and temperate latitudes, where there is an abundance of rain-fall. It does not blight, cures easily, is greatly relished by stock and can be easily grown if sown either broadcast or in drills. After the first cutting it stools enormously, and as many as a hundred stalks sometimes come from a single root. After frost Sudan Grass is killed, and entirely unlike Johnson Grass it can be easily gotten rid of, as the winter destroys it entirely. Current prices on request.

Culture—Sudan Grass can be sown either in drills $2\frac{1}{4}$ to 3 feet apart at the rate of 5 to 6 lbs. to the acre, and cultivated like corn, or broadcast 15 to 20 lbs. per acre. Seed should be sown about the time of planting corn and the hay cut when the grass is headed out, with a mower or binder. Early cutting is desirable as the hay is more nutritious and gives the grass a better chance for large succeeding crops.

SORGHUM OR CANE

Culture—Sow in May, June or July, either in drills 3 ft. apart at the rate of about 1 pk. per acre or broadcast 1 to $1\frac{1}{2}$ bus. per acre. Cut after seed has matured.

Early Amber—A favorite sort in Northern and many Western states. Grows 10 to 12 ft. high. Price fluctuates. Current prices on request.

Red Top or Imphee—A favorite sort in Kentucky and Tennessee and one of the best varieties for general purposes both for stock feeding or making syrup. Current prices on request.

Early Orange—Similar in growth to Amber, except that the head is more spreading. A favorite sort in Southern and Western states where it produces large crops. Current prices on request.

BROOM CORN

This is usually a profitable crop and sometimes enormously profitable. A fair yield is a ton to 3 or 4 acres of ground and the seed is valuable for stock and poultry food in addition to the returns from the broom straw.

Culture—Sow in drills 3 ft. apart at the rate of 3 to 5 lbs. per acre, thinning out stalks to about 70 to the rod. Cultivate as for corn. Rich land requires thicker seeding and more stalks than medium or poor soil. Cut when the seed is in the milk state.

Improved Evergreen—A favorite sort in the Middle West producing long, straight straw of greenish appearance after being cut, which commands the highest price. Current prices on request.

SUMMER FLOWERING BULBS AND ROOTS

These include many of our most attractive plants both for foliage and flowers. As a rule they should be planted out of doors after the weather has become settled and warm. After the first

frost and the leaves have turned droopy or yellow, take up and put in a dry cellar or some other place where they will not freeze, storing in paper bags or soil preferably, and then replanting the following year.

TUBEROUS-ROOTED BEGONIAS

They are now used extensively for outdoor planting. Give them a partially shaded position in a light soil and well-drained location, and they will give more bloom than any other plant which will grow in such a place. A soil that will grow it to perfection is turfy matter scraped from the bottom of old sod—one part, and one part sand. Mix these well together, and you have a compost that is friable, porous, and well adapted to any plants having fine, fibrous roots. It is more satisfactory to apply plant-food when needed, and in such quantities as seem to be required, than to make the soil very rich from the start. Water very cautiously until active growth begins, then increase the amount. But at no time during its existence will the plant require more

than enough to make—and keep the soil moist all through. Good drainage should be provided to guard against over-watering.

DOUBLE FLOWERING VARIETIES

Double—Crimson, rose, scarlet, white and yellow, in separate colors, 30c each; \$3.25 per dozen; \$35.00 per 100.

Double, Mixed—25c each; \$2.75 per dozen; \$22.50 per 100.

SINGLE FLOWERING VARIETIES

Single—Crimson, rose, scarlet, white and yellow, in separate colors, 25c each; \$2.75 per dozen; \$22.50 per 100.

Single, Mixed—20c each; \$2.25 per dozen; \$17.50 per 100.

CANNAS

The wonderful improvement to which this popular bedding plant has been developed makes it today one of the best of all summer flowering plants both for flowers and foliage. Its ornamental leaves varying from light pea green to darkest brilliant maroons and bronzes can be used most effectively both in borders or beds. The flower spikes have been developed to enormous size and individual flowers sometimes measure 2 inches across. They are of the most brilliant colors, including all shades from creamy

white through pure lemon yellow, orange, salmon pink, scarlet to deep red velvety maroons. Many of the flowers are tinged with gold, some spotted and others striped until there is a gorgeous display which continues to bloom from early summer until cut by frost.

For best results beds should be deeply spaded and a liberal amount of well rotted manure dug in. A mass of the different colors can be planted together or single plants are effective—the arrangement being largely dictated by one's own taste.

THE AMBASSADOR

A distinguished looking Canna. Flowers vivid cherry-red; has luxurious tropical foliage prettily bronzed and makes a splendid color contrast with its brilliant blossoms. Ambassador has a habit of holding its flowers high above the foliage, a feature which makes this variety especially attractive. 3½ to 4 feet. Price, dormant roots. Each, 20c. Per dozen..... \$2.00

Prices of Named Varieties listed below—Dormant Roots—each, 10c. Dozen, \$1.00.
By mail, \$1.15 dozen. Except where noted.

GREEN FOLIAGE

City of Portland—A wonderful bright rose-pink, much deeper in color than *Hungaria*. A free-flowering and vigorous grower. 3½ feet.

Eureka—The genuine, practical *White Canna* is found at last. With the advent of *Eureka*, we are granted good, full-trusses; broad petals; uniform, free and continuous bloom, and a clean, waxy, lily-white color. Plant growth sturdy, with nice foliage. 4½ feet.

Gaiety—Scarlet-orange mottled with carmine and edged with clear yellow. Very showy. 5 feet.

Hungaria—Large flowers, borne in trusses of immense size. Color a pure *La France* pink with satiny sheen. The most popular pink; green foliage. 3½ feet.

Karl Merck—Flower a pure yellow with tinge of orange and flecked with pink dashes, becoming red in throat. Large flowers; strong grower. 4 feet.

Louisiana—Very large, beautiful, vivid, scarlet, orchid-like flowers, often measuring five to six inches across. Foliage a glossy green, edged with a narrow purple band. 6 feet.

Meteor—The best deep red large-flowered Canna, with massive erect trusses of deep-red flowers. 5 feet.

Queen Charlotte—The center of the petal is a brilliant crimson-scarlet, shaded with crimson and bordered with a wide belt of gold. 3 feet high.

The President—4 feet. Rich, glowing scarlet. Large, full flowers.

Venus—Rose pink, creamy-yellow border. 4 feet.

Yellow Humbert—Has the same habit of growth as the *King Humbert*. Has green foliage and produces yellow flowers, dotted with red. 4 to 5 feet.

BRONZE LEAVED

King Humbert—In this grand Canna we have a combination of the highest type of flowers with the finest bronze foliage. Its flowers measure 6 inches in diameter. Produced in gigantic trusses, a brilliant orange-scarlet with bright red markings; foliage broad and massive, of a rich coppery-bronze. 5 feet.

Shenandoah—4 feet. Flowers salmon-pink borne in large clusters, foliage rich ruby-red.

OUR 1929 MIXED SELECTED COLLECTION

Per doz....75c

By Mail.....90c

CALADIUMS—(Elephant's Ear)

A vigorous growing plant which has tremendously large, pendulous leaves borne on long stiff stems. In rich soil, and with an abundance of moisture, assumes very large growth and is most effective either singly on lawns or planted in centers of beds or as backgrounds for other blooming plants.

	Each	Doz.
7 to 9 in. circumference.....	10c	\$1.00
9 to 11 in. circumference.....	20c	2.00
11 to 13 in. circumference.....	35c	3.50

MAMMOTH SIZE

13 to 15 in. circumference.....	60c	6.00
---------------------------------	-----	------

TUBEROSES

Well-known summer flower, having a very sweet scent. Bulbs may be planted outside from April to June.

Excelsior Dwarf Pearl—The best of all double Tuberoses, producing very large finely formed flowers. First size bulbs, 10c each. 85c doz. \$6.00 per 100.

MADEIRA VINES

Madeira Vines (Mexican Potato)—A rapid growing vine with bright, smooth leaves which produce intense shade and valuable for covering fences, outbuildings, or screening porches. Plant the roots 2 inches deep. Vines should be trailed on strings or poles. Strong roots, 5c each. 40c doz. Per 100.....\$3.00

Caladium or Elephant Ear

DAHLIAS

READY ABOUT APRIL 1ST.

One of the most satisfactory of the summer flowering roots, producing an abundance of brilliant colored flowers from July to frost. The different varieties comprise all colors from purest white to deepest maroon. Many of them in two or more colors with edged petals; some double with quilled petals, others broad, flat petals; some twisted and curled, and comprise many fantastic shapes. There are several classes. Our stock embraces the best varieties and prices are very reasonable.

Culture—Plant from May to July. Do not allow over three stocks to grow. Stake the plants. Keeping the suckers pulled off will produce the finest blooms. After frost dig and store in a dry place where they will not freeze.

The size of the tuber does not in any way designate the size or quality of the flower. Some varieties of dahlias always produce very small bulbs, while other varieties make larger ones.

Our stock is **CHOICE FIELD GROWN** Roots, strong division.

DECORATIVE DAHLIAS

These come next to the Cactus as a cut-flower. They are also very showy in the garden, being unusually free bloomers. They are more formal in make-up than the Cactus Dahlias, but not so formal as the Show varieties, being a happy medium between the two.

Mrs. I. De Ver Warner—One of Judge Marean's best creations. Very large beautiful flowers of fine form and substance. Color a rich rosy mauve. Stems long and rigid. Very attractive in the garden and one of the best for exhibition and for cutting. We consider it one of the best dahlias on our list. 60c each.

Pride of California—Dark rich crimson of pleasing form and large size. Flowers held erect on splendid stems. One of the best red decorative dahlias for cutting yet introduced. 35c each.

Jersey's Beauty—A justly praised decorative of striking loveliness. A perfect bloom of deep, true pink, carried high above the foliage on perfect stems. A famous prize winner. 75c each.

Shannon—A large bold flower on long stiff stems. This wonderful new dahlia cannot be excelled as a cut-flower or garden variety. Without disbudding it often measures 7 inches across and 5 deep. Will last a week when cut. The color is a deep golden orange overlaid with a silvery sheen, causing it to glisten in the sun or artificial light. 60c each.

Judge Marean—In this large dahlia there is a riot of blending color, ever changing as the flower ages. There is a glowing salmon pink, iridescent orange, yellow and pure gold, and the shades all blend most beautifully. The large fine flower stands on a long straight, strong stem facing the garden boldly. \$1.00 each.

Snowdrift—Pure white, full deep built flower with broad petals. Low bush. One of the best white decoratives. 60c each.

Mrs. Carl Salbach—An immense bloom of a lovely, mauve pink, shading lighter to the center and every petal outlined in deep mauve. The stem is extremely long and strong, holding its immense blossom proudly erect above a tall, vigorous plant. A most valuable and useful exhibition and cut flower variety, 60c each.

Mina Burple—Large brilliant deep red. 35c each.

CACTUS DAHLIAS

So-called from their resemblance to Cactus flowers. They are characterized by long, narrow, pointed tubular and twisted petals of graded lengths, giving the flowers a striking and attractive appearance. Grand for cut-flowers.

Attraction—A beautiful dahlia that is greatly admired. The flowers, which measure fully 6 inches in diameter, are composed of gracefully arranged curled or twisted petals of a lively yet soft silvery mauve-rose, with white suffusion. 60c each.

Mrs. I. De Ver Warner

Cactus Dahlias—Cont'd

Kalif—Its brilliant pure scarlet color and strong stout stems make it one of the most useful dahlias, both for cutting and exhibition. 60c each.

Gladys Bates—A huge cutting flower of perfect form, color, tan with rose reverse, a dahlia of real merit. 60c each.

Ballet Girl—Very large cactus, with long very finely quilled petals. Colors, orange tipped white; some flowers solid orange on same plant. 60c each.

Gladys Sherwood—An immense pure white blossom, deep and full, held very erect on splendid stems. A most popular white. 75c each.

SHOW AND FANCY DAHLIAS

These are the old-fashioned dahlias of our mothers' gardens. Perfect in shape and outline.

Maude Adams—Fine white, suffused clear pink. 35c each.

A. D. Livonia—Medium sized, shell pink, very fine cut-flower. 25c each.

Ethel Mower—An exquisite shade of shell pink, carried on long stiff stems. Fine exhibition variety. 60c each.

Mrs. Dexter—Orange yellow, long stems, a profuse early bloomer. 25c each.

Delighted—Giant pure white. 35c each.

Our 1929 Mixed Dahlia Collection

Composed only of selected varieties.

Nothing under one dozen sold.

PER DOZEN..\$1.50 BY MAIL..\$1.65

GLADIOLI

Gladioli are among the most decorative plants in the garden and as a cut-flower lends itself readily to any arrangement. If the spikes are cut when the lowest flower is in bloom, the others will open in succession and remain fresh a week or ten days.

Gladioli will thrive in almost any good soil except a stiff clay. Plant the bulbs six to nine inches apart, the large ones four inches and the small ones two inches deep. Make an early planting of the smallest bulbs first as soon as the ground is sufficiently dry and warm. Continue to plant at intervals of two weeks during the spring and early summer; in this way a succession of bloom may be had from midsummer until frost. A free use of water during the season of active growth, particularly as the buds begin to show color, will be beneficial in producing fine blossoms. In the autumn, before freezing, they should be dug and the tops allowed to dry down, after which the dry tops, earth and old bulbs can be removed. Store in a cool, dry place, secure from frost until spring.

NEW AND RARE RUFFLED GLADIOLI COLLECTION

Rose Ash (Ashes of Roses)—Old rose overlaid and blended with pink and red, giving the color of ashes of roses. Very attractive. 15c each; \$1.50 per doz.; \$10.00 per 100.

Orange Glory—Deep orange with carmine blotched throat. Very vigorous, husky plant. Heavily ruffled flowers. 15c each; \$1.50 per doz.; \$10.00 per 100.

Purple Glory—Deepest velvety maroon with almost black blotches, large ruffled flowers on very tall, sturdy stems. 25c each; \$2.25 per doz.; \$15.00 per 100.

Twilight—Creamy buff, edges of petals pink, throat primrose yellow and pink. 20c each; \$2.00 per doz.; \$12.50 per 100.

Mrs. H. E. Bothin—A beautiful geranium pink tinted salmon, flaming scarlet center; striking color, well-placed heavily ruffled flowers. One of the best. 15c each; \$1.50 per doz.; \$10.00 per 100.

NAMED VARIETIES

These comprise some of the choicest sorts.

If by mail add 7c per dozen for postage.

America—One of the finest varieties for cutting or bedding; color a beautiful soft flesh-pink; orchid-like in its coloring and texture; growth and habit perfect. 6c each; 50c per doz.; \$3.00 per 100.

Anna Eberius—Beautiful dark velvety purple, throat a deeper shade, slightly ruffled. The best in its color and a strong grower. 10c each; 90c per doz.; \$6.00 per 100.

Goliath—Extra fine dark purplish maroon. 15c each; \$1.50 per doz.; \$10.00 per 100.

Halley—A delicate salmon pink with roseate tinge. The lower petals have a creamy blotch with a stripe of bright red through the center. The best of all salmon pinks. 7c each; 60c per doz.; \$4.00 per 100.

Le Marechal Foch—Rose-pink, resembling America in color but deeper. Large flowers and beautifully ruffled. 7c each; 60c per doz.; \$4.00 per 100.

Lily White—Pure white. Large flowers. Early. 7c each; 60c per doz.; \$4.00 per 100.

Mrs. Francis King—Brilliant vermillion scarlet borne on long spikes. Flowers enormous, sometimes 4½ inches across. Most excellent. 6c each; 50c per doz.; \$3.50 per 100.

Mrs. Frank Pendleton—Flushed salmon-pink, with rich maroon blotch on the three lower petals. The most popular flower in florists' shops. 8c each; 85c per doz.; \$5.50 per 100.

Panama—A new seedling of America which resembles the parent variety in every way except that it is a much deeper pink. A grand variety. Spike very long with flowers large and well arranged. 7c each; 60c per doz.; \$4.00 per 100.

Peace—Very large, nearly white, with pale violet feathering on lower petals; flowers correctly placed on a tall, graceful spike. 7c each; 60c per doz.; \$4.00 per 100.

Princepine—An especially fine variety with large flowers of good substance. Color is a brilliant red, marked with a pinkish-white blotch and borne on strong spikes. 7c each; 60c per doz.; \$4.00 per 100.

Purity—A pure white seedling of America, having the same habit of growth, form of flower and substance. A strong grower and free bloomer with tall, well-furnished spikes. 7c each; 60c per doz.; \$4.00 per 100.

Schwaben—Clear canary-yellow, shading to soft sulphur. Largest flower stalk and leaves of all. 7c each; 65c per doz.; \$4.50 per 100.

Wilbrink—Sport of Halley. It retains the earliness of that variety, but has a delicate pale pink color, somewhat similar to "America." 7c each; 60c per doz.; \$4.00 per 100.

Yellow Hammer—Pure yellow, extra strong grower. 10c each; \$1.00 per doz.; \$7.00 per 100.

Gladioli

MIXED GLADIOLI

JMC Superb Mixture—Largest size bulbs. Brilliant colors and shades. 6c each; 50c per doz.; \$3.50 per 100.

As a safeguard against fungous disease, such as rot, etc., dust bulbs thoroughly with Semesan before planting. See page 82.

HARDY LILIES

Lilies are stately and most beautiful bulbous plants—producing large flowers of exquisite outline and varied coloring. They are hardy even in cold locations with protection, and usually surviving for many years. Ideal locations are in the shrubbery or herbaceous border where the roots are sheltered from the hot sun. Groups of 6 or more lilies of a kind, here and there, in such situations are most effective. Large isolated clumps or beds of the varieties *Auratum* or *Rubrum*, are very beautiful. They should be planted 6 to 8 inches below the surface in light soils, or 4 to 5 inches below in heavy soils; in the latter case the bulbs should be surrounded by sand to facilitate drainage.

Lilium Regale or Myriophyllum—It is absolutely hardy and is excellent for forcing. It has been predicted that this will become the Easter Lily of the future, and being so hardy, may be grown at home. The flowers are white, slightly suffused with pink on the outer edges, with a beautiful shade of canary yellow at the center, and extending part way up the trumpet. It is delightfully perfumed, reminding one of the Jasmine, and lacking the heavy, oppressive odor of most Lilies. Blooms out-of-doors early in July. Thrives in any good soil not too wet. Each 50c; doz., \$5.00.

Auratum (Gold-Banded Lily)—A magnificent sort producing large broad creamy white flowers spotted with maroon and having a broad band of gold extending the length of each petal. Large size bulbs, 35c each; \$3.50 per doz.

Speciosum Rubrum—A magnificent sort. Color blush white with dark maroon spots. Very effective and handsome. 35c each; \$3.50 per doz.

CYANOGAS KILLS MOLES

And other rodents that infest the soil. Protects your bulbs and choice plants from pests. Easily applied and effective. The only sure remedy that kills moles, woodchucks, squirrels, ground-hogs and other rodents that infest the ground. 1-lb. pkg., 75c; 5 lbs, \$3.00. By express only; cannot be mailed. See Page 80.

ROSES FOR THE GARDEN

Many of our old customers are familiar with the high-grade roses that we send out, but to those who have never planted our stock, we wish to direct their attention to the following:

All our roses are 2-year-old field grown budded stock, except where noted: While some planters prefer stock grown on their own roots on account of the possibility of budded plants developing wild shoots, this will rarely occur if the deep planting as directed in the following paragraph is followed. Much can be said in favor of budded plants, they being more vigorous producing finer blooms, coming into bearing sooner, and are as permanent and hardy as those on their own roots, while many of the very finest varieties will not succeed at all when grown on their own roots. Preference is given to budded plants by all who have had experience with the different classes.

HOW TO GROW ROSES

Situation—Good roses may be grown in any open, sunny position, if sheltered from north winds, and clear of all roots of trees and shrubs.

Planting—The soil should be rich, and carefully prepared to a depth of at least 18 inches. The most satisfactory fertilizer to use is well-rotted animal manure, of which a liberal quantity may be thoroughly mixed with the soil. Ground bone meal, at the rate of a trowelful for each plant, may also be added at the time of planting.

Plant Hybrid Tea Roses 18-24 inches apart and Hybrid Perpetuals 2½-3 feet apart. All budded Roses should be planted so that the crown from which the shoots arise is 1-inch beneath the surface of the bed.

Winter Protection—In this latitude we have found that the most satisfactory protection is to draw up a mound of soil from 8 to 10 inches high around the base of the plant, then covering the entire beds after the ground begins to freeze with any loose material, such as straw or peat moss.

Climbing or Trellis Roses—Planted around verandas or porches they are especially desirable. Other choice locations are for training over summer houses, pergolas, along fences and the rose walk. Climbing roses should be planted from 3 to 8 ft. apart, depending upon how dense a covering is desired. Little, if any, pruning should be done. Branches that grow in long shoots, many times 15 to 20 ft. or more should be carefully trained and tied to trellis or support.

*For complete description of peat moss, see bottom of page 72.

NEW HYBRID TEA ROSES

Talisman (Montgomery, 1929). Awarded American Rose Society Gold Medal at Louisville, 1928, the President Coolidge Horticultural Gold Medal at New York, 1928; Gold Medals at Philadelphia and New York shows, 1928.

Talisman is the most vividly colored rose ever introduced and exceptionally easy to grow. It is a combination of yellow and copper suffused with pink in the bud. Its foliage is very fine and vigorous, untroubled by disease, and the plant grows rapidly and blooms with exceptional freedom. The flowers have much substance and never lose their striking color entirely, although they are lighter in unfavorable weather. \$2.50 each.

Lady Margaret Stewart (1927). Another marvelous introduction of Alexander Dickson & Sons awarded the Gold Medal of the National Rose Society of England at the 1926 Spring Show. A rose of unique and distinct color, the flowers in the young stage are a deep sunflower yellow heavily veined and splashed with orange-scarlet with the reverse of the petals deeply suffused with carmine, as the flowers develop these colors intermingle forming a most beautiful cadmium orange effect. The bud is long and pointed, opening to a full double flower, of most pleasing decorative form of delightfully sweet scent. \$2.00 each.

Dame Edith Helen. (Alex Dickson & Sons, 1926.) Awarded Gold Medals by the National Rose Society of England and also at the New York and Philadelphia Flower Shows.

A rapid rise in the popularity of this new rose was anticipated at the last meeting of the American Rose Society. In this we feel more enthusiastic than over any new rose yet introduced.

The plant possesses a strong, vigorous constitution with large, healthy, dark green foliage, the flowers are produced singly on well foliated strong canes throughout the season, these are of immense size, composed of very substantial broad petals which curl back prettily, forming a wonderful long pointed bud which develops into a full double flower, which is absolutely perfect in every stage of development. The color is a brilliant, yet soft pink and is delightfully and strongly sweet scented. \$1.50 each.

Etoile de Hollande. One of the most reliable red bedding roses. A strong, clean vigorous grower that produces its large, magnificent flowers throughout the season, these are moderately double and particularly attractive in the half-open state, in color a brilliant crimson red. \$1.50 each.

Rev. F. Page Roberts—A rose of remarkable beauty both in form and color. The long pointed buds are of a coppery-red stained red on the outside and open to good full double fragrant flowers of a golden-yellow particularly high colored in late summer and fall. The plant is of vigorous branching habit with beautiful foliage. A most distinct variety that has deservedly gained great popularity in the short period since its introduction. \$1.50 each.

"OUR ROSE COLLECTION"

Selected for unusual qualities of color and form. They are very strong and vigorous and bloom freely.

See description, Page

Betty Uprichard—Coppery-orange, inside	72
salmon-pink.....	72
Columbia—Rose-pink.....	72
Duchess of Wellington—Saffron-yellow.....	72
Hoosier Beauty—Deep glowing crimson.....	72
Radiance—Silvery pink.....	72
Red Radiance—Rosy red.....	72

The above collection of 6 varieties (1 of each) for \$4.00.

The above collection of 6 varieties (2 of each) for \$7.75.

Fertilizers—Use Sacco, Bone Meal, Sheep Manure or Shredded Cattle Manure.

See page 84 for complete description and prices.

Select Ever Blooming Hybrid Tea Roses

America—A glowing rose-pink with long pointed buds which develop into large, artistically formed double flowers.

Betty Uprichard—One of those delightfully contrastive types; the outside a blend of deep toned carmine with coppery orange; the interior a delicate salmon pink. Strong garden variety, sweetly fragrant.

Columbia—Of strong, vigorous habit and exceptionally free blooming. The flowers are perfect in form. Color a most pleasing shade of rose-pink and delightfully fragrant.

Duchess of Wellington—The most popular yellow garden rose. Intense saffron-yellow stained with deep crimson, changing to a deep coppery saffron-yellow as the flowers develop. The flowers are fairly full, with large petals, great substance, delightfully fragrant and very free-flowering.

Edel—An enormous bold, stately, well-built flower of great depth, quality and finish. Color, white with the faintest ivory shading towards the base.

Hoosier Beauty—Deep, glowing crimson with darker shadings; large, beautifully formed flowers carried on vigorous, branching stems.

Los Angeles—Luminous flame-pink, toned coral, shaded translucent gold at base of petals.

Mme. Butterfly—Brilliant pink, suffused apricot and gold.

Mme. Edouard Herriot—Also called "The Daily Mail Rose". Its coral-red buds develop into flowers of the same hue shaded yellow to scarlet, an extraordinary coloring.

Ophelia—Salmon flesh, shaded with rose and with a heart of glowing peach-pink and orange-yellow blendings; large, fragrant and of perfect shape.

Radiance—An ideal bedding rose of American origin that continues to produce its large flowers throughout the most unfavorable hot summer weather when frequently many other varieties fail; in color a brilliant carmine-pink, with salmon-pink and yellow shadings at the base of the petals; truly a rose for every garden.

Red Radiance—A counterpart of Radiance from which it is a "sport," possessing all the good traits of that valuable variety but differing in color which is a bright cerise-red.

Sensation—Bud is large, long-pointed; the expanded flower very double. The finish suggests rich velvet, in color a scarlet-crimson deepened over all by glossy maroon. The foliage is dark, and the scented bloom profuse.

Souvenir de Claudius Pernet—A most vigorous grower of erect branching habit; beautiful, brilliant green foliage; long pointed buds of exquisite shape, carried on long, stiff stems. Very large and full flowers with elongated deep petals, a beautifully formed bloom. Color, a most striking sunflower-yellow, deeper in the center without any color blending and which is retained without fading even in the warmest weather.

Souv. de Georges Pernet—A strong vigorous grower and free bloomer. The flowers are large; globular in form; color, Orient red shading to a cochineal-carmine at the end of the petals, the whole being suffused with a golden sheen.

Price—Any of the above, in strong two-year-old dormant plants, 85c each. \$8.50 doz.

HARDY CLIMBING ROSES

American Pillar—Rich rosy pink.

Climbing American Beauty—Rosy crimson.

Dorothy Perkins—Pure salmon-pink.

Dr. Van Fleet—Rich flesh-pink; exquisitely shaped buds.

Emily Gray—Orange-yellow.

Gardenia—Buds bright yellow, flowers cream. Very hardy.

Jacotte—A splendid new variety, salmon-orange. 85c each.

Mary Wallace—Rose pink, salmon base.

Paul's Scarlet Climber—Vivid scarlet.

Silver Moon—Pure white.

Price. 50c each. \$5.00 per dozen, except where noted.

HYBRID PERPETUAL ROSES

American Beauty—Deep carmine rose.

Frau Karl Druschki—The best snow white.

Price. 75c each. \$7.50 per dozen.

ROSE SPECIES

Hugonis—(Novelty). A remarkable and very valuable briar rose brought in from China. Grows and spreads quickly to as much as 6 feet at maturity. Blooms extravagantly in May, full length of last year's shoots. Flowers single, ranging from deep gold to canary, with conspicuous stamen tufts. After it has finished flowering it remains an attractive decorative bush for the balance of the season. Perfectly hardy. Each, \$1.00.

GROW BETTER ROSES

DESTROY INSECT PESTS AND DISEASE BEFORE THEY CAN ATTACK

Mildew and Black Spot—Spray with Fungtrogen, or dust with All-in-One.

Green Fly or Aphis—Dust with All-in-One or spray with Evergreen or "Black Leaf 40".

Rose Bugs and Beetles—Spray with Evergreen.

We offer on page 80 a large assortment of insecticides and fungicides, including the above mentioned. Refer to page 86 for the proper sprayers and dusters.

PEAT MOSS

THE PERFECT MULCH FOR ROSES AND HOW IT SHOULD BE USED

The best time to apply Peat Moss is about the time the roses are coming into bloom. Previous to that time the ground should be worked weekly and kept open and free from weeds. Apply the moss evenly, about 2 inches thick, as it comes from the bale or slightly moistened. Wet down after applying in order to anchor it in place and enjoy complete relief from weeding, hoeing, and backache forever after.

In fall, hill up Granulated Peat Moss about the rose plants to a height of 6 to 10 inches. In spring it can easily be removed and spread evenly over the entire bed without danger of breaking away any young, tender shoots that may have started into growth. See page 85, for prices.

HARDY PERENNIAL PLANTS

The old-time perennials are coming to be more widely known and planted each year. No hardy border is quite complete without it being interplanted with some of these choice specimen, and the whole border filled with perennials is a joy every day during the flowering season.

A very effective way of planting, especially when the space is long, is to use a large quantity of plants and a few varieties whose blooming season follows each other in quick succession. It is a good idea to plant the whole border in small groups so that the entire space is attractive with flowers of one kind, and perhaps one or two colors. If this plan is followed, the border cannot present a whole mass of bloom, but there are pleasant changes almost every week during the season.

The preparation of a perennial bed should be very thorough, especially as the soil cannot be well tended or much

enriched afterward. If the subsoil does not permit sufficient under-drainage to prevent water staying on the surface then under-drainage to the depth of at least two and a half feet will be necessary.

A first class perennial bed, suited to sustain a large variety of plants in vigorous growth, should have the ground made loose to a depth of at least two feet. A satisfactory method is to throw off the top soil, then dig over the subsoil and mix with it a liberal amount of sheep manure. If the soil is a stiff clay, an application of about two inches of screened coal ashes or sand worked into the soil will keep it loose.

The top, if possible, should be good rich loam well mixed with sheep manure and put in a fine, pulverized condition. Keep the surface soil rich at all times, since many of the plants are shallow rooted and need a very mellow soil.

STIMUPLANT
Makes a
WONDER GARDEN

AQUILEGIA (Columbine)

This is one of the best perennials for borders or edges of shrubbery. They do best in partial shade.

Long Spurred Hybrids—20c each. \$2.00 per dozen.

ASTER, HARDY (Michaelmas Daisy)

Hardy Asters are easy of cultivation in ordinary soils and exposures and are among the best plants for the hardy border and for cut flowers. Flowers appear in the autumn and are brilliant blue, purple or white. Each, 20c. Per doz. \$2.00

CAMPANULA (Canterbury Bells)

These are well-known biennials and perennials which are easily grown in any garden and give fine borders or beds. Colors pink, blue and white. Each, 20c. Per dozen. \$2.00

CHRYSANTHEMUMS (Hardy)

These are universally popular for outdoor bedding. They produce a lavish profusion of blooms, giving color, life and beauty to the garden just at a time when other plants have been destroyed by frost or looking their worst. They are quite hardy if planted in a well-drained position, and, with a slight covering of leaves or litter during the winter, will take care of themselves after once planted. Each, 25c. Per dozen. \$2.50

COREOPSIS LANCEOLATA

Bright golden yellow, blooming in profusion all summer. Each, 20c. Per dozen. \$2.00

DELPHINIUM (Larkspur)

These are deservedly one of the most popular subjects in the hardy border, bold, attractive and highly prepossessing plants of easiest culture; perfectly hardy. They will establish themselves in almost any garden soil, but respond quickly to liberal treatment.

Delphinium Belladonna—The freest and most continuous blooming of all. Clear turquoise-blue. Each, 25c. Per dozen. \$2.50

Delphinium Bellamosa—Dark blue, white center, spikes three to four feet tall, vigorous; free blooming. Each, 25c. Per dozen. \$2.50

Delphinium Hybrids—A beautiful collection of wonderfully developed plants of brilliant and showy flowers. Mixed colors. Each, 25c. Per dozen. \$2.50

DIGITALIS (Foxglove)

The strong flowerstalks—frequently 4 to 6 feet high—rising from rich and luxuriant masses of leaves, always give an appearance of strength to the hardy border, and during their period of flowering dominate the whole garden. Assorted, each, 20c. Per dozen. \$2.00

FORGET-ME-NOT

Myosotis Palustris Semperflorens—A variety that is hardly ever out of flower; useful in a shady spot in the border and for forcing cut flowers in the winter. Each, 20c. Per dozen. \$2.00

GAILLARDIA (Blanket Flower)

Grandiflora—One of the showiest hardy plants, growing about 2 feet high and succeeding in any soil in a sunny position. The centre is dark-red brown, while the petals are marked with rings of brilliant crimson, orange and vermillion. Each, 20c. Per dozen. \$2.00

GYPSOPHILA (Baby's Breath)

Will thrive in any soil in a sunny position, and on account of their gracefully arranged large panicles of minute flowers should be in every garden.

Paniculata—A beautiful old-fashioned plant, possessing a grace not found in any other perennial. Each, 20c. Per dozen. \$2.00

HIBISCUS (Mallow)

Mallow Marvels—A robust type of upright habit, producing an abundance of flowers of enormous size in all the richest shades of crimson, pink and white; mixed colors. Each, 20c. Per dozen. \$2.00

HOLLYHOCKS

Growing 5 to 6 feet tall, these plants produce a pleasing effect planted either in rows on the lawn or among shrubbery. They require a deep rich soil and a sunny situation and will repay a little extra attention given them.

Double flowering in colors. Each, 20c. Per dozen. \$2.00

PEONIES

The Peony of all the hardy outdoor plants is perhaps the oldest and best known inhabitant of the flower garden, and in the improved double forms offered by us the gorgeous display of blooms in the month of June is unequalled. The flowers being perfectly double, many being very fragrant and all of massive size.

We can supply large clumps of many varieties of Peonies from 35c to \$1.50 each.

PHLOX (Hardy)

Phlox Decussata—This is one of the most useful flowers for summer decoration, the colors varying from pure white to deep crimson. They are not at all particular as to soil, and are exceedingly hardy. To obtain good results it is wise to manure the soil well and give them a fairly open situation, and an occasional soaking of water during very dry weather. Once planted they require no further attention for several years, but it is advisable to renew them about every fifth year. Price, assorted varieties, each, 25c. Per dozen. \$2.50

PHYSALIS (Chinese Lantern Plant)

Franchetti—An ornamental variety of the Winter Cherry, forming dense bushes about 2 feet high, producing freely its bright orange-scarlet lantern-like fruit which, when cut, will last all winter. Very attractive plant. Each, 25c. Per dozen. \$2.50

PINKS (Hardy Garden)

Dianthus Plumarius—(Hardy Garden or Pheasant Eye Pinks.) These "Clove Pinks," so much used for edgings of old-fashioned gardens, bloom most profusely during May and June. They grow about a foot high and bear double flowers resembling small carnations. We have white, pink and red. Each, 25c. Per dozen. \$2.50

POPPY (Oriental)

Perennial poppies are of the easiest culture; almost any kind of soil suits them, but they do best in deep, rich loam; give them water occasionally during dry spells in the early part of the season. Each, 25c. Per dozen. \$2.50

SEDUM (Stone Crop)

Spectabilis—Erect growing; height, 18 inches with broad light-green foliage and immense heads of handsome, showy, rose-colored flowers. Each, 20c. Per dozen. \$2.00

SHASTA DAISY

Large, snowy-white flowers, in bloom continuously throughout the summer and fall. Each, 20c. Per dozen. \$2.00

SWEET WILLIAM

Dianthus Barbatus—These old-fashioned favorites are prized border plants. There is a great variety of rich colors, and the flowers are very fragrant. Each, 20c. Per dozen. \$2.00

TRITOMA

(Red Hot Poker, Flame Flower or Torch Lily)

Pfitzeri—(The Everblooming Flame Flower.) In bloom from August to November, a rich orange-scarlet, producing a grand effect, either planted singly in the border or in masses. Each, 25c. Per dozen. \$2.50

WE DO NOT GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES. AT PRICES QUOTED

Use SACCO PLANT FOOD for Hardy Perennials

ORNAMENTAL FLOWERING SHRUBS

There is nothing that will add more beauty or lend more enchantment to grounds and lawns than well selected judiciously grouped shrubs, and considering their moderate cost, they should be used more largely.

SPECIAL

EIGHT POPULAR SHRUBS THAT BLOOM ALL SUMMER

Forsythia Fortunei.....	5-6 feet—April	Honeysuckle Red Tartarian...5-6 feet—May-July
Deutzia.....	3-4 feet—May	Weigella Rosea.....4-5 feet—June
Spirea Van Houttei.....	4-5 feet—May-June	Spirea Anthony Waterer.....2-3 feet—July-Aug.
Syringa Mock Orange.....	6-7 feet—May-June	Hydrangea P. G.....3-4 feet—Aug.-Oct.
ABOVE COLLECTION OF EIGHT FLOWERING SHRUBS.....		\$4.50

Althea (Rose of Sharon)—The Altheas are among the most valuable of our hardy Shrubs on account of their late season of blooming, which is from August to October a period during which but few shrubs or trees are in flower. They are also extensively used as hedge plants, for which they are admirably adapted.

	Each	Doz.
Althea Double Rose, Double White and Double Purple.....	\$0.60	\$6.00

Barberry Thunbergi—A beautiful Japanese variety of dwarf habit. Small foliage, assuming the most varied and beautiful tints of coloring in the autumn; very desirable for grouping and a grand hedge plant. Strong plants. 24 to 30 inches. 12 to 18 inches.....

Buddleia (Butterfly Shrub or Summer Lilac.) Flowers continuously all season. The flowers are composed of many little blossoms in the shape and color of lilacs.....	.50	5.00
---	-----	------

Calycanthus Floridus (Sweet-Scented Shrub)—Flowers fragrant, like strawberries; double and of chocolate color.....

Cercis Canadensis (Judas Tree or Red Bud)—All the branches and twigs are covered with a mass of small pink flowers early in the spring, before the leaves appear. 2 to 3 feet.....	.75	7.50
--	-----	------

Corchorus (Kerria)—Globe Flower or Japanese Rose. Japonica. Flowers bright yellow; large and showy. 1½ to 2 feet.....	.75	7.50
---	-----	------

	Each	Doz.
Deutzia Gracilis—A dwarf bush, covered with spikes of pure white flowers in early summer.....	\$0.75	\$7.50

Deutzia Lemolni—Flowers pure white. Habit dwarf and free flowering. Extra strong plants...	.75	7.50
--	-----	------

Deutzia Pride of Rochester—Large double white flowers, slightly tinted with rose. 2 to 3 feet.	.50	5.00
--	-----	------

Dogwood (White Flowering)—The flowers produced in spring before the leaves appear, are from 3 to 3½ inches in diameter, white and very showy. Foliage grayish green, glossy and handsome, and in the autumn turns to a deep red; one of the most showy flowering trees.....

Euonymus Europaeus (Burning Bush)—A conspicuous shrub, in the autumn and winter when loaded with scarlet seed pods, from which the orange-colored berries hang on slender threads, 3 feet. Extra strong plants.....	1.00	10.00
---	------	-------

Forsythia Fortunei (Golden Bell)—Of upright growth, deep green foliage and bright yellow flowers in April. Extra strong plants.....	.50	5.00
---	-----	------

Forsythia Virdissima (Green Stemmed Golden Bell)—Bright yellow flowers on spreading branches. Excellent foliage that assumes a rich autumn color and persists until early winter. Extra strong plants.....	.50	5.00
--	-----	------

WE DO NOT GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES, AT PRICES QUOTED

ORNAMENTAL FLOWERING SHRUBS—Cont'd

Hydrangea Paniculata Grandiflora—This is the finest shrub in cultivation, and endures heat and cold extremely well. The flowers, which are borne in dense pyramidal panicles in the greatest profusion, are white when they first open, but gradually change to rose and remain in good condition for weeks. Extra strong plants. 2 to 3 feet.....\$0.75 \$7.50

HYDRANGEA PANICULATA GRANDIFLORA

Standard or Tree Shaped

These are fine specimen plants, four and five years old, trained to tree shape with about three feet of straight stem and nicely shaped heads, should bloom profusely the first year. Extra strong plants 2.25

HONEYSUCKLE, Upright

Valuable for handsome flowers and showy fruits. The following varieties are erect, upright growth. The climbing sorts will be found under the head of Climbing Plants.

Morrowi—A fine variety from Japan, valuable for its handsome fruit. 2 to 3 feet..... .60 6.00

Red Tartarian—Pink flowers which contrast beautifully with the foliage. 2 to 3 feet..... .60 6.00

White Tartarian—Forms a high bush of creamy white fragrant flowers in May and June. 2 to 3 feet..... .60 6.00

LILAC

Lilac Common (*Syringa Vulgaris*)—The common purple species, and one of the best, 3 feet..... .75 7.50

Lilac Common White (*S. Vulgaris alba*)—Flowers pure white; very fragrant. 2 feet..... .75 7.50

MOCK ORANGE

Mock Orange or Syringa—A well-known shrub, with pure white, highly scented flowers. One of the first to flower. Extra strong plants..... .60 6.00

JAPAN QUINCE

Cydonia Japonica—Blossoms in early spring; flowers dazzling scarlet. Makes an excellent hedge. 3 feet..... .75 7.50

SNOWBALL, Viburnum

Common (*Sterilis*)—A well-known and favorite shrub, of large size, which bears large globe shaped clusters of pure white flowers the latter part of May. 2 to 3 feet..... 1.00 10.00

SNOWBERRY

A graceful shrub, 3 to 5 feet tall, with slender branches. Flowers white or pinkish, in summer. Berries white, produced in showy clusters, the branches bending under their weight..... .60 6.00

SPIREA. Meadow Sweet

Elegant low shrubs of easiest culture, their blooming extends over a period of 3 months.

Anthony Waterer—A fine dwarf Spirea bearing dark crimson flowers all summer. One of the finest shrubs..... .50 5.00

Billardi—A fine rose-colored sort, which blooms nearly all summer. 2 to 3 feet..... .60 6.00

SPIREA—Continued

Thunbergi—Of dwarf habit, rounded, graceful form with slender branches, somewhat drooping. Flowers are small, white, appearing early in spring. Foliage narrow and yellowish green. One of the first Spireas to bloom, and much esteemed on account of its neat graceful habit. 2 to 3 feet.....\$0.75 \$7.50

Van Houttei—One of the very finest of all Spireas. At the flowering season, in May or early June, the plant is covered with a mass of large, white flowers presenting a beautiful appearance. It is a beautiful ornament for the lawn at any season. Perfectly hardy, an early bloomer and one of the finest shrubs in the catalogue. 2 to 3 feet..... .35 3.50
3 to 4 feet..... .45 4.50

WEIGELIA

Eva Rathke—A charming variety, flowers brilliant crimson, a beautiful, distinct clear shade, strong plants. 2 to 3 feet..... .75 7.50

Rosea Nana Variegata—Leaves beautiful, margined creamy white; flowers pink. It is a dwarf grower, and adapted to small lawns or gardens. 2 to 3 feet. Strong plants..... .90 9.00

HEDGE PLANTS

California Privet—A vigorous, hardy variety of fine habit and dark green foliage which is rarely attacked by insects and keeps its green color mostly unchanged until late fall. It succeeds well under adverse conditions and is ideal for planting as ornamental hedges.

Planting—Plant in double rows, the two rows being about 8 inches apart. The plants should be set 12 inches apart in the row, alternating the plants. In order to secure a dense hedge from the base up, the plants should be severely pruned the first two seasons.

	Doz.	Per 100
1½ to 2 feet.....	\$1.00	4.50
2 to 3 feet.....	1.20	6.50

WE DO NOT GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES, AT PRICES QUOTED

FRUIT TREES

Select thrifty trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are more apt to thrive; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth. If not

prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots and setting the trees therein, carefully pack the earth about the roots, taking up when required. Never leave the roots exposed to the sun and air. We do not guarantee to replace plants or trees.

SENT BY EXPRESS OR FREIGHT AT EXPENSE OF PURCHASER.

APPLES

STANDARD

We can furnish all varieties usually catalogued, but the following list comprises the most desirable sorts:

5 to 7 feet, 90c each; \$9.00 per dozen.

SUMMER VARIETIES

Early Harvest—Pale yellow, fine flavor, August.

Yellow Transparent—Pale yellow, good quality.

AUTUMN VARIETIES

Fall Pippin—Very large, yellow, rich, aromatic.

Maiden's Blush—Large, beautiful, blush cheek.

WINTER VARIETIES

Baldwin—Large, dark red, productive.

Ben Davis—Large, handsome, striped; good quality.

Grimes Golden Pippin—Medium to large, skin golden yellow, flesh crisp, tender, juicy, long keeper.

Jonathan—Medium, red and yellow, flesh tender, juicy and rich.

Rome Beauty—Large, yellow shaded red, tender.

Wine Sap—Medium, deep red, rich, sub-acid.

CRAB APPLES

5 to 7 feet, 90c each; \$9.00 per dozen.

Hyslop—Deep crimson, very popular on account of its large size, beauty and hardiness.

PEARS

STANDARD AND DWARF

5 to 7 feet, \$1.25 each; \$12.50 per dozen.

Bartlett—Large, clear, yellow, juicy, August.

Kieffer's Hybrid—Large, rich color and good quality.

Seckel—Small, yellowish brown, one of the best.

QUINCES

3 to 5 feet, \$1.25 each; \$12.50 per dozen.

Champion—Fruit bright yellow, flesh very fragrant and tender, October.

MULBERRIES

4 to 6 feet, \$1.00 each; \$10.00 per dozen.

Downing's Everbearing—One of the most prolific varieties, bearing an abundance of large, black, sub-acid fruits, hardy, fruits about three months.

PEACHES

4 to 5 feet, 60c each; \$6.00 per dozen.

Champion—Creamy white with red cheeks, freestone, excellent quality, early in August.

Crawford's Early—Large yellow, of good quality, freestone, early in September.

Crawford's Late—Large, yellow with red cheek, freestone, last of September.

Elberta—Large, yellow with red cheek, flesh yellow, firm, juicy, of high quality, very prolific, September.

Heath Cling—Large, flesh white, juicy and melting, October.

Old Mixon Free—Large, yellow with red cheek, September.

CHERRIES

HEART AND BIGARREAU (Sweet)

4 to 6 feet, \$1.00 each; \$10.00 per dozen.

Black Tartarian—Very large, purplish black, juicy, rich, excellent, productive, last of June.

Governor Wood—Large, light red, juicy, rich, delicious. Tree healthy and productive, June.

Yellow Spanish—Large, pale yellow with light red cheek, late June.

DUKE AND MORELLO (Sour)

4 to 6 feet, \$1.00 each; \$10.00 per dozen.

Dyehouse—A very early and sure bearer, ripens a week before Early Richmond, fine quality, June.

Early Richmond—Medium, dark red, fine quality.

English Morello—Dark red, rich, acid, juicy and good.

PLUMS

STANDARD

5 to 7 feet, \$1.00 each; per \$10.00 dozen.

Burbank—The largest and best variety, color red, excellent quality, hardy and vigorous grower.

Damson—Small, oval fruit, purple, hardy, productive.

Green Gage—Small, delicious, very prolific, fine quality.

Lombard—Medium, red, juicy, hardy and productive.

Red June—Large, red, fine quality, strong, vigorous grower. Finest extra early plum.

DISTANCES FOR PLANTING. Apples, 30 to 40 ft. Pears, 18 to 20 ft. Quinces, 10 to 12 ft. Peaches, 16 to 18 ft. Cherries, sweet, 18 to 20 ft. Cherries, sour, 15 to 18 ft. Plums, 16 to 20 ft.

ALL PRICES IN THIS CATALOG SUBJECT TO CHANGE WITHOUT NOTICE. WE DO NOT
GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES, AT PRICES QUOTED

Grape Vines, Small Fruits, Asparagus, Etc.

We do not guarantee to replace Plants, Shrubs or Trees

GRAPE VINES

ALL TWO-YEAR-OLD SELECTED STOCK

BLACK OR PURPLE GRAPES

Campbell's Early—Bunch and berry large, glossy, black, sweet and juicy; fine quality. 20c each. \$2.00 per dozen.

Moore's Early—Ripens ten days earlier than Concord; bunch medium, berry large, round and black, vine exceedingly hardy. 20c each. \$2.00 per dozen.

*Concord—Large, black grape, hardy and productive; juicy and sweet. 15c each. \$1.50 per dozen.

Ives Seedling—Dark purple, sweet. 20c each. \$2.00 per dozen.

RED GRAPES

30c each; \$3.00 per dozen.

Brighton—Bunch large, berries red, round, excellent flavor; one of the earliest.

*Catawba—Berries large, round, when ripe a dark copper color; sweet, rich, musky flavor.

Delaware—Small, light red, thin skin, very juicy, sweet, fine flavor.

WHITE OR YELLOW GRAPES

*Niagara—Vine remarkably hardy and strong grower; bunches very large and compact; berries large, greenish white, slightly ambered in the sun; skin thin but tough, and does not crack. 20c each. \$2.00 per dozen.

Pocklington—A seedling of the Concord, resembling that variety in leaf, vine, habit of growth, hardiness and productiveness. Bunch and berry very large; attractive golden yellow color. 20c each. \$2.00 per dozen.

*Varieties marked with a * are best for arbors.

BLACKBERRIES

75c per dozen; \$5.00 per 100.

Early Harvest—Very prolific, choice variety.

Blower—Large, luscious berries, rich in quality and quantity.

Eldorado—Large fruit, borne in clusters and ripen well together, fine quality, good keeper.

DEWBERRY

\$1.00 per dozen; \$6.00 per 100.

Lucretia—One of the low-growing, trailing blackberries. In earliness, size and quality it equals any of the tall-growing sorts. It has proven highly satisfactory wherever tried, and many say it is the best of the blackberry family.

CURRANTS

30c each; \$3.00 per dozen.

Cherry—Fruit large, bunch small, deep red, acid.

Fay's Prolific—Extra large stems and berries, color rich red, fine quality, very productive.

Pomona—Bright red, extra fine quality and enormously productive; strong, vigorous grower.

GOOSEBERRIES

25c each; \$2.50 per dozen.

Downings—Very large and fine quality.

Houghton—Medium size, very productive.

Smith's Improved—Large, thin skin, best for table use.

RASPBERRIES

75c per dozen; \$4.50 per 100.

St. Regis—Fruit commences to ripen with the earliest and continuing on young canes until October, many quarts often being picked after the first snow fall. Berries bright crimson, large size, rich, sugary with full raspberry flavor. Flesh firm and meaty, a good shipper. Wonderfully prolific. Canes stocky, of strong growth, with abundance of dark green leathery foliage.

Cardinal—Produces a fine quality of dark red or almost purple berries through a long season.

Cumberland—The largest black cap; a healthy, vigorous grower; very productive and of finest quality.

Cuthbert—Large, firm, deep rich crimson, of excellent quality, tall, strong, vigorous, perfectly hardy and very productive. Ripens medium to late.

SPRING STRAWBERRIES

25 plants 50 cents; 100 plants \$1.25.

Missionary (Per.)—An early variety, a vigorous grower, healthy and rust resistant, producing large quantities of good size, dark red berries of good flavor.

Senator Dunlap (Per.)—The demand for this variety has been increasing steadily, as it has an unusually long fruiting season. It bears immense quantities of large, handsome, rich, fine-flavored dark red berries.

Gandy (Per.)—Another old favorite. Its popularity, instead of decreasing, is steadily increasing. The fruit is a dark red with dark red seeds. A very late berry that does best on a heavy clay soil.

Aroma (Per.)—One of the finest for long distance shipping. The large berries are bright red to the center. Of conical shape, with prominent yellow seeds that help to make them very attractive on market. The Aroma has three outstanding points: Its large size, its very bright color and the very fragrant aroma.

FALL OR EVERBEARING STRAWBERRIES

VARIETIES, PROGRESSIVE AND CHAMPION

60c per dozen; \$2.50 per 100.

ASPARAGUS ROOTS

May be either planted in fall or spring. Dig up your ground deep, put plenty of well-rotted manure thoroughly mixed in the soil, throw out a bed about four to five inches deep, lay the plants in by spreading the roots out well and scatter the dirt over the plants about four inches, or the depth of the ground thrown out, firm the dirt well around the plants by patting it down with spade or shovel, then top dress the ground with about three inches of well-rotted manure, and scatter salt enough over the top of this to make the ground white enough to track a rabbit. The second year after planting you will be able to harvest enough asparagus for a good-sized family from a bed about 200 plants. You should keep the crown of the asparagus cut regularly so it will produce from three and one-half to seven pounds of asparagus, and when planted in small beds, where it can be well mulched and cared for, will even do much better than this. It is necessary to start with good roots. It depends much more on the care taken of the plants and the plant food given them than it does the variety planted. Salt should be put on at the end of every season.

ASPARAGUS ROOTS—Two-year-old

	Per 25	Per 100
Washington (rust resistant).....	\$0.60	\$2.00
Conover's Colossal.....	.50	1.50
Palmetto.....	.50	1.50

For descriptions of above varieties, see page 7.

If wanted by mail, add 10c per 25 plants or 15c per 100 for postage.

DISTANCES FOR PLANTING. Grapes, rows 10 to 16 feet apart, 7 to 10 feet in rows. Blackberries, 5 to 7 feet apart, 3 to 5 feet in rows. Currants, 4 feet apart each way. Gooseberries, 4 feet apart each way. Raspberries, rows 5 feet apart, 3 feet in rows. Strawberries, for field culture, rows 3 to 3½ feet apart, 1 to 1½ feet in rows; for Garden Culture, plant in beds 4 feet wide, 3 rows in each bed, plants 1 foot apart in rows.

WE DO NOT GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES, AT PRICES QUOTED

DECIDUOUS SHADE AND ORNAMENTAL TREES

FOR LAWN, STREET AND FOREST PLANTING

Norway Maple

	Each	Per Doz.
Ash, American white.....8 to 10 ft.	\$1.00	\$10.00
Box Elder, (See Maple Ash-Leaved).		
Catalpa, Speciosa.....6 to 8 ft.	1.50	15.00
Catalpa, Bungei, grafted 1 yr.....	2.00	20.00
Catalpa, Bungei, 2 yr.....	3.00	30.00
Elm, American.....6 to 8 ft.	1.50	15.00
Horse Chestnut, White Fl'g...6 to 8 ft.	2.25	22.50
Linden, European.....6 to 8 ft.	3.00	30.00
Liquidamber, Sweet Gum.....	2.25	22.50
Maple, Ash-leaved (Box Elder).6 to 8 ft.	2.00	20.00
Maple, Norway.....8 to 10 ft.	3.75	37.50
Maple, Silver or soft.....8 to 10 ft.	2.25	22.50
Maple, Rock or sugar.....8 to 10 ft.	3.00	30.00
Mulberry, Weeping, Russian, 2 yr.....	4.00	.....
Oak, Pin.....6 to 8 ft.	2.25	22.50
Oak, Red.....4 to 6 ft.	2.25	22.50
Oak, Scarlet.....6 to 8 ft.	3.00	30.00
Poplar, Carolina.....8 to 10 ft.	1.50	15.00
Poplar, Lombardy.....8 to 10 ft.	1.25	12.50
Sycamore, American.....6 to 8 ft.	1.80	18.00
Tulip Tree.....5 to 6 ft.	2.25	22.50
Willow, Babylonica.....6 to 8 ft.	1.25	12.50
Willow, Weeping.....6 to 8 ft.	1.75	17.50

For Shady Lawns Use Our "SHADY NOOK" Lawn Seed

(See Page 3.)

WATER-LILIES AND AQUATIC PLANTS

Place your order for these plants early and we will reserve them until the proper planting season.

You have never known all the delights of a garden, if you have never known the real pleasure that comes from a pool of water-lilies. Hardy water-lilies thrive in pools and small ponds, no trouble to care for them. A box one foot square and one foot deep is as small as you can have for the plants to do well. The soil for water-lilies is preferably a mixture of two thirds rich garden soil and one third well rotted cattle manure. Most water-lilies thrive at any depth from 4 to 30 inches.

PINK VARIETIES

- Tuberoso Rosea—A delightful shade of pink. Strong, vigorous grower. Each.....\$1.00
- Eugenia de Land—Deep rose pink; narrow petals. Each.....1.25
- Marliacea Rosea—The flowers are deep rose color. One of the best pink varieties. Each.....2.00

YELLOW VARIETIES

- Marliacea Chromatella—Color of the bloom is bright yellow; leaves green mottled brown. Each.....1.50
- Comanche—The color is apricot when first opening, deepening to a rich coppery bronze later. One of the finest of lilies. Each.....5.00

WHITE VARIETIES

- Marliacea Albida—This is one of the steadiest of bloomers. White with yellow stamen. Each.....1.00
- Tuberoso Richardsoni—Flowers are pure white, double and good size. Rapid grower. Each.....1.00
- Gladstone—The best of all white lilies. Each.....1.50

RED VARIETIES

- James Brydon—Flowers are rich crimson, reverse of petals having a silvery sheen. Should be in every water-garden. Each.....2.50
- Glorioso—The king of the red water-lilies. It just blooms and blooms. Each.....5.00

SUBMERGED PLANTS

These plants are to be rooted in soil in shallow water or in the lily boxes. Collection of 10 plants.....1.00

SHALLOW WATER PLANTS

Your pool will be more attractive when planted with this collection of plants. Collection of 12 plants.....2.00

TROPICAL PLANTS

These plants are ready about June 1st. No pool is complete without these plants. Collection of 6 plants.....\$ 1.00

Nymphaea Comanche

WE DO NOT GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES, AT PRICES QUOTED

CLIMBING AND TRAILING PLANTS

AMPELOPSIS

Veitchii—Japan Creeper. Boston Ivy. A rapid growing climber which clings to walls, fences, trees, stumps, etc., with great tenacity. The leaves overlap one another, forming a dense sheet of green in summer, which changes to crimson scarlet in autumn. Strong 2-year old, each 50c. Doz.....\$5.00

CLEMATIS

Among the most popular of hardy perennials and not exceeded in beauty and effectiveness by any other class of climbers. They are excellent as a screen for fences, pillars, or trailing on walls or arbors, or on verandas. Very effective in masses of rock work and some are valuable for cultivation in pots. Clematis does best in deep, rich, sandy, loamy soil, well mulched with manure and the finest results are obtained in partial shade, where there is a liberal supply of water given at the roots.

Named Sorts—These include **Jacmanni** (large violet purple), **Henryi** (large creamy white), **Madam Edw. Andre** (large bright velvety red). Strong plants, each.....\$1.00

Paniculata—A rapid luxuriant growing sort, bearing immense clusters of small double white flowers in greatest profusion in late summer. It is sweet scented and most desirable for verandas, fences, trellises, and grows from 20 to 30 ft. in a single season. Should be cut back to the ground each year. Each 60c. Doz.\$6.00

We send out strong, healthy roots of Clematis and cannot entertain any claims for non-success with these plants.

HONEYSUCKLE

Monthly Fragrant—Blossoms all summer. Red and yellow, very fragrant flowers. Each 50c. Doz.....\$5.00

Hall's Japan (Halleana)—A strong, vigorous, almost evergreen sort. Pure white flowers changing to yellow, very fragrant. Blossoms abundantly from July to December, holds its leaves until January. Each, 50c. Doz.....\$5.00

KUDZU VINE—Pueraria Thunbergiana or Jack and the Bean Stalk Vine

A most remarkable climber. In rich soil will grow 70 feet in one season. It starts into growth slowly, but after 3 or 4 weeks grows almost so rapidly as to be beyond belief. Leaves are of the shape of lima beans, dark green, soft and wooly, fine for porches, arbors, old trees, etc. Strong plants, each, 40c. Doz.....\$4.00

Wisteria

Clematis Paniculata

IVY

English—A well-known sort which is used for covering walls or planting in cemeteries, especially in the shade. Each, 50c. Doz.....\$5.00

WISTERIA

Chinese Purple (Sinensis)—An elegant and rapid growing climber, attaining a height of 20 feet in a season. Has hundreds of long, pendulous clusters of sweet scented pale blue flowers in May and June and in autumn. Each.....75c

Chinese White—Similar to above. Pure white flowers; beautiful. Each.....75c

ORNAMENTAL GRASSES

Price All Varieties, 35c each; \$3.50 per doz.

Erianthus Ravennae (Plume Grass)—Grows six to eight feet high and produces handsome plumes in fall.

Eulalia Gracillima (Japan Rush)—The most beautiful of all the Eulalias, with narrow, graceful foliage entirely green, except that the mid-rib is of a silver sheen. Perfectly hardy.

Eulalia Japonica Variegata—Leaves striped white and green longitudinally.

Eulalia Zebrina (Zebra Grass)—A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light yellow alternating.

The dried blooms of all the Eulalia make beautiful winter ornaments.

WE DO NOT GUARANTEE OR REPLACE PLANTS, SHRUBS OR TREES, AT PRICES QUOTED

INSECTICIDES AND FUNGICIDES

*Liquid Insecticides and Poisons cannot be sent by mail.

All prices subject to market changes.

***ACME ALL ROUND SPRAY**—Flowers, vines, shrubs, roses, vegetables, need protection same as commercial crops. All Round Spray contains the three leading remedies used by all large growers, Arsenate of Lead, Nicotine Sulphate and Bordeaux Mixture.

Perfect protection for the small user is assured by complete directions in form of spraying guide attached to every package. ¼-lb., 45c; 1 lb., 95c.

***ACME GARDEN GUARD**—No sprayers, no water, no mixing. Dust on plants from sifter top carton. Acme Garden Guard is the strongest garden insecticide of its type on the market—yet safe to use. For use on cabbage, cauliflower, tomato plants, melon vines, currant and gooseberry bushes and other vegetables, flowers and shrubs of many kinds. 1 lb., 25c; 5 lb. paper bag, \$1.00.

***ACME 2-WAY SPRAY**—An approved balanced Insecticide and Fungicide containing 14% Arsenate of Lead and 83% Bordeaux Mixture—2 results with one spray.

Controls Insects, combats Blight, Stimulates Foliage.

Easy to apply—wet or dry—For dusting, apply lightly, as it comes in the package.

In spraying apples, grapes, muskmelons, potatoes, squash and tomatoes, use 9 ½ level tablespoonfuls to 1 gallon of water.

On pears, sour cherries, egg plant and peppers, use 7 level tablespoonfuls to 1 gallon of water. 1 lb., 50c; 4 lbs., \$1.50.

***ALL-IN-ONE**—A combination mixture of materials recommended by the American Rose Society suitable for controlling Black Spot, Mildew, Slugs and Aphis on all varieties of roses. 1 lb. pkg., 60c.

ANSECT (Rose Bug Destroyer)—Highly effective when used on Rose Bugs, many hard-bodied insects, Red Spider, Mealy Bug and other garden pests. Dilute with from 30 to 50 parts water. Thorough spraying is essential. Pt., \$1.00; 4-oz. cans., 30c.

By mail or express at customer's expense.

Antrol

*ANTS DESTROYED IN THEIR NESTS

New Method "Gets" Them At Their Source—Safe, Permanent, effective.

ANTROL—The Antrol system is adapted to any size house or garden and quickly destroys all species of sweet eating ants. It is composed of small glass containers and a special formula of syrup. The containers are partially filled with syrup and placed about the outside edges of the house or along "ant" trails in the garden if the infestation occurs there. The ants smell the syrup, eat it and

FOR SPRAY CALENDAR, SEE PAGE 83.

then transmit its mild poison to the queen in the nest. Soon the entire ant colony is destroyed!

The complete system should cover every 15 feet around the outside of the house or "ant" trails in the garden.

PRICES

Antrol Sets (small size) containing 4 jars and 1—4-oz. bottle of syrup.....	\$ 1.00
Antrol Sets (large size) containing 9 jars and 1—6-oz. bottle of syrup.....	1.75
Extra Jars, each.....	.15
4-oz. Bottle of Syrup.....	.50
6-oz. Bottle of Syrup.....	.60
Pint Bottles of Syrup.....	1.00
Gallon Bottles of Syrup.....	4.00

***ARSENATE OF LEAD**—One of the best and most effective of poisonous insecticides for leaf-eating insects, and more especially adapted to trees and shrubs, as it adheres to the foliage better. It is not so liable to be washed off by rains, and does not burn.

Dry—½ lb., 30c; 1 lb., 50c; 4 lbs., \$1.50; 12 lbs., \$4.25.

***BLACK LEAF 40 (40% Nicotine Sulphate)** Highly recommended by the Experiment Stations as a spray for Black Aphis and sucking insects of this class. 1-oz. bottle, 35c; ½-lb., \$1.25; 2 lbs., \$3.25; 10 lbs., \$11.85.

***BORDEAUX MIXTURE**—For blight, mildew and all fungous diseases. Can be used alone or in connection with Paris Green or Arsenate of Lead. For hardy foliage such as apple, pear, potato, tomato, egg plant, use 2 oz. to 3 quarts of water. For tender foliage such as peach, cherry and cucumber, dilute to one-half strength. ½-lb., 25c; 1 lb., 40c; 4 lbs., \$1.25; 12 lbs., \$3.25.

***CALCIUM CYANIDE (Cyanogas)**—For greenhouse fumigation. A powder, which when exposed to the air forms a gas. One-quarter ounce sufficient for 1,000 cubic feet, for control of Aphis, White Fly, Thrips, Soft Scale, etc. Also an effective control for Ants, Moles, etc. Per lb., 75c; 5 lbs., \$3.00.

CARBOLA—The white paint that disinfects. 2 lbs., 30c; 5 lbs., 75c; 10 lbs., \$1.25; 50 lbs., \$5.25.

CUT WORM KILLER—See "Snarol".

EVER GREEN
NON-POISONOUS INSECTICIDE

Effective against cucumber and melon beetles, cabbage worms, rose slugs, aphis, leaf hoppers, and most other plant insects including cutworms and Mexican Bean Beetle.

Non-Poisonous—Evergreen is harmless to man, live stock, birds and pets. Kills only insects. Eliminates washing of fruits and vegetables before marketing.

Non-Injurious—Spray freely on the tenderest plants. Won't injure the ground.

Easy to Use—Just mix with water and stir. No unpleasant odor.

Won't Gum Sprayers—No bad effect on metal or rubber. Stays in solution and can't clog sprayers. 1-oz. bottle, 35c; 6-oz. bottle, \$1.00; 16-oz. bottle, \$2.00; 32-oz. bottle, \$3.50; 1 gal. bottle, \$13.00; 5 gal. \$50.00.

Bulk prices on request—order to-day

Insecticides prefixed by (*) cannot be mailed.

INSECTICIDES AND FUNGICIDES—Cont'd

FLIT—Destroys flies, mosquitoes, moths, ants, bed bugs, roaches, other insects and their eggs.

Clears the house in a few minutes of mosquitoes and disease bearing flies.

Flit spray penetrates cracks and crevices where bed bugs and roaches breed, destroying the insects, their eggs and larvae.

Flit, sprayed on garments destroys moths, their eggs and the tiny worms that eat holes.

Spray Flit freely about the room, keeping doors and windows closed. After five or ten minutes flies will be found dead on the floor. All odor will disappear if room is freely aired.

Spray Flit liberally on standing water, drains, etc., to kill mosquito larvae. $\frac{1}{2}$ pt., 50c; 1 pt., 75c; 1 qt., \$1.25; 1 gal., \$4.00.

FISH OIL SOAP—One of the best and safest remedies for sucking insects and plant lice on vegetables, shrubs and trees. Kills Aphis, Thrip, Melon-Lice and all insects sucking juices from trees. Is also effective for preventing and destroying Borers in trees as a wash. 1 lb., 35c; 5 lbs., \$1.50.

CONQUERS MILDEW AND BLACK SPOT

A highly concentrated fungicide invisible on the foliage or blooms. Fungtrogen is the most effective and scientific preventative and remedy for mildew, black spot and other fungoid diseases of roses and other plants.

It is an equally efficacious detergent for rust on carnations grown under glass as well as snapdragons, etc., imparting a sturdy vigor heretofore considered impossible. Fungtrogen is a complete spray easily diluted in water, making 60 times their volume. Endorsed by leading Rosarians.

PRICES

$\frac{1}{2}$ Pint.....	\$0.75	Quart.....	\$2.00
Pint.....	1.25	Gallon.....	6.00

Postage extra.

***HELLEBORE POWDER**—For destruction of Slugs, Worms, Caterpillars, etc. Apply with powder gun and dust evenly over plants early in the morning while plants are wet with dew. $\frac{1}{2}$ lb., 30c; 1 lb., 50c.

LIME and SULPHUR (Dry)—Mixes with water—becomes a liquid testing the same as standard liquid solutions. It is claimed that the brand we carry is the only powdered form that is exactly the same as standard liquid solutions and can with safety to the tree be used in combination with an arsenate as a summer spray without the disadvantages of bulk, weight, leakage, etc. 1 lb., 35c; 5 lbs., \$1.50; 10 lbs., \$2.75; 25 lbs., \$5.00.

***MAGNESIUM ARSENATE DUST MIXTURE**—For Control of Mexican Bean Beetle—This material is a prepared product all ready for use. Contains genuine Magnesium Arsenate properly blended with hydrated lime in accordance with official governmental recommendation. It is recommended by government and state extension authorities as best control of the Mexican Bean Beetle, may be used with equal results on cucumbers, melons and on flowers or plants of tender foliage. Will not Burn. Per lb., 40c; 4 lbs., \$1.50; 12 lbs., \$4.00.

***NICO-FUME LIQUID**—For destroying aphis, thrip and red spider, making a good insecticide for fumigating green houses. Contains 40% nicotine. $\frac{1}{4}$ -lb. tins, 75c; 4 lbs., \$6.25.

***NICO-FUME TOBACCO POWDER**—For florists and growers who prefer a high-strength, especially prepared, tobacco powder fumigant, to destroy Aphis, Thrips, etc., we hereby offer "Nico-Fume" Powder—which may confidently be relied upon as being worthy to bear the name of "Nico-Fume." 5-lb. tin, \$3.75; 10-lb. tin, \$6.85.

PARA-DICHLOROBENZENE—For killing peach tree borers. Can be used successfully only during August and September as it is not effective if used at other seasons. Do not use on very young trees. Per lb., 60c; 5 lbs., \$2.50; 10 lbs., \$4.25.

***PARIS GREEN**—Apply dry or in a solution of water. Paris Green is a strong and best known poison for potato bugs. Its effectiveness is recognized by all potato growers. Do not use on some fruits. On apple and other fruits use with Bordeaux Mixture. Never mix Paris Green with Lime-Sulphur solution. Price, $\frac{1}{4}$ lb., 20c; $\frac{1}{2}$ lb., 30c; 1 lb., 50c; 4 lbs., \$1.50.

***PYROX**—The one best spray for apples, potatoes and general purposes against leaf-eating insects and fungous diseases. This combined insecticide and fungicide has stood the test of time and practical field experience. It sticks to foliage. Mix with cold water. 1 lb., 50c; 5 lbs., \$2.00.

K-R-O

KILLS RATS ONLY

Not a Poison

Will not kill human beings, live stock, dogs, cats or poultry. Can be used with safety around the home, barn, poultryhouse, warehouse, or any rat infested building. Directions furnished with each package. Per package, 75c.

SCALECIDE

***SCALECIDE (Pratts)**—A preparation of micible oils for San Jose and other scale and some other insects. It mixes with cold water and stays mixed but does not form an emulsion. It is not as disagreeable to use as Lime Sulphur. As a winter spray use a solution 1 part Scalecide to 15 to 20 parts of water when trees are dormant. For summer spray, 1 part Scalecide to 25 to 30 parts of water. Prices, qt., 75c; 1 gal., \$1.75; 5 gal., \$6.25; 10 gal., \$10.60; 30 gal., \$26.00; barrel (50 gal.), \$38.00.

SLUG SHOT, HAMMOND'S
One of the best insecticides for vegetables in use. Non-poisonous to human life. Price, 1-lb., 25c; 5-lb. pkgs., 75c; 10-lb. pkgs., \$1.35.

Snarol

The National Pest Control

Kills Garden Pests—Stops Damage!

***SNAROL**—Cutworms, slugs, snails, earwigs, sowbugs, grasshoppers and other annoying pests are quickly exterminated by this amazing new preparation. Snarol is a ready prepared meal that you simply broadcast on the ground—under the flowers and plants. Water will not harm it. Price, 1-lb. carton, 50c; 3-lb. carton, \$1.00; 15-lb. bag, \$3.75.

***SULFOCIDE**—For many fungous diseases of Fruit Trees, Grapes and small fruits. Also effective for Blight on Potatoes, Beans, Melons and other vegetables or anywhere a strong fungicidal spray is needed. Dilute 1 to 200. 1 pt., 70c; 1 qt., \$1.00; 1 gal., \$2.75; 5 gal., \$8.75.

INSECTICIDES AND FUNGICIDES—Conc'd

SULPHUR, Powdered—Used principally to prevent and control mildew on roses and other plants. 1 lb., 15c; 2 lbs., 25c; 5 lbs., 50c; 10 lbs., 90c.

TOBACCO DUST—A good remedy for Green Fly, Aphis, Fleas, Beetles, etc. 1 lb., 10c; 3 lbs., 25c; 10 lbs., 65c; 100 lbs., \$4.50.

TOBACCO STEMS—Used for fumigating plants to kill insects, and as a mulch for Roses, Asters, Lettuce, etc. Bale of about 125 lbs., \$2.00.

TREE TANGLEFOOT—For protecting trees against climbing insect pests in a simple, economical and effective way; put a band of tree tanglefoot, from 3 to 5 inches wide completely around the tree. A perfect safeguard against Gypsy, Brown-Tail and Tussock Moth, Canker Worms and Ants, and other creeping insects. 1 lb., 60c; 5 lbs., \$2.75; 10 lbs., \$5.25; 25 lbs., \$11.00.

TREE WOUND PAINT—Prevents decay after pruning. This penetrating, antiseptic paint is not affected by heat, cold or moisture. Does not peel, crack or get brittle. Stops tree bleeding. 1-qt. cans, \$1.00.

VOLCK—Among the many pests growers have to contend with are red spiders, mites, aphids (green fly), thrips, mealy bugs, scales, white flies, caterpillars, leaf rollers. Most every grower has experienced difficulty in the control of one or more of these pests. All of them are safely and effectively controlled with Volck. Rose mildew can be prevented and stopped by Volck. ½ pt. can., 50c; 1 pt. can., 75c; 1 qt., \$1.00; 1 gal., \$3.00; 5 gal., \$12.00; 14 gal., \$25.00; 28 gal., \$40.00

Full directions on each can.

WAX, GRAFTING—1 pkg., 25c; ½ lb., 40c; 1 lb., 60c. (By mail add 7c per lb.)

***WEED KILLER**—A highly concentrated solution which dilutes one part to 40 parts of water. It is effective within 12 hours after application and on application will keep paths and roadways free from weeds for an entire season. 1 qt., 70c; 1 gal., \$1.75.

DU BAY SEED DISINFECTANTS

Control Seed-Borne Diseases of Farm Crops

Stimulate Germination—Improve Stands

Generally Produce Increased Yields of Higher Quality

CERESAN

For Seed Treatment Of Small Grains

Ceresan has proven effective in controlling such seed-borne diseases as bunt or stinking smut of wheat; stripe disease of barley; loose and covered smuts of barley and oats and covered kernel smut of sorghum. It is the only dust treatment which has successfully controlled these destructive grain diseases. Ceresan does not injure the seed nor the grain drill. Only 2 oz. of Ceresan required per bushel of wheat, rye or sorghum and 3 oz. for barley and oats. Easy to apply, economical to use.

8 oz.....	\$.50	5 lbs.....	\$ 3.00
1 lb.....	.75	25 lbs.....	12.50

SEMESAN BEL

For Seed White and Sweet Potatoes

Simply mix, dip, drain, dry and your seed potatoes are ready for planting. Semesan Bel may be used on either whole or cut seed pieces. Semesan Bel effectively controls such seed-borne disease organisms as scab, rhizoctonia and black-leg. By controlling these diseases, germination is generally increased, stand improved and the resultant crop bigger and of better quality. One pound treats 16 to 20 bushels of seed. Du Bay Semesan Bel succeeds the products sold as Du Pont Semesan Bel and Bayer Dipdust.

4 oz.....	\$0.50	5 lbs.....	\$ 8.00
1 lb.....	1.75	25 lbs.....	31.25

SEMESAN JR.

For Seed Field and Sweet Corn

Semesan Jr. is especially effective in controlling seed-borne infections of diplodia, Gibberella and Basiporium, without harming the seed embryo in the least. Its use protects the seed from rotting in the ground and makes possible earlier planting which generally results in increased yields. Improved germination, better stands, control of certain diseases, increased yields are the benefits which thousands of farmers are reaping, at a cost of less than 3c an acre. Succeeds the products sold as Du Pont Semesan Jr. and Bayer Dust.

4 oz.....	\$0.50	5 lbs.....	\$ 8.00
1 lb.....	1.75	25 lbs.....	31.25

SEMESAN

For Flower and Vegetable Seeds

Semesan may be applied in dust or liquid form to the seed before planting. It is harmless to the seed but deadly to disease organisms that may be on the seed. Semesan is such a powerful and effective disinfectant that seed treatment with it is ridiculously low in cost, ranging from ¼c to 1c per pound of seed. One ounce treats 15 lbs. of seed. Effective in controlling damping off and such devastating gladiolus diseases as hard rot and scab. Du Bay Semesan succeeds the products sold as Du Pont Semesan and Bayer Uspulun.

2 oz.....	\$0.50	5 lbs.....	\$13.00
1 lb.....	2.75	25 lbs.....	56.25

NU-GREEN

For the successful prevention and control of Brown Patch

No longer is it necessary to fear the ravages of large and small Brown Patch with the coming of hot, humid weather.

In order to prevent the appearance of these diseases which so damage your expensive greens, use Nu-Green, which is a combination Brown Patch Disinfectant and stimulator.

Nu-Green comes ready for use. No need of the bother and inconvenience of mixing ingredients yourself. No fear of unbalanced quantities of disinfectant and plant food. No danger to grasses from improper mixture. With Nu-Green you are assured of the best possible results. It is easily and quickly applied.

To prevent Brown Patch from putting in an appearance, once each ten days or two weeks, beginning prior to the Brown Patch

season, apply a solution of one pound Nu-Green to 50 gallons of Water. Use at the rate of 50 gallons of Nu-Green solution to 1,000 square feet of turf, including the approaches and borders.

3 oz.....	\$ 0.50	25 lbs.....	\$ 37.50
1 lb.....	2.00	100 lbs.....	145.00
5 lbs.....	9.00	300 lbs.....	420.00

Du Bay Seed Disinfectants, like many agricultural chemicals, are poisonous in nature and owing to present Postal Regulations cannot be sent through the mails, but must be sent by express or freight.

Treat all seeds before planting with Du Bay Disinfectants

FOR SPRAY CALENDAR, SEE PAGE 83. Insecticides prefixed by (*) cannot be mailed.

SPRAY CALENDAR

	Spray No. 1	Spray No. 2	Spray No. 3	Spray No. 4	Spray No. 5
PEACH.....	(Dormant Spray). Apply in fall after leaves fall or in spring before buds open. Apply Lime-Sulphur or Scalecide. Controls leaf curl. San Jose scale, aphid and scab. For peach tree borers, use Para-Dichlorobenzene.	Ten days after the petals fall or when the blossom husks are shedding. Apply Arsenate of Lead. Controls rot and scab.	Ten days later than No. 2. Apply commercial Lime Sulphur 1-75 and Arsenate of Lead. Controls curculio, pustular spot, scab, rot and aphid eggs.	Three weeks after No. 3. Apply commercial Lime-Sulphur 1-75. Controls scab and rot.	
CHERRY.....	(Dormant Spray). With Lime-Sulphur on sweet cherries only. Controls San Jose scale.	(Preblossom Spray). Apply Bordeaux Arsenate. Controls rot and curculio.	Just after blossoms fall. Apply Arsenate of Lead plus Black Leaf Forty. Controls rot, curculio and aphid.	One week after No. 3. Use Lime-Sulphur 1-75 plus Arsenate of Lead. Controls rot, curculio, leaf spot and mildew.	After the fruit is picked. Apply Bordeaux along with Arsenate if slugs are present.
QUINCE.....	(Dormant Spray). Lime-Sulphur or Scalecide. Controls San Jose scale and leaf spot.	After blossoms drop. Apply Bordeaux. Controls leaf spot.	Two weeks after 2nd spray. Apply Bordeaux. Controls leaf spot.	Two weeks after 3rd spray. Apply Bordeaux. Controls leaf spot.	
APPLE.....	(Dormant Spray). Use Lime-Sulphur or Scalecide in fall or spring to control scale. Add Black Leaf 40 to Lime-Sulphur for the delayed dormant spray to control aphid. Scalecide kills aphid without nicotine, also the eggs of leaf roller and red mite.	(Preblossom Spray). When pink shows in cluster buds before buds open. Apply Bordeaux with Arsenate of Lead (add Black Leaf Forty if aphid are present). Controls apple scab, curculio, canker worm and aphid.	(Calyx Cup Spray). Just after petals fall, before calyx closes. Apply Lime-Sulphur with Arsenate of Lead (add Black Leaf 40 if aphid are present). Controls apple scale, sooty fungous, curculio, codling moth and canker worm.	Fourteen days after petals fall. Apply Bordeaux and Arsenate of Lead. Controls apple blotch, codling moth and canker worm.	About July 25th apply Bordeaux and Arsenate of Lead. Controls beetle, rot, apple blotch and codling moth.
PEAR.....	Same as apple. Scalecide applied in the fall or early spring controls pear psylla. Applied as a delayed dormant spray Scalecide controls pear thrips.	Same as apple.	Same as apple.		
PLUM.....	(Dormant Spray). Apply in fall after leaves fall or in spring before buds open. Apply Lime-Sulphur or Scalecide. Controls San Jose scale and aphid eggs.	When buds are swelling. Apply Bordeaux with Arsenate of Lead. Controls rot and curculio.	(European varieties). After calyx drops. Apply Bordeaux with Arsenate of Lead. (American and Japanese varieties). Use Lime-Sulphur 1-75 instead of Bordeaux.	(European varieties). Repeat No. 3 two weeks later. (American and Japanese varieties). Apply Lime-Sulphur 1-75 instead of Bordeaux. Controls rot, curculio and aphid eggs.	
GRAPE.....	Just before the blossoms open. Apply Bordeaux. Controls mildew and black rot.	Just after fruit sets. Repeat No. 1. Controls black rot and mildew.	Two weeks later. Apply Bordeaux and Arsenate of Lead. Controls beetle and root worm.	1st to 10th of August. Bordeaux and Arsenate with soap as spreader. Apply with plenty of pressure. Controls berry worm and fungous diseases.	
CURRENT AND GOOSEBERRY.....	(Dormant Spray). Apply Lime-Sulphur or Scalecide. Controls San Jose scale, scurfy scale and oyster shell scale.	When the leaves are unfolding. Use Bordeaux. Controls leaf spot and mildew.	After leaves expand, just as the blossoms open. Apply Bordeaux and Arsenate of Lead. Controls leaf spot, mildew and currant worm. If aphid are present use Black Leaf Forty.	Whenever currant worm appears. Dust with Hellebore or Paris Green and Hydrated Lime. Controls mildew and currant worm.	
RASPBERRY AND BLACKBERRY..	(Dormant Spray). If bushes are infested with scale. Apply Lime-Sulphur or Scalecide. Controls Rose scale and San Jose scale.	When buds are swelling. Apply Arsenate of Lead. Controls beetle.	While blossoms are open. Apply Arsenate of Lead. Controls beetle, which attacks bloom.	When young canes are 6 inches high. Spray with Bordeaux. Controls anthracnose on young cane.	
STRAWBERRY.....	When leaves are half grown, before blooming. Apply Bordeaux for leaf spot.	One week later. Apply Spray No. 1 on young plants. Omit the spray on old plants. Controls leaf spot.	Last of May to 1st of June. Apply Hellebore for leaf rollers and slugs.	After fruit is picked. Mow the vines close to the ground, rake off tops and burn. Spray new tops with Bordeaux. Controls mildew and fungous diseases.	

FERTILIZERS

PULVERIZED SHEEP MANURE

This is a pure natural manure and one of the most nutritious foods for plants. Its effect is immediate. It is very rich, safe and gives quick results. It will give excellent results on flower beds, lawns or in vegetable gardens, as it contains all the elements for promoting a quick, luxuriant growth, as well as adding body to the plant. Can be used either in dry form or dissolved to make a liquid manure. If applied dry, no raking off is required as it does not disfigure the grounds, nor does it contain seeds of foul weeds, nor offensive odor.

Directions—For lawns, apply broadcast at the rate of five to six hundred lbs. per acre in February, March or April in spring, or in September or October in the fall. For pot plants mix one quart of sheep manure to six parts of soil. For use in the vegetable garden apply either broadcast and rake in or in drills at the rate of fifteen hundred to two thousand pounds per acre and mix slightly with the soil. For Liquid application use 1 lb. to 5 gallons of water. Prices, 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.65. 100 lbs., \$2.75.

PURE BONE MEAL

This pulverized ground bone is excellent for rose culture and lawns. It decomposes rapidly and is quickly effective. Should be applied at the rate of 10 lbs. per thousand square feet or 400 to 500 lbs. per acre. Analysis, ammonia, 2%; total phosphoric acid, 27%. 1 lb., 10c; 5 lbs., 40c; 10 lbs., 70c; 25 lbs., \$1.35; 50 lbs., \$2.50; Bag of 125 lbs., \$4.50.

CATTLE MANURE (Shredded)

A substitute for stable manure in gardens and greenhouses, as it supplies plant food, humus and organic matter; largely used for rose culture and for mulching. The quality we offer is selected manure taken from paved Stock Yards cattle pens dried and sterilized by a high temperature direct heat process which kills weed seeds, fungous and disease germs. 100-lb. bags only. Per bag of 100 lbs., \$2.75.

MURIATE OF POTASH

Apply 100 to 150 lbs. per acre, usually with other fertilizers. This must be used with great care as it is very powerful. 1 lb., 15c; 2 lbs., 25c; 10 lbs., \$1.00; 25 lbs., \$2.00; 50 lbs., \$3.00; 100 lbs., \$5.00.

DRIED BLOOD MEAL

A splendid fertilizer for Roses, Carnations, Chrysanthemums, etc., as well as for pot plants. Can be mixed with the soil or applied in liquid form. 1 lb., 15c; 25 lbs., \$2.00; 50 lbs., \$3.75; 100 lbs., \$7.00.

SULPHATE OF AMMONIA

Contains approximately 25 per cent of ammonia and comes in fine crystals which are very nice to apply broadcast. Owing to its

firmness and keeping qualities it is preferred by some gardeners and fruit growers to Nitrate of Soda. Owing to the fact that it carries 5 per cent more ammonia to the weight than Nitrate of Soda, the user should apply four pounds of Sulphate of Ammonia where he uses five pounds of Nitrate of Soda. 1 lb., 15c; 2 lbs., 25c; 10 lbs., 85c; 25 lbs., \$1.50; 50 lbs., \$2.75; 100 lbs., \$5.00.

ADCO

For making Artificial Manure—Dry leaves, mixed with Adco and kept moist, turn into excellent manure. So do flower stalks, cuttings, pea vines, and almost any other kind of non-woody vegetable waste.

Adco is a powder which, mixed with vegetable matter and kept moist, turns the latter into Real Manure, but without the odor, flies, etc. The process is perfectly simple and not at all laborious. The method is being generally adopted by gardeners, who know that manure is a necessity to the soil and can no longer be obtained from stables. Farmers can use straw, corn stalks, etc., and need no longer maintain live stock.

Price, Adco, in 25-lb. bags, each \$2.00. (Enough for about 12 wheelbarrow loads of garden waste, making one-half ton of manure.)

Adco, in special 150-lb. bags, each, \$10.50. (Enough for a heap 10 ft. x 10 ft. x 6 ft. making about three tons of manure.)

Each shipment is accompanied by simple directions, which makes any mistake impossible.

PLANTABBS

Plantabbs are small, white, odorless tablets, ideal for house plants where smelly fertilizer cannot be used but equally good for all garden planting.

Plantabbs are economical, there is no waste; they are clean, odorless, easy to apply, give uniform feeding and by dissolving quickly produce immediate fertilization.

Three sizes: 30 tablets, 25c; 75 tablets, 50c; 200 tablets, \$1.00.

STIM-U-PLANT

Growers of fine flowers, shrubs and vegetables for the best markets and for exhibition, fertilize and stimulate them frequently, a little at a time. An excellent fertilizer for this purpose is Stim-U-plant, an odorless, highly concentrated plant food, in tablet form, with guaranteed chemical analysis of 11 per cent nitrogen, 12 per cent phosphoric acid, 15 per cent potash. The proportions are accurate, there is no wasted filler, and in this form you apply plant food exactly when and where and as needed.

Easy to Use—Simply insert tablets in soil near plants or dissolve in water at the rate of four tablets to the gallon and apply as liquid manure. Complete directions with every package. Order Stim-U-plant tablets with your seed and plant order.

Price, 30 for 25c; 100 for 75c; 1,000 for \$3.50.

SACCO
TRADE MARK REG. U.S. PAT. OFF.
— Makes Things Grow —

AMOUNT TO APPLY

Use 2 to 4 lbs. for every 100 sq. ft. (10 x 10 ft. area.)
Full directions for applying SACCO are printed on each package.

SACCO is the finest of fertilizers—a combined soil rectifier and growth producer for use on LAWNS, GARDENS, SHRUBS, FLOWERS, TREES, POTTED PLANTS and VEGETABLES. It is a well-balanced preparation containing ALL THE FEEDING ELEMENTS essential to the perfect growth and development of all plants.

ONE Application Produces Amazing Results

A single SACCO application can be depended upon to make grass and vegetables grow vigorously and to make flowers and shrubbery beautiful with bloom and foliage. This plant food gives quick results, is easy to apply and, because only a small quantity is required, is very economical. SACCO has no offensive odor.

SACCO is Recommended by Highest Authorities

SACCO has the approval of horticulturists and of many thousands of satisfied users. On the lawns of fine homes—on golf courses—in private gardens—in hot-houses—and in the nurseries of progressive florists and commercial growers—SACCO has proved its unquestionable superiority.

The 85 cent size—10 lbs.—is sufficient to fertilize plot of lawn 20x25 ft.

The \$1.75 size—25 lbs.—will cover plot 40x30 ft. See "Amount to apply" above.

PRICES—1 lb. can, 25c—5 lb. bag, 50c—10 lb. bag, 85c—25 lb. bag, \$1.75—50 lb. bag, \$3.00—100 lb. bag, \$5.00.

A booklet of Detailed Instructions is contained in each package.

Special prices for larger quantities.

(Fertilizers continued on next page.)

FERTILIZERS—Cont'd

NITRATE OF SODA

As a top dressing use at the rate of 100 lbs. per acre between the rows when the plants are well established, on the following vegetables: Cabbage, Cauliflower, Egg Plant, Lettuce, Spinach, Beets, Celery and Onions. For Asparagus, a top dressing of 250 lbs. per acre when the young shoots are starting in the spring. For Strawberries, apply between the rows at the rate of 100 lbs. per acre at the time of blossoming. For the home garden, apply a solution of one ounce to two gallons of water. 1 lb., 15c; 2 lbs., 25c; 10 lbs., 85c; 25 lbs., \$1.50; 50 lbs., \$2.75; 100 lbs., \$5.00.

PLANT MARVEL

Ensures bushy ferns and healthy flowers and plants. It is a pure, rich, quick-acting plant tonic and contains 61.30 per cent of plant food. Begins to feed instantly. Nourishes continuously and plentifully. Package, 25c; ½-lb. container, 60c; 1-lb. container, \$1.00. The \$1.00 size is the most economical.

PULVERIZED LIMESTONE A Lawn and Garden Conditioner

The agricultural value of lime is well known and it is an economic neutralizer for soil acidity, also for binding sandy soils and loosening clay soils.

For renewing old lawns use at the rate of 100 pounds for each four hundred square feet.

For new lawns give a generous coating at the rate of 1,000 to 2,000 pounds per acre for sandy soils and 2,000 to 3,000 pounds per acre for clay soils.

Lime will be found very beneficial in the growing of all garden crops, fruit trees and flowers, also for leguminous crops, such as Alfalfa, Sweet Clover, Red Clover, Soy Beans, Cow Peas, Vetches, etc. Per bag of 100 lbs., \$1.15; per 500 lbs., \$4.75; per 1,000 lbs., \$9.00.

16% ACID PHOSPHATE

Some soils contain a large percentage of Nitrogen and some Potash, but still are deficient in Phosphoric Acid. This must be supplied for the purpose of producing a balanced combination of fertilizer elements, by the application of 16% Acid Phosphate which produces a beneficial effect by supplying the proper proportion of Phosphoric Acid. Apply from 200 to 400 lbs. per acre. Analysis: Available phos. acid, 16%; insoluble, 1%. 5 lbs., 30c; 10 lbs., 50c; 25 lbs., \$1.00; 50 lbs., \$1.50; per bag of 125 lbs., \$2.75.

Double Rotary Sprinkler—Next best to rain. Operates on the rotating principle, resulting in a sprinkle like a gentle shower. Will sprinkle a circular area up to 80 feet in diameter—more than 5,000 square feet. A sturdy, durable machine—well built of best materials and entirely self-operating. For golf clubs, parks, cemeteries and private estates. Each....\$12.50

Rain King—A real innovation in the sprinkler line, and radically different from any other sprinkler made.

Circular or stationary spray—fine or coarse—fast or slow—large lawn, small lawn—trees, shrubs, flower beds—takes care of them all.

Small, compact, easily handled. No cumbersome contrivance always in the way. Simple adjustments—made easily. Set instantly as a revolving or stationary sprinkler.

Nozzles adjust immediately to a fine spray or coarse spray, with any pressure, and runs fast or slow, as wanted. Never clogs up and stops—a common fault with other sprinklers, both revolving and stationary. Price.....\$3.50

New Way Sprinkler—Sturdy and simple in design. Spreads the water evenly and gently, nothing to be adjusted. Each..\$1.00

IMPORTED GRANULATED PEAT MOSS or BULB FIBRE

Ferns, palms and other potted foliage plants that are placed in jardiniere or window boxes, will keep wonderfully well, if the space between the pots is filled in with moistened Granulated Peat Moss to the height of the shoulder of the plant pots. Flower pots are porous, and the capillary attraction of the roots draws the moisture from the moss through the pots; furthermore the air is allowed free access and is always somewhat damp—a natural condition for most pot plants.

This Granulated Peat Moss or Mull is especially selected for horticultural purposes. It is finely granulated, of little weight, and is entirely free from foreign matter. It is packed in compressed bales, burlaped on all sides, sticked and wire strapped. When loosened the contents will cover 240 sq. ft., 1 inch deep. It is not sold by weight, because the weight of the bale is dependent on its moisture content, which varies according to atmospheric conditions.

A few of the many purposes for which it is used: Fertilizer Carrier, Mulching, Cold Frames, Lawns, Improving Soils, Propagating, Cuttings, Landscape Work, Benches (Greenhouse), Golf Courses, Packing, Storing Bulbs, Potting, Layering, Seed Beds, etc. Send for booklet giving detailed information.

Prices: Per ½-bushel, 60c; per bushel, \$1.00; large bale (13 cu. ft. and covers 240 sq. ft., one inch deep).....\$4.50
5 bales.....\$4.25 per bale. 10 bales.....\$4.00 per bale.

HUMUS

Exhaustive tests have proven that Humus makes a balanced feeding for plant life, a food that can not be supplied otherwise. Humus is not sold to eliminate the use of fertilizers but to release the natural fertilizers from the soil and make them available. The average soil contains enough potash, but due to improper cultivation or acidity only a small portion has ever become available.

The Humus we offer is taken from a bog seventy-five feet in depth and has undoubtedly been in process of formation since the end of the glacial period. This Humus is then passed through processes which more thoroughly break up the fibres and destroy harmful bacteria and weed seeds.

Our Humus is odorless and contains no insects harmful to plant life.

For pot plants, the garden or greenhouse it is advisable to use at the time of planting, application being made to the seed row or to roots of the plant.

Facts—Food put into the human body will not sustain life unless properly digested. Plant food (fertilizer) put into the soil will not benefit plant life until it is digested. Our Humus digests the fertilizers. 5 lbs., 25c; 10 lbs., 40c; 25 lbs., 75c; 50 lbs., \$1.25; 100 lbs., \$1.75; 500 lbs., \$8.00; 1,000 lbs., \$15.00.

LAWN SPRINKLERS

Fountain Lawn Sprinkler—A ring of brass to which the hose is attached, giving a mist-like spray. No revolving parts to wear or get out of order. Each.....\$0.75

Rainbow Lawn Sprinklers—Distributes water in small particles like mist and rain combined over an area 40 to 50 feet, supported on a heavy steel, green enameled sled stand, which may be easily drawn over the lawn. As fascinating in action as a fountain. Wonderfully effective in gardens, lawns, parks and on terraces. Each.....\$2.50

Two Purpose Sprinkler—A patented article different from anything on the market. Strong and sturdy. Simple in design and construction. When used as a hose nozzle, quickly adjusted from a long solid stream to the finest mist spray. Changed in an instant to an ornamental garden sprinkler. Adapted to lawns and gardens of any size. Operates efficiently under any pressure. Each...\$1.75

Market Gardener's Sprinkler—Every Market Gardener, Florist, and others who use a hose for watering hot beds, cold frames, gardens and lawns should have one of these sprinklers. Simply attach to hose in place of nozzle. Each.....\$1.50

SPRAYERS AND DUSTERS

Compressed Air and Knapsack

HUDSON PERFECTION SPRAYER

For general high pressure purposes, the Perfection is the very best. Easily operated and economical to use for white-washing, disinfecting, deodorizing, cold water painting, etc. Best materials, best construction and best quality throughout.

Capacity, 4 gallons. Pump is seamless brass tubing. Fastens to tank by heavy threaded malleable cap which screws onto brass tank collar.

Nozzle is designed for high pressure work. Handles any solution and works perfectly under all pressures.

Regularly equipped with 12-inch brass extension rod as shown. Permits the operator to quickly and easily reach low-lying plants, under surfaces of leaves, all parts of trees, shrubs or vines, or the nooks and corners of the poultry house, dairy barn or hog pen, without tiresome bending or climbing. Fitted with standard 1/4-inch iron pipe threads so that a longer rod can be used if desired.

No. 110-B—Brass tank. Each.....\$9.50
No. 110-G—Galvanized tank. Each.....6.50

EXTENSION PIPE

2-ft. lengths for spraying tall shrubs, trees, etc. Solid brass. Each.....60c

WIZARD SPRAYER

The Wizard Sprayer has a detachable tank with large opening for easy filling, cleaning, etc.; the curved siphon tube which permits spraying in any direction including straight overhead; the combined drip cup and brace to catch all solutions not thoroughly vaporized; the vent which entirely eliminates vacuum, siphoning, etc. Ideal for use with fly oils and other insecticides in and about the home. Pump attaches directly to large screw cap and siphon tube. Tank has capacity of 8 ounces. Each.....40c

COMET CONTINUOUS SPRAYER

The Comet Continuous Sprayer handles fly oil, insecticides, disinfectants and all other solutions very efficiently. The variable nozzle is instantly adjustable for any solution or for any type of spray from fog to solid stream. Pump is recessed into top of tank and securely soldered, a very rigid construction. All working parts are brass with syphon tube and check valve easily accessible. Pump and tank are made of heavy tin or brass sheet as ordered. Capacity, 1 quart.

Tin pumps with tin reservoir.....\$0.90
Brass pumps with brass reservoir. Each.....1.25

HUDSON JUNIOR SPRAYER

The Junior Sprayer is made for the man who needs a medium size high pressure Compressed Air Sprayer. It is particularly adapted for the backyard garden, small truck farm or for disinfecting. It will do any work the larger models can, for it differs from them only in capacity. It is substantially made and will give entire satisfaction. Capacity, approximately 2 1/2 gallons.

No. 140-B—Junior, brass tank. Each.....\$7.00
No. 140-G—Junior, galvanized tank. Each.....5.00

MASTER FOG SPRAYER

Produces extraordinarily fine mist-like spray. Well constructed. Capacity, 1 qt. Price, each.....50c

CARDINAL CONTINUOUS SPRAYER

Heavy galvanized steel tank. All seams double seamed and thoroughly soldered. Large filler opening. All brass, instantly adjustable nozzle. Capacity, approximately 3 quarts. Each.. \$1.50.

ROBERTSON SPRAYER

A small, compact, powerful, continuous sprayer which at the same time is more efficient than the ordinary large sprayer. Especially designed for use around the home. Tin pump with galvanized reservoir. Each.....65c

PERFECTION NOZZLE

The Perfection Nozzle is constructed entirely of brass, with all parts carefully machined. Liquid channels are large and non-clogging. Large packing nut gives ample packing space and holds the shutoff pin in perfect alignment. The pin is leather tipped, shuts off instantly, and without leakage. Operates with a slight pressure of the fingers.

The nozzle handles all solutions. The reversible spray disc adapts it for fine or coarse spray, and when removed, the nozzle throws a solid stream. All parts are easily accessible. Fitted with standard 1/4-inch pipe threads so that fog nozzle tip can be unscrewed and an extension pipe added. Each.....\$1.50

SPRAYERS AND DUSTERS—Cont'd

ANGLE FOG NOZZLE

The Angle Fog Nozzle is made with all parts readily accessible and easily cleaned. Body is brass, carefully machined. The discs, strainer and cap are turned from high-grade brass stock. Fitted with 1/4-inch pipe thread, permitting standard fittings to be used. Each.....75c

MODOC SPRAY PUMP

The Modoc is used in spraying fruit trees and vines, garden truck, ornamental shrubs and hedges; for whitewash, disinfectants, insecticides; for washing automobiles, wagons, windows, or in an emergency as a fire pump. It is double acting and continuous developing 150 pounds nozzle pressure. Makes a very convenient portable outfit because it can be used with a bucket or small tank. Valves and plunger are accessible for cleaning, etc. Nozzle discs are reversible or removable, producing any desired spray from the very finest to a solid stream. All parts except the handle and foot rest are brass. Discharge Equipment—3 feet of 3/8-inch spray hose, a 12-inch extension and fog nozzle fitted with discs for spray or solid stream. Can be used with a longer extension rod if desired. Each.....\$4.50

JIM DANDY SPRAYER

Adapted for spraying garden and farm vegetables of every description; shrubbery, grape vines, currant bushes, fruit trees, etc. Will spray rapidly disinfectants in schools, public buildings, poultry houses and stables; fly spray on cattle; whitewash, carbola, cold water paints, etc. The reservoir is made of heavy galvanized iron, capacity, two quarts; all other parts are entirely of brass, including ball check valves and nozzle. The Golden Spray Nozzle furnished is adjustable for large, fine mist spray or long distance coarse spray, as desired. Price, each.....\$3.50

MODEL BX—FEENY DUST GUN

The Feeny Dust Gun is a mechanically perfect apparatus which emits powder in clouds of right consistency from any position and in any direction, downward, upward or horizontal. Entirely different principles of mechanics have been brought into play than have been used heretofore on such outfits. MODEL BX—Like cut. 28 inches long. Price, each.....\$1.50 MODEL D—Two quart capacity. Price, each.....4.25

CADET DUSTER

Adapted for use with all insect powders. A favorite with the housewife in applying roach, ant and various bug powders. Each.50c

MAJOR DUSTER

For all powder insecticides. Has large powder reservoir. Strainer shaped to prevent clogging and give uniform volume of discharge. Each.....\$1.25

PARAGON SPRAYERS

These Sprayers have self-cleaning strainers and cannot clog the nozzle when spraying, as the agitator passes over it with each stroke of the pump, dislodging any particles the suction may draw into its surface. They are the sprayers adapted for spraying insecticides, whitewashing or applying cold water paint. Every Paragon Sprayer is fully guaranteed, and if any part proves defective same will be immediately replaced free of charge. 100 lbs. pressure is easily obtained with this sprayer.

- No. 1. Paragon Sprayer
No. "0"—Capacity 3 1/2 gallons.—Equipment 4 ft. of 6-ply hose, 3 ft. spray pipe, 2 spray nozzles. \$12.50.
No. "1"—Capacity 6 gallons.—Equipment 5 ft. 6-ply hose, 5 ft. spray pipe, 2 nozzles. Net price, \$17.50.
No. "3"—Capacity 12 gallons.—Equipment 10 ft. 6-ply hose, 7 1/2 ft. spray pipe, 2 spray nozzles. Net price complete, \$25.00. Without truck, \$21.50.
No. "4"—Capacity 28 gallons.—Equipment 20 ft. 6-ply hose, 10 ft. spray pipe, 2 spray nozzles, net price complete with barrel, \$39.50. Not mounted on wheels, price, \$29.50.
No. "5"—Capacity 50 gallons.—Equipment 25 ft. 6-ply hose, 10 ft. spray pipe, one 3-way spray nozzle, 1 single spray nozzle. This sprayer has a solid cast brass pump and large air chamber mounted in a strong barrel but not on wheels. It is positively the very best of hand-power sprayers made for extensive tree spraying. Net price, \$45.00.
Bamboo Brass Lined Spray Poles—10 ft. lengths. Each, \$4.00.

RECLEANED BIRD SEEDS, PET SUPPLIES, BIRD HOUSES, ETC.

It is very important that you make the proper selection of foods for your birds; pure, fresh, clean food is necessary at all times. Our bird seeds are of the highest quality, fresh and re-cleaned. Your pets will thrive if you get your supplies in this line from us.

Bird Pep—Keeps canary birds in prime condition and prevents loss of song. Easily attached to cage. Pkg., 15c. 2 for 25c.

Canary Seed—Re-cleaned and of splendid quality. Per lb., 15c. (By mail, 20c.)

Canary Seed Mixed—A mixture of the finest quality and in proper proportions. Per lb., 15c. (By mail, 20c.)

Cuttle Fish Bone—Good for digestion and general health. Each 5c; 20c per ¼-lb.; 60c per lb. (By mail, 70c.)

Hemp Seed—Birds are very fond of this seed; it is rich and should be fed with discretion. Per lb., 15c. (By mail, 20c.)

Lettuce Seed—A slight sprinkle of this is much relished by canaries. Per lb., 50c. (By mail, 60c.)

Maw Seed—Calculated to improve the song of canaries, etc. ¼-lb., 10c; lb., 25c. (By mail, 30c.)

Millet Seed—Nutritious and appetizing. Lb., 15c. (By mail, 20c.) 5 lbs., 60c. (By mail, 85c.)

Rape Seed—Will keep birds in excellent condition; feed with canary seed. Lb., 15c. (By mail, 20c.)

**PRICES ON BIRD SEED IN LARGER QUANTITIES,
QUOTED ON APPLICATION.**

FISH FOOD AND SUPPLIES

Fish Food—Especially put up for fish in aquariums and globes, and should be fed regularly. We can supply it in wafer or in natural form. Per box, 10c. (By mail, 15c.)

Goldfish Bowls—An extensive assortment of styles and sizes. 50c to \$10.00, each.

Goldfish Bowl and Aquarium Ornaments—Attractive designs. 15c to \$1.25 each. Postage extra.

Sea Shells—Per lb., 20c. Postage extra.

Pearl Chips—Per lb., 10c; 2 lbs., 15c. Postage extra.

Colored Chips—Beautifully colored, many shades. Per lb., 10c. Postage extra.

Dip Nets—For handling gold fish when changing water in globes or aquariums. Each, 25c. Postage extra.

BIRD HOUSES

These Woods Craft Houses are well constructed of first class seasoned wood, covered with a tinted stucco which will last a lifetime. They are built for the true purpose of attracting the birds and will resist weather conditions.

Help protect and multiply our native bird. They will repay in song and chirp, add attractiveness and enliven grounds, besides destroying countless worms, bugs, beetles and grasshoppers which devour vegetation.

Wren Hutlet.....\$2.75 each
Bluebird Hut.....3.00 each
Robin Home, small.....3.00 each
Robin Home, large.....4.00 each

English Sparrow Traps. \$5.00
and \$9.00 each.

Winter Feederies.....\$3.00 and 4.00 each
Martin Houses.....\$8.00 to \$30.00

Wild Bird Feed—A mixture of grain and seed for wild birds—5 lb., 40c; 10 lbs., 70c; 25 lbs., \$1.50.

Bird Sand—Silver, fine. Pkg., 15c; 2 for 25c. (By mail, add 7c per pkg.)

Song Restorer—For canaries; revives the desire to be lively and sing more lustily. Per pkg., 25c. (By mail, 30c.)

Burnett's Food—Will give immediate relief from the effects of moulting, eradicates all impurities from the blood, and restores to the songster, a strong and clear voice. Per bottle, 25c. (By mail, 30c.)

Burnett's Louse Powder—An effective remedy to be dusted on all kinds of birds. Per can, 25c. (By mail, 30c.)

Sunflower Seed—We are large handlers of this important food for parrots. We turn out only a very choice article. Per lb., 15c. (By mail, 20c.)

Canary Bird Nests—A wire basket well made. 15c each.

Bird Nesting—10c per pkg.

Bird Baths—Made of opal glass. 15c each.

Seed Cups—Made of opal glass. 15c each. 2 for 25c.

Drinking Cups—Made of opal glass. 15c each. 2 for 25c.

Egg Food and Tonic Cups—10c each.

DOG FOODS AND SUPPLIES

Spratts Dog Cakes—In large cake form for older dogs.

Spratts Puppy Cakes—A perfect food for puppies and for small breeds.

Spratts Ovals—Mixed to proper proportion and baked in small oval forms to carry in the pocket while hunting, etc.

Spratts Weetmeet—A ground food for mixing with table scraps.

Spratts Fibo—Similar to Weetmeet, but containing a larger percentage of milk and egg. Per lb., 15c; 10 lbs., 14½c per lb.; 100 lbs., 14c per lb.; 50 lbs. at 100 lb. rate. Postage extra.

Thorobread Dog Cakes—A balanced food for all dogs—high in protein—economical. Per lb., 15c; 2 lbs., 25c; 10 lbs., \$1.20; 100 lbs., \$9.00. Postage extra.

Thorobread Kibbled—A granulated balanced food which can be mixed with table scraps. Per lb., 15c; 2 lbs., 25c; 10 lbs., \$1.20; 100 lbs., \$9.50. Postage extra.

Vitamont—A balanced food for dogs or cats, composed of meat, cereals and vegetables. Packed in cans containing 16 ozs. Per can, 18c; 3 cans, 50c; 12 cans, \$1.75; case of 48 cans, \$6.50. Postage extra.

Spratts Flea Dog Soap—Per bar, 25c. (By mail, 30c.)

Spratts Flea Powder—Per can, 30c. (By mail, 35c.)

Milray Liquid Flea Soap—Absolutely pure. Per 10-oz. can, 50c. (By mail, 60c.)

WREN HUTLET

LAWN MOWERS

WOLVERINE LAWN MOWERS

The Ideal Wolverine Mower is built for hard work. It gives lasting service on jobs where a mower is kept in continuous service. Its long life is due to the use of the highest grade bearings, careful workmanship and high quality of materials throughout. It has Norma-Hoffman ball bearings, double tie rod frame reinforcement,

high carbon steel blades, dust-proof bearing bushings, positive can't slip adjustments, specially designed handle clamp. The cheapest mower to operate when length of service is considered.

16-in.....	\$23.00
18-in.....	25.00

GENUINE PHILADELPHIA LAWN MOWERS

The Philadelphia Lawn Mower has stood the test for years and is acknowledged to be one of the best and a strictly High-Grade Mower.

Style K—5 blades, 10-in. wheel, 6½-in. cylinder. Single pinion, geared on both sides. The greatest diameter cylinder with five blades, insures fine cut and with its large driving wheels, is light running. 16-in., \$18.50. 18-in. \$20.50.

Style C—4 blades, 8½-in. wheel, 5¼-in. cylinder. This style medium high wheel is to supply a demand for a mower which has real merits and is light running, durable and easy to handle. 16-in., \$16.50. 18-in., \$18.00. 20-in., \$19.25.

Dewey—4 blades, 8-in. wheel, 5¼-in. cylinder. A strictly high-grade lawn mower within the reach of owners of small lawns. Blades of Crucible steel. 16-in., \$11.00.

Lawn Trimmer—4 blades, 8-in. wheel, 5½-in. cylinder. An efficient and complete lawn trimmer, built for durability and service. Positively cuts smoothly to ¼ inch of wall, post, tree or fence. Vanadium Crucible steel blades. Use of shears or sickle unnecessary.

6-in.....	\$12.00
-----------	---------

KEEP YOUR LAWN MOWER SHARP

You can do it yourself easily and quickly with a Berghman Lawn Mower Sharpener. It is adjustable to all types and makes of machines and lasts forever. A few strokes on each blade and your mower cuts like new. Each.....\$1.00

Complete
Illustrated
Catalogue
on Request

Planet Jr. Garden Tools

Our Net
Prices are
Less than
Planet, Jr.
Catalogue
Prices

PLANET JR. No. 4

Combined Hill and Drill Seeder, \$17.50. As Drill Only, \$13.75.

PLANET JR. WHEEL HOES

No. 12. Double Wheel Hoe—Has 8 cultivating teeth and weeding tools. Our net price complete.....\$10.25

No. 13. Double Wheel Hoe—2 weeding hoes, only. Our net price..... 7.50

No. 16. Single Wheel Hoe—Has 7 cultivating teeth, a garden plow. Our net price..... 8.50

No. 17. Single Wheel Hoe—Has 6 weeding and cultivating teeth. Our net price..... 7.25

No. 19. Single Wheel Hoe Cultivator and Plow—Our net price..... 5.50

HILL AND DRILL SEEDERS

No. 12 Planet Jr. Double and Single Wheel Hoe, Combined. Equipment:
One Pair of 6-inch Hoes,
Four Steel Cultivator Teeth,
One Pair of Plows, Two Leaf Lifters.....\$10.25

No. 4. Combined Hill and Drill Seeder—With 2 hoes, 3 cultivating teeth and plow, as shown. Hopper holds 3 pints. Our net price complete.....\$17.50

As a seeder without tools. Our net price..... 13.75

No. 3. Hill and Drill Seeder—Without cultivating tools, hopper holds 3 quarts. Our net price..... 17.00

No. 25. Hill and Drill Seeder Combined, Double Wheel Hoe, Cultivator and Plow—Has 8 cultivating tools. Our net price complete. 21.00

LAWN EDGE TRIMMER

Practically everyone who has use for a lawn mower has use for an Edger.

To keep grounds looking neat and attractive, the grass bordering all walks must be frequently edged and the No. 2 machine will do this work quickly and with little effort, no matter if the walks are straight or curved, or if they are of cement, stone or brick. Price, each, \$2.00. Postage extra.

HORTICULTURAL TOOLS AND SUNDRIES

Baskets, Wire Hanging—12 in., 35c; 16 in., 50c.

NORCROSS CULTIVATORS

The prongs are square spring steel bent corner-wise with forged shovels at the ends. The socket frame and clamping bar are made of toughest malleable. Handle, best grade of white ash.

3 Prong, 9 in. handle.....Each 60c
3 Prong, 48 in. handle.....Each 85c

Dibbles—Iron with wood handle. For transplanting plants and planting bulbs..... \$0.75
Flower Garden Sets—English pattern, 1-5 tooth rake, 1 trowel, 1 hoe. All 16-inch handles. Per set..... \$1.00
Forks, Hand Weeding—Small size..... .50
Forks, Spading..... 1.50
Fruit Picker—Made of galvanized steel wire; attaches to pole of any length. Price without pole..... \$0.75
Glass Cloth—A substitute for glass; per yard, 40c; 10 yds., \$ 3.50; 100 yds..... 32.00
Grass Hooks—Highest grade. Each..... .75
Grass Shears—American..... 60c, \$1.00 and 1.25
Grasswips—The new style grass cutter. Use like a golf club. Each..... 1.00

MOISTURE RETAINING
REGISTERED
GROWELL
TRADE MARK
PLANT & FLOWER POT

A NEW POT

Especially designed for use where transplanting is necessary and where it is desirable to avoid the usual set-back due to transplanting. Both pot and plant transplanted to field or beds without disturbing roots. Saves from 10 days to 2 weeks growing time. Increases profits. Used with great success by many growers.

PRICES							
No.	Top Dia.	Bottom Dia.	Height	12 Pots	50 Pots	100 Pots	1000 Pots
2	2 3/4	1 1/2	3	50c	\$1.75	\$3.00	\$20.00
3	3 1/2	2	3 3/4	60c	2.00	3.50	23.00
4	4 1/8	2 3/8	4	75c	2.50	4.25	25.00
5	5 1/4	3	5	\$1.00	3.25	6.00	40.00
6	6 3/8	3 3/4	6 1/4	1.25	4.25	7.75	50.00

Hoes	Onion, with two prongs.....	.75
	Standard Socket Garden.....	1.25

MILO HOT BED MATS

Made from heavy weight burlap, absorbent pulp and felt cemented together with a specially prepared waterproof compound.

This combination forms a covering both air-tight and water-proof. Also makes ideal truck covers for marketing vegetables. Size, 78x80 inches. Price.....\$5.00

Pennsylvania Lawn Cleaner—Cleans your lawn more thoroughly and quicker than four men with hand rakes. Well constructed.....\$35.00

RITTENHOUSE MOLE TRAP

The simplest, safest and surest mole trap ever invented. Self-setting. No danger of its going off unless the trigger is touched. Made of all steel and tinned. The spears are spring steel, therefore do not have to be as long as soft steel. Price..... \$1.00

Moss, Green Sheet—For hanging baskets, etc. Per bale, 40c; large bundle (5 bales), \$1.75.

Oil, Lawn Mower—This is a handy can filled with fine oil, manufactured expressly for lawn mowers, bicycles, etc. Per can..... \$0.30

Germaco
Hotkaps

PROTECT PLANTS FOR PROFIT

Germaco Hotkaps can make you extra dollars this season. They protect plants from frost, wind, rain, insects and ground crusting. Thus they produce hardier, quicker crops. You get higher prices! Thousands were used in 48 states last year. They cost so little that growers cannot afford to be without them.

Prices: 1,000 lots, \$11.50 per 1,000; 5,000 lots, \$11.00 per 1,000; 10,000 lots, \$10.75 per 1,000. 250 trial packages, including garden type waterproof setter, \$4.00; Germaco steel HOTKAP setter, \$2.50.

If you need HOTKAPS for your backyard garden, note these prices: 50 with garden setter, \$1.50; 100 with garden setter, \$2.25; garden setter alone, 50c.

Write for free pamphlet or order to-day!

		LABELS		Per 100	Per 1000
Tree Pot	Labels 3 1/2 inch copper wired.....	\$0.35			\$3.00
	" 3 1/2 "	.25			1.75
	" 5 "	.35			3.00
Garden	" 6 "	.40			3.50
	" 8 "	.90			8.00
	" 10 "	1.00			9.00
			Per Doz.	Per 100	
Plant	" 3x 1/2 " weatherproof.....	.40			3.00
	" 4x 1/2 "	.65			5.00

DUNHAM WATER-WEIGHT LAWN ROLLERS

Dunham Water-Weight Rollers are electric welded —no rivets used—the drum cannot possibly leak.

If you wish a fine lawn, you must use a Lawn Roller. In noother manner can a smooth compact surface be maintained. It packs the soil, thus retaining the moisture throughout the season, enabling young and tender grass to secure the necessary nourishment.

The Dunham Water-Weight Roller can be made as heavy or as light as desired by simply putting in the right amount of water. For storing away or for moving, it can be emptied entirely and is light and easy to handle.

No.	Diameter	Length	Weight, Empty	Weight, Filled with Water	Price
2	14 in.	24 in.	68 lbs.	175 lbs.	\$ 10.00
4	18 in.	24 in.	82 lbs.	265 lbs.	12.50
7	24 in.	24 in.	110 lbs.	420 lbs.	18.00

The above rollers weigh 50% more when filled with sand—water is more convenient.

HORTICULTURAL TOOLS AND SUNDRIES—Cont'd

GROW BIGGER, BETTER, EARLIER CROPS WITH MULCH PAPER—

Do Away with Weeding and Cultivating

Mulch Paper prevents the growth of weeds, preserves soil moisture and increases soil fertility. All vegetation protected and stimulated by Mulch Paper, matures weeks earlier and yields larger.

Type A—Light Weight—For annual crops. Rolls 18 inches wide, 300 lineal yards to roll. Weight, about 27 lbs., \$3.50 per roll. Rolls 36 inches wide, 300 lineal yards to roll. Weight, about 53 lbs., \$7.00 per roll.

Type B—Heavy Weight—For all purposes. Rolls 18 inches wide, 150 lineal yards to roll. Weight, about 30 lbs., \$3.50 per roll. Rolls 36 inches wide, 150 lineal yards to roll. Weight, about 60 lbs., \$7.00 per roll.

PAPER PLANT BANDS AND POTS

Packed 250 to a box.

Saves time and labor to anyone growing their own plants from seed. Eliminates trouble and loss in using clay pots.

Ready to Use

	Size	Depth	Per 100	Per 1000
Plant Bands.....	2x2	2 1/2	40c	\$3.50
Pots with folding bottom.....	2x2	2 1/2	50c	4.50
Pots with folding bottom.....	3x3	3	70c	6.00

"ADJUSTO" Plant Supports

A practical and cheap plant support that will last a life time. Contains no hooks or screws. The stake is of oak, painted green, and the hoop is of the strongest wire also painted green to prevent rust. It is easily put up and is adjustable to any height.

Stakes 1/4 in. square. Diameter of wire, 13 inches.

	Each	Doz.
3 feet.....	20c	\$2.25
4 feet.....	25c	2.75
5 feet.....	30c	3.25
6 feet.....	35c	3.85

For Potted Plants, Etc.

18 inch.....	10c	1.10
--------------	-----	------

SIMPLICITY HEDGE PRUNER AND TRIMMER

For pruning back old growth and trimming new

With this tool you can actually do as much work in one hour as you formerly did in four hours with the old-style pruner or lopping shears.

Pruner and Trimmer.....\$6.00

Trimmer..... 4.00

Raffia Natural—The best tying material for plants, also used for making baskets, etc. Per lb..... \$0.60

BAMBOO LAWN AND GARDEN RAKE

Removes every trace of dead grass, weeds, etc. Light, durable, efficient. Has a 4 ft. brass clamped smooth hard wood handle. 18 inches wide, 33 teeth.

Each.....\$1.00

Rakes Hardwood, 20 teeth..... 1.00

" Lawn, Wire, 24 teeth..... 1.00

" Steel Garden, 14 teeth..... 1.25

Pruning Saws—Double cut, coarse teeth on one side of the blade, fine teeth on the opposite side. 16-inch stationary blade.

Each..... \$1.50

Scythes, English, for grass, 32 inch, riveted back. Each.....\$2.75

Scythe Snath. Each..... \$1.65

Scythe Stones, English round.

Each..... \$0.40

CAHOON BROADCAST SEED SOWER

The standard broadcast Seeder and one of the best manufactured. Sows all kinds of grain, Clover, Timothy and heavy seeds. Has a capacity of 4 to 6 acres per hour at a common walking gait and distributes seeds uniformly in about one-fifth the time required by hand. Very simple in operation and easy to adjust for quantity. Price, \$5.00.

Cyclone Broadcast Seed Sower

A general seeder, which has four pressed tin flanges and distributing wheel under the bottom; gearing wheel centered, making it easy to run. Has an accurate gauge. Sloping feed board and force-feed steel frame. This is one of the most widely used types. The sack holds one-half bushel; convenient hand hold and body shield. The machine is well braced.

Price..... \$2.00

Tin Horn Seed Sower—A light, accurate seeder which will broadcast clean seed from 30 to 40 ft. Length of the tube when extended is 30 inches. Good grade of heavy ducking is used on the sack. Weight only 12 ounces. Price, \$1.00.

Hedge Shears—6 inch blade, \$1.50; 8 inch blade, \$2.75; 10 inch blade.....\$ 3.00

Pruning Shears..... \$1.50, \$2.00 and \$2.50

Spades, D handle..... 1.75

Sprinkler, Rubber—Indispensable for floral work and window gardening. Each.....\$ 1.00

Cane Stakes, Japanese Bamboo, dyed green.

3 ft..... 20c doz.; \$1.25 per 100

4 ft..... 25c doz.; 1.50 per 100

Cane Stakes, Japanese Bamboo, natural color—Strong, light, durable for supporting plants.

6 ft.....\$1.75 per 100

8 ft..... 2.00 per 100

Dahlia Stakes—Wooden, painted green, tapering at end.

6 ft.....8c each, \$7.00 per 100

TREE PRUNERS

Well constructed. Limbs three-quarters of an inch in diameter may be cut off with ease.

8-ft. Price.....\$2.00

10-ft. Price..... 2.25

Trowels Extra heavy.....\$.35

" Forged steel, very strong..... .85

" Solid Steel..... .25

Transplanting Trowels—Can be used either as a planter, dibble or weed digger; blade being narrow and deeply curved.....\$.25

HORTICULTURAL TOOLS AND SUNDRIES—Conc'd

WATERING POTS

Long Spout. Made from best quality of iron, and heavily galvanized. Two roses with each pot for fine and coarse watering.

6-qt.....\$4.25
8-qt.....4.75
10-qt.....5.25

Dandelion Weeder and Asparagus Knife—Made of one piece hard, stiff steel..... \$0.50

“OUT-U-KUM” WEED PULLER

A slight push and pull removes not only the weed, but the entire root. A perfect weed puller.

Each.....\$0.75

Steel Garden Weeder—One piece pressed steel. Has five steel fingers. Each.....25c

FLOWER POTS AND SAUCERS

of Extra Fine Finish and Bear Shipping Well.

No Charge for Packing. Earthenware Flower Pots cannot be sent by Parcel Post.

STANDARD FLOWER POTS AND FERN POTS				FLOWER POT SAUCERS			
Size	Each	Dozen	Per 100	Size	Each	Dozen	Per 100
2 inch.....	\$0.03	\$0.30	\$2.00	6 inch.....	\$0.12	\$1.20	\$ 9.00
2½ ".....	.03	.35	2.50	7 ".....	.18	1.75	14.00
3 ".....	.04	.40	2.75	8 ".....	.25	2.75	20.00
3½ ".....	.05	.45	3.25	10 ".....	.60	6.50	
4 ".....	.06	.50	4.00	12 ".....	1.00	11.00	
5 ".....	.08	.75	6.00	14 ".....	1.75		

PLANT TUBS

An excellent new tub, cheap, neat and durable. Made from ¾-inch Cypress.

No. 4.	9 inches diameter,	9 inches depth.....	\$ 0.85
No. 5.	10 " " " " " "	.....	1.10
No. 7.	12 " " " " " "	.....	1.65
No. 9.	14 " " " " " "	.....	2.20
No. 11.	16 " " " " " "	.....	2.75
No. 13.	18 " " " " " "	.....	3.50
No. 14.	19 " " " " " "	.....	4.00

Handles 35c per pair extra.

All Prices Subject to Market Changes.

“SUCCESS” FLOWER BOXES

This box embodies attractive appearance, general utility and durability.

The heavy roll edge adds greatly to the appearance, a device inside the box permits the application of water to the plants without the slightest degree of untidiness which frequently arises from watering plants by sprinkling, and the good quality japan over galvanized metal warrants long life.

All boxes 7¼ inches wide at bottom and 6½ inches deep.

18-inch.	Each.....	\$1.25	36-inch.	Each.....	\$2.50
24-inch.	Each.....	1.50	42-inch.	Each.....	3.25
30-inch.	Each.....	2.00	48-inch.	Each.....	3.75

STOCK AND POULTRY SUPPLIES

DR. HESS POULTRY AND STOCK REMEDIES

Poultry Pan-A-Cea—1½ lbs., 25c; 5 lbs., 75c; 12 lbs., \$1.50.

Poultry Worm Powder—1½ lb. box, 50c; 4 lb. box, \$1.25; 10 lb. box, \$2.75.

Roup Remedy—100 tablet size, 50c.

Instant Louse Killer—1 lb. box, 25c; 2½ lb. box, 50c.

White Diarrhoea Remedy—100 tablet size, 50c.

Dip and Disinfectant—Pt. bottle, 50c; qt., 75c; ½ gal., \$1.00; 1 gal., \$1.75.

POULTRY FOOD

A perfectly balanced ration of grain without grit, shell or other adulterants. Current prices.

CHICK FEED

A perfectly balanced ration of grain and seeds for young chicks. Current prices.

BUTTERMILK EGG MASH

Protein, 20%; Fat, 4%

8¾ lb. bag, 40c; 100 lbs., \$4.25.

Mica Grits. Coarse and fine. 4 lbs., 10c; 100 lbs., \$1.35.

Oyster Shell. 4 lbs., 10c; 100 lbs., \$1.25.

Charcoal, fine or coarse. 1 lb., 10c; 5 lbs., 25c.

Meat Scraps. Protein 50%. 3 lbs., 25c; 25 lbs., \$1.40; larger quantities, current prices.

Nest Eggs—Porcelain. 5c each; 40c per dozen.

Egg Carriers—1 dozen size, per dozen, 25c; per 100, \$2.00.

Aluminized Metal Egg Crates—For sending eggs via parcel post. Made of a light but sturdy metal, with strength built into every joint, they are nevertheless sufficiently light to carry with a minimum of carrying costs.

1½ dozen size.....	\$1.25
2 " ".....	1.50
4 " ".....	2.00
6 " ".....	2.50

STOCK AND POULTRY SUPPLIES—Cont'd

O. K. POULTRY LITTER

A great Labor Saver and does away with most of the unpleasant work of caring for poultry. Repels vermin and is so light and springy that heavy birds do not injure themselves when alighting on it, thereby preventing bumble foot and lameness. Keeps the birds clean as it prevents the droppings from sticking to them. It is very economical as it outlasts any other Litter two or three times. Prevents dampness and

keeps the coops pure and sweet—there will be no unpleasant odors where it is used. Saves the cost of disinfectants. One bale will cover about 80 square feet, 3 inches deep. Per bale, \$4.50; 5 bales, \$4.25 per bale; 10 bales, \$4.00 per bale. Write for prices on larger quantities.

CELLULOID LEG BANDS

All colors and sizes. 10c doz. 65c 100.

CHAMPION LEG BANDS

In sets, numbers 1 to 12, 15c set.
In sets, numbers 1 to 25, 25c set.
In sets, numbers 1 to 50, 40c set.
In sets, numbers 1 to 100, 75c set.

Grit and Shell Box—Has three compartments. Each 85c

MASON JAR FOUNTAIN

This appliance for chicks, feeds water, grain, grit, etc., automatically. Is very easy to fill and operate. Made of rust-proof metal. Jar screws into cap in center of pan, affording easy cleaning. This is an absolutely sanitary fountain made to fit any half-gallon, quart or pint Mason jar. We do not furnish jars. 10c each.

Lawn Park Brood Coops—Made from galvanized materials, will not rust, and is proof against all chick enemies.

Size, closed, 18 x 24 inches; extended, 18 x 48 inches. Height, 19½ inches, \$4.50.

QUALITY BABY CHICKS

Beginning about February 1, we will have on sale, day old baby chicks of all breeds. They are pure bred from flocks that have been culled closely and every possible precaution taken to insure

healthy chicks. We pay parcel post charges on 50 or more and guarantee 97% live arrival. When better chicks are hatched, we will sell them.

"STARTRITE" CHICK FOOD
An Unequalled Food for Baby Chicks

Gives the young chicks all the food elements required by them to develop properly and in the correct proportions. No guess work. Can be fed either wet or dry. Chicks will mature rapidly and in the best condition with no losses. 4 lbs., 35c; 10 lbs., 65c; 25 lbs., \$1.50; 50 lbs., \$2.75; 100 lbs., \$5.25.

BABY CHICK FEEDING TROUGH

Made of heavy galvanized rust-proof sheet iron and used for baby chicks. Detachable top makes them easy to fill and keep clean. 10-inch length, 25c each; 20-inch length, 40c each.

CAN'T CLOG DRY MASH FEEDER

The feed magazine is suspended from the frame by short chains, which can be adjusted for length. The feed-pan hangs from the bottom of the magazine by three short chains leaving a space between magazine and pan thru which the mash flows. Vibration from the jostling of the hens as they eat causes the mash to feed down steadily. The vertical sides of the magazine and the cone-shaped bottom of the pan make clogging impossible.

No. 27—20 qt. capacity. Each.....\$2.75
No. 37—32 qt. capacity. Each.....3.25.

SQUARE BOTTOM DRINKING FOUNTAIN

Made of heavy galvanized iron. Easy to clean. Prevents disease. Prices, 2 qts., 95c; 1 gal., \$1.20; 2 gal., \$1.50.

STOCK AND POULTRY SUPPLIES—Cont'd

LARGE CAPACITY FEEDER

A wonderful feeder for young growing stock and a great time and labor saver when chicks are raised in large numbers. Made of heavy galvanized iron with a large capacity.

Sliding top cover, easy to fill and clean, and the birds cannot roost on the cover or sides to foul the feed.

Feeder, capacity 10 quarts, length 21 inches, width 8½ inches, height 7 inches. 16 openings on each side, so that 32 chicks can feed at one time. Each, \$1.35.

DRY MASH HOPPERS

The improved curved bottom keeps the feed within easy reach of the birds and the taper shape of the hopper—larger at the bottom—prevents the feed from clogging and insures a gradual, automatic feed. The wire grid and the wires running from the flange through the wire grid prevent the fowls from throwing out or wasting the feed.

The sloping top prevents them from roosting on the hopper. When both covers are closed it is rat, mouse and weather proof.

No. 35—8½ inches wide. Capacity 10 quarts, \$1.50.

No. 36—12 inches wide. Capacity 14 quarts, 1.95

No. 37—24 inches wide. Capacity 32 quarts, 2.75.

Dry Mash Hopper

LITTLE PUTNAM STOVE

A Little Putnam Stove is nine inches in diameter and four inches high.

The combustion is perfect, doubling the heat value of the oil. The oil tank holds three pints and burns three to four weeks without refilling or any other attention. The wick never needs trimming. Each, \$1.95.

BUCKEYE INCUBATORS AND BROODERS

Style "E" Buckeye

We can supply all parts for Buckeye Incubators and Brooders.
Ask for descriptive Buckeye catalogue.

WHY THE BUCKEYE SUCCEEDS

The unprecedented success which has followed the Buckeye for thirty years is primarily due to the invention of the Buckeye hot-water system. Without this wonderful system of hot-water heating, that perfect balance between the temperature, moisture and ventilation, which is so necessary to successful incubation, would be a physical impossibility. Our ability to heat the egg chamber without cooking all the moisture out of the air is not only responsible for the abundant supply of natural moisture, but at the same time the soft radiated heat from the hot-water tank provides an absolutely uniform temperature and permits the perfect ventilation of the egg chamber at the same time.

FUMES FROM LAMP CANNOT ENTER A BUCKEYE

Too much emphasis cannot be attached to the importance of keeping impure gases and fumes out of an incubator. Instead of passing the hot air fumes through the incubator, with a likelihood of leakage in the conductor at any time, we heat the water on the outside—sending it circulating around the egg chamber—and keep all the fumes from the lamp on the outside. It takes but a very small portion of lamp fumes to kill the developing chicks, and by circulating hot water through the egg chamber instead of hot air, we entirely eliminate all possibility of damage to the eggs.

BUCKEYE STYLE "E" INCUBATORS

The popular-priced Buckeye. A single wall machine. Economy practiced only in those parts that do not effect hatching quality and built-in immense quantities allow our offering them at prices that defy competition. They contain all the vital Buckeye features, including 12 ounce copper tanks, sold under the same absolute guarantee. No extras to buy.

No. 14—65 eggs.....\$16.50
No. 16—110 eggs.....22.50
No. 17—210 eggs.....30.00

CONTINUED ON NEXT PAGE

BUCKEYE INCUBATORS AND BROODERS—Cont'd

BUCKEYE "STANDARD" INCUBATORS

The world's best Incubator, built up to a standard, not down to a price.

California redwood construction.

Double wall insulated case.

Heavy copper tanks.

Buckeye patented metal thermostat.

Safe, economical heater.

Protected by Insurance Underwriters' label.

Endorsed by all Agricultural Colleges.

No extras to buy—each Incubator complete in every detail.

No. 1—110 eggs.....	\$30.00
No. 2—175 eggs.....	35.00
No. 3—250 eggs.....	46.50
No. 4—350 eggs.....	55.00
No. 5—600 eggs.....	87.50

"Standard" Buckeye

GUARANTEE

Every "Standard" or "Style E" Buckeye Incubator is guaranteed to hatch more chicks and stronger chicks than any Incubator of any other brand.

The perfect construction of all mechanical parts is also guaranteed, and any "Standard" or "Style E" Incubator or part thereof that does not fulfill our guarantee in every particular, will be replaced without question any time within 40 days.

Signed: THE BUCKEYE INCUBATOR COMPANY.

THE BUCKEYE "RITE-HEAT" BROODERS

IS THE GREATEST OIL-BURNING BROODER EVER DEVELOPED

A brooder that will take care of baby chicks in large numbers just as satisfactorily and under the same wide range of conditions as secured with Buckeye Coal-Burning Brooders. It can be operated in almost any temperature and depended upon to supply the correct amount of heat for brooding purposes. There is no limit to the heat it can produce and will care for chicks in a room of any size or temperature.

Large Capacity—Simple—Efficient—Economical—Low Oil Consumption.

Simple—Dependable Regulation.

The burner is made of cast-iron and consists of only three pieces.

The burners are completely assembled and attached to stove before leaving factory.

Only necessary for operator to connect stove with oil container, place the canopy over the stove, and the brooder is ready to work.

The oil container has capacity of four gallons—sufficient for 24 hours under any weather conditions.

ACTUAL RATING

"Rite-Heat" Brooders are made in two sizes, with 48 in. and 62 in. canopies, rated at 500 and 1,000 chicks respectively.

	No. 101	No. 102
Capacity.....	500	1000
Diameter of Canopy.....	48 in.	62 in.
Price.....	\$26.50	\$31.50

BUCKEYE COLONY BROODERS

Biggest Brooder Values Ever Offered the Public!

THE COAL-BURNING BUCKEYE

A Brooder that burns hard or soft coal, is self-feeding, Self-regulating, simple, safe and everlasting. Nothing to break—nothing to wear out. Equipped with a double automatic regulator that absolutely controls the temperature every minute of the day and night. Stove is of heavy cast-iron equipped with rocker grate. Self-cleaning and anti-clog.

THE BUCKEYE REVOLVING BROODER CANOPY

All Coal-burning Brooders are equipped with a revolving canopy, with large door, eliminating the canopy bail, rope and pulleys, and permitting easier cleaning around the Brooder. Note the following coal capacity, size, and weight of stoves, diameter of canopies, size of grates, and compare them with other Coal-burning Stoves of the same chick capacity on the market to-day.

	No. 117	No. 118	No. 119
Chick Capacity.....	350	500	1000
Height of Stove.....	20"	20 1/8"	23 1/8"
Diameter of Base....	11"	12 1/4"	13 1/2"
Diameter of Grate...	8 1/4"	9 1/8"	10 1/8"
Diameter of Canopy.	42"	52"	56"
Coal Capacity.....	23 1/2 lbs.	36 lbs.	58 lbs.
Smoke Pipe.....	4'	5'	5'
Price.....	\$14.75	\$18.50	\$22.50

BUCKEYE INCUBATORS AND BROODERS—Conc'd

BUCKEYE BLUE FLAME COLONY BROODERS

This Brooder, with the new improved burner, is the most efficient and economical oil-burning brooder in the world. Equipped with a self-feeding oil-container holding one gallon. The hovers are of galvanized steel supported by cast-iron legs, and equipped with a heating plate in the top of the canopy, increasing the efficiency of the burner. No complicated levers, valves or thermostats. Self-feeding, self-regulating, simple, safe, durable, smokeless, odorless and noiseless.

- No. 27-A—200 Chicks. Diam. 34".....\$16.75
- No. 80—350 Chicks. Diam. 42"..... 17.50
- No. 81—500 Chicks. Diam. 52"..... 18.50

BUCKEYE "ELECTRIC" BROODERS

After four years' experimental and development work, the Buckeye "Electric" Brooder has been perfected. Poultry men can now secure a brooder heated by electricity that will give them maximum of brooding satisfaction without the disadvantages common with other brooders of this type.

Accurate—Dependable Electric Switch controls the turning on and off of current.

No sticking or burning out of contact points.

Sure—Safe—Reliable.

RATED ACTUAL CAPACITY

Buckeye "Electric" Brooders are made in four sizes and will actually take care of the quantity of chicks specified.

Compare the diameter of Buckeye canopies and chick rating with competitive brooders. Buckeye gains by comparison.

	No. 90	No. 91	No. 92	No. 93
Chick Capacity.....	50	100	200	300
Diameter of Canopy.....	26 in.	36 in.	46 in.	56 in.
Price.....	\$14.50	\$19.75	\$24.75	\$29.50

GUARANTEE

Buckeye Brooders are guaranteed to be exactly as represented and to do everything we claim for them. They are guaranteed to do everything that any other Brooder will do—and do it better.

That's a pretty broad guarantee, but we mean every word of it.

Buckeye Brooders are the greatest brooding device ever invented and we are ready to prove it by permitting you to

Write your own Money-back Guarantee

We will permit you to try any size Buckeye Brooder for 30 days under any kind of guarantee you care to write and return your money without argument if you are not entirely satisfied.

Signed: THE BUCKEYE INCUBATOR COMPANY.

MERCHANDISE ORDERS

You have friends! So have we!

Your friends, some of them, love gardens. Who knows best what garden lovers like? We do. We deal with them all the time.

As a Garden Gift we believe our Merchandise Orders will prove to be a solution of the great problem of giving just what a friend wants and in garden matters this is a point of importance.

The order, up to the amount it is written for, will buy anything we catalogue. We issue them in all even dollar denominations from two dollars up. It leaves the selection of the Seeds, Bulbs, Plants, etc., to the one who receives the gift, and, after all, who can choose better?

THE J. CHAS. McCULLOUGH SEED CO.

228-230-232 East Fourth Street, Near Sycamore - Cincinnati, Ohio

<p>Date _____</p> <p>Name _____</p> <p>Street _____</p> <p>R. F. D. _____ Box _____</p> <p>Post Office _____</p> <p>County _____ State _____</p> <p>FREIGHT OR EXPRESS OFFICE _____</p> <p>SHIP BY ☐ MAIL ☐ EXPRESS ☐ FREIGHT</p>	<p style="text-align: center;">AMOUNT ENCLOSED</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Cash _____</td> <td style="width: 20%;"></td> </tr> <tr> <td>Check _____</td> <td></td> </tr> <tr> <td>Money Order _____</td> <td></td> </tr> <tr> <td>Stamps _____</td> <td></td> </tr> <tr> <td>TOTAL</td> <td></td> </tr> </table> <p>No. _____</p> <p>Put up by _____</p> <p>Date _____</p>	Cash _____		Check _____		Money Order _____		Stamps _____		TOTAL	
Cash _____											
Check _____											
Money Order _____											
Stamps _____											
TOTAL											

~~The~~ The J. Chas. McCullough Seed Co. give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs or plants they send out and will not be in any way responsible for the crop. Purity and germination tests are for information only and without guarantee.

[illegible]

INDEX

Adco.....	84	Grass Hooks.....	90	Plant Tubs.....	92
Alfalfa.....	63	Grass Seeds.....	2-3 and 61-62	Poppies.....	54-55 and 73
Antirrhinum.....	45	Growell Pots.....	90	Potatoes, Irish.....	34-35
Asparagus.....	7 and 77	Hedge Plants.....	75	" Sweet.....	35
Asters.....	46 and 73	Herbs.....	22	Poultry Litter.....	92
Barberry.....	74	Hoes.....	90	Poultry Supplies.....	92-96
Beans, Garden, Dwarf.....	7-8-9	Hollyhocks.....	51 and 73	Powder Guns.....	87
" Lima.....	11	Honeysuckle.....	75 and 79	Prices on Vegetable Seeds.....	4-5-6
" Pole or Running.....	9-10	Horticultural Tools.....	90-91-92	Privet.....	75
Bent.....	12-13	Hotkaps.....	90	Pruners.....	91
Begonias.....	68	Hot Bed Mats.....	90	Pumpkin.....	34
Bird Gravel.....	88	Humus.....	85	Radish.....	35-36
Blind Houses.....	88	Hydrangea.....	75	Raffia.....	91
Bird Seeds.....	83	Incubators.....	94-95	Rakes.....	91
Blackberries.....	77	Insecticides.....	80-81-82	Rape.....	67 and 88
Blue Grass Seed.....	62	Inoculating Bacteria.....	64	Raspberries.....	77
Bone Meal.....	84	Ivy.....	60 and 79	Rhubarb.....	37
Breeders.....	95-96	Kale.....	22	Rock Garden.....	42
Brussels Sprouts.....	13	Kohl-Rabi.....	22	Rollers, Lawn.....	90
Broom Corn.....	67	Labels.....	90	Roses.....	71-73
Buckwheat.....	67	Lawn Accessories.....	85 and 89-90-91	Rutabaga.....	41
Bulbs, Summer.....	68-69-70	" Cleaners.....	90	Salsify.....	37
Cabbage.....	13-14-15	" Grass Seed.....	2-3	Salvia.....	55
" Plants.....	15	" Lime.....	85	Saws, Pruning.....	91
Caladiums.....	68	" Mowers.....	89 and 98	Scaleside.....	81
Canary Seed.....	38	" Mower Sharpener.....	89	Seeds, Grass.....	2-3 and 61-62
Cane Stakes.....	91	" Rollers.....	90	Seed Sower, Garden.....	39
Cannas.....	47 and 68	" Sprinklers.....	85	Seed Sowers, Grass and Clover.....	91
Carrot.....	15	Leek.....	22	Shade Trees.....	78
Cattle Manure.....	84	Lettuce.....	23-24	Shears.....	91
Cauliflower.....	16	Lilac.....	75	Sheep Manure.....	84
Celery.....	16-17	Lilies.....	70	Shrubs, Flowering.....	74-75
Clematis.....	79	Limestone, Agricultural.....	85	Snapdragon.....	45
Climbers, Seed.....	60	Madeira Vines.....	68	Soja Beans.....	66-67
Climbing Plants.....	79	Martin Houses.....	88	Sorghum.....	67
Clover Seed.....	63	Melton, Musk.....	24-25-26	Spades.....	91
Collards.....	17	" Water.....	26-27	Spading Forks.....	90
Corn, Field.....	65	Millet.....	67 and 88	Sparrow Trap.....	88
" Fodder.....	65	Mole Traps.....	90	Spinach.....	37
" Garden.....	17-18-19	Moon Flowers.....	60	Spiraea.....	75
" Pop.....	19	Mulch Paper.....	91	Spray Calendar.....	83
Corn Salad.....	19	Mushroom Spaw.....	28	Sprayers.....	86-87
Cow Peas.....	66	Mustard.....	27	Sprinklers.....	85
Cucumber.....	20	Nasturtium.....	53	Squash.....	38
Currants.....	77	Nitrate of Soda.....	85	Strawberries.....	77
Cattle Bone.....	88	Nursery Stock.....	71-79	Sudan Grass.....	67
Cabbias.....	48 and 69	Oats.....	65-66	Sulphate of Ammonia.....	84
Chawberries.....	77	Okra.....	28	Summer Flowering Bulbs.....	68-69-70
Cobbles.....	90	Onion.....	29	Sunflower.....	56 and 66 and 88
Cog Foods.....	88	Onion Sets.....	28	Sweet Peas.....	52 and 57
Coin Plant.....	21	Ornamental Grasses.....	79	Swiss Chard.....	12
Emerald Lawn Seed.....	3	Ornamental Trees.....	78	Tobacco.....	41
Custars.....	21	Pansies.....	53	Tomato.....	38-39-40
Farm, Field, Forage Seed.....	61-67	Paper Pots.....	91	Tools.....	92-90-91-92
Fertilisers.....	84-85	Parcel Post Rates.....	Second Cover page	Tree Tanglefoot.....	82
Flower Boxes.....	92	Parsley.....	30	Trees, Shade.....	78
Flowering Shrubs.....	74-75	Paranip.....	30	" Fruit.....	76
Flower Pots and Saucers.....	92	Peanuts.....	33	Tree Pruners.....	91
Flower Seeds.....	42-60	Peas, Canada Field.....	66	Trowels.....	91
Flower Tubs.....	92	" Cow.....	66	Tuberoses.....	68
Forks.....	90	" Garden.....	30-31-32-33	Tubs, Plant.....	92
Fruit Picker.....	90	" Sweet.....	52 and 57	Turnip.....	41
Fruit Trees.....	76	Peat Moss.....	85	Vetch.....	66
Fragrantes.....	80-81-82	Peonies.....	73	Vine Seeds.....	60
Fuchs.....	21	Pepper.....	33	Water Lilies.....	78
Garden.....	70	Perennial Plants.....	73	Watering Pots.....	92
Glass Cloth.....	90	Pet Supplies.....	85	Wax, Grafting.....	82
Golf Mixtures.....	3	Phlox.....	54 and 73	Weeders.....	92
Gooseberries.....	77	Planet Jr. Tools.....	92	White Clover.....	63
Goats.....	60	Plant Food.....	84-85	Window Flower Boxes.....	92
Grapes.....	77	Plant Stakes.....	91	Wisteria.....	79
		Plant Supports.....	91	Zinnia.....	59

Ideal Power Lawn Mowers Save Labor—and Build Finer Lawns

Ideal Power Lawn Mowers are built in various sizes and capacities for practically all requirements.

Above is illustrated the roller type Ideal that is made in both 22" and 30" sizes. These machines are noted for their simplicity and absolute reliability. They are labor-savers and lawn builders.

Used extensively by home owners, park departments, schools, colleges, cemeteries, ball parks, and in fact every place where there are large lawns to care for.

We will gladly arrange for a demonstration of any Ideal equipment at any time. Special literature upon request.

Ideal Wheel Type Mowers are built in two sizes—20-inch cut and 25-inch cut. Recommended for cemeteries and on lawns having steep grades to climb.

The Ideal Golf Dump Cart is a handy tool for any park department, golf club, nurseryman, or florist. Strongly made. Wide crown wheels. Capacity, 1½ yards.

THE J. CHAS. McCULLOUGH SEED CO.

DISTRIBUTORS

228 - 230 - 232 East Fourth Street
CINCINNATI, OHIO