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62.73

85th
YEAR

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D. N. Shoemaker.

FEB - 2 1922

Mingle's SEEDS

For

FARM and GARDEN

P. B. MINGLE CO.

103 MARKET ST.

PHILADELPHIA - PA.

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THE 85TH YEAR

FOR

MINGLE'S SEEDS

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The firm of P. B. Mingle Co. has been engaged in the seed business in the same building, No. 103 Market Street and No. 4 North Front Street, uninterruptedly, since 1837, and is well known among its patrons as headquarters for Clover, Grass and Vegetable Seeds; Bulbs, Roots and Plants; Poultry, Farm and Garden Supplies, being one of the largest handlers in this State.

Strict personal application to the details of so large a business has earned them a valuable reputation as thoroughly reliable seedsmen, whose representations as to the quality of the goods they offer can implicitly be relied upon.

General Directions to Customers

The attention of our Customers is respectfully called to the following directions, which will if followed, be an aid to purchasers as well as ourselves.

ORDER EARLY

We aim to execute all orders as soon as received, but during the rush season in April and May, delays are unavoidable, which, however, can be largely overcome by our patrons anticipating their wants and ordering and taking delivery of their requirements early.

USE THE ORDER SHEET

We place an order sheet in each catalogue. Please use same in ordering. It will aid us considerably in getting up your orders.

Please remember to write on each order your NAME, POST-OFFICE, COUNTY and STATE, also give number of street or P. O. Box as distinctly as possible; also, the NEAREST EXPRESS OFFICE, or, if on a stage route, send us special directions, giving us the name of the Express Company delivering goods.

TERMS OF SALE

CASH WITH ORDER.—Please send money with the order sufficient to cover the whole bill.

REMITTANCE

Should be made by Post-office Money Order, Drafts on Philadelphia or New York Banks, or Express Money Orders. We disclaim all responsibility when remittances are not made as above directed. Where it is not possible to obtain these, the letter should be registered. Postage stamps will be found a convenient method of remitting for small amounts, and can be used by us to advantage. Coin should not be sent by mail.

PERSONAL CHECKS

From unknown patrons will be cashed before order is executed.

PROMPT ATTENTION

Anticipating the wishes of our customers, we give orders our prompt attention on the day they are received, and if for any reason, delay is unavoidable, we send prompt notice.

SHIPPING INSTRUCTIONS

Always state by what method you want goods forwarded, otherwise we will ship according to our best judgment.

PARCEL POST

Please include parcel post charges, if goods are desired shipped by this method, where remittance accompanies the order. (Unless your order calls for goods that we agree to pay charges on.)

We pay postage on 5c. and 10c. packets and ounces of garden and flower seeds. Packages of 50 lbs., and under can be sent by parcel post. Postage in first parcel post zone (50 miles), is 5c. per lb., and 1c. extra for each additional pound. In second postal zone (100 miles), 5c. per lb., and 2c. extra for each additional pound. When, owing to bulk or weight, seeds cannot be sent by mail, we deliver free to express or freight stations in Philadelphia, the purchaser paying all other transportation charges.

C. O. D. SHIPMENTS

Goods can be sent C. O. D. (with the exception of perishable items). No C. O. D. shipments for any kind of goods can be made by express or freight out of town unless a partial remittance accompanies the order.

SPECIAL NOTICE

Market Gardeners, Farmers' Clubs and Institutions wanting to purchase seeds in unusually large quantities should write for special prices. We have made prices very low in this catalogue, yet when a number of bushels or pounds are wanted we can frequently supply at a lower price than by the single pound or bushel. In writing give us a list of quantities and varieties required and we will return list promptly with our lowest price for the lot.

Always remember that we can save you money, no matter where you live.

NON-WARRANTY OF SEEDS

It is a well-known fact that unfavorable weather (cold and wet, or hot and dry) has an unfavorable bearing on the germination of seeds, causing partial or complete failure of the crop; or the seeds may be, and frequently are, destroyed by insects of various kinds; therefore, while we exercise the greatest care to have all seeds pure, reliable and true to name, our seeds are sold without any warranty, expressed or implied, and without any responsibility on our part as to result of crop. If the purchaser does not agree to these terms the seeds are at once to be returned to us.

CORRESPONDENCE

Write us about any seed you would like to know of and your letter will be answered the same day it is received. If you wish to know exactly what the freight or express would be on any article to your station, write us and we will tell you.

Space in this catalogue will not permit description of every article we sell, therefore, if there be anything you wish in our line write us for prices, if we don't have it we will get it and if we can't get it, it is not made.

REFERENCE TABLES

Handy reference calendar and useful tables for the Farmer, Home Gardener or Florist, which may help to solve quickly all problems in the sowing or planting of seeds or plants.

FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER
Sow in Hotbed Early Beans Broccoli Early Cabbage Forcing Carrot Early Celery Cucumber Eggplant Early Lettuce Parsley Pepper Radish Tomato	Sow in Hotbed Early Beans Early Beets Brussels Sprouts Early Cabbage Forcing Carrot Cauliflower Celery Eggplant Kohlrabi Lettuce Parsley Pepper Radish Tomato In Open Ground Beans, B. Windsor Beets Carrot Leek Onion Parsley Parsnip Peas Potatoes Radish Spinach Early Turnip Sweet Peas	Sow in Hotbed Cucumber Eggplant Melon Pepper Tomato In Open Ground Asparagus English Beans Beets Brussels Sprouts Early Cabbage Carrot Cauliflower Celery Cress Kohlrabi Lettuce Melon Onion Parsley Parsnip Peas Potatoes Radish Spinach Early Turnip	In Open Ground Artichoke Asparagus Beans, Bush & Running Beets Brussels Sprouts Carrot Cauliflower Celery Sweet Corn Cress Cucumber Kohlrabi Leek Lettuce Melon Onion Parsley Parsnip Early Peas Potatoes Radish Salsify Spinach Early Turnip	In Open Ground Beans, Lima & all other sorts Beets Broccoli Brussels Sprouts Late Cabbage Carrot Cauliflower Sweet Corn Cress Cucumber Endive Kale Kohlrabi Lettuce Melon Nasturtium Okra Peas Potatoes Pumpkin Radish Salsify Spinach Squash Herbs	In Open Ground Beans Beets Carrot Sweet Corn Corn Salad Cress Cucumber Endive Gherkin Kale Kohlrabi Lettuce Nasturtium Okra Peas Pumpkin Winter Radish Spinach Squash Turnip	In Open Ground Beans, Bush Tuberous Cher- vil Corn Salad Cucumber Endive Lettuce Welsh Onion Early Peas Radish Spinach Turnip Rutabaga	In Open Ground Cabbage for coldframes Cauliflower for coldframes Tuberous Cher- vil Corn Salad Cress Siberian Kale Lettuce Mustard Winter Radish Spinach Turnip
Try the Crimson Globe Beet this year it is one of the best.						A popular Potato THE RED SKIN for planting late in July, look on page 26 for description.	

Average Amount of Seed and Number of Plants for One Acre.

QUANTITY PER ACRE	QUANTITY PER ACRE	QUANTITY PER ACRE
Artichoke, 1 oz. to 500 plants..... 6 oz.	Cow Peas in drills..... 60 lbs.	Onion, in beds for sets..... 50 lbs.
Asparagus, 1 oz. to 800 plants..... 4 oz.	broadcast..... 1/2 to 2 bush.	in rows to make large bulbs..... 6 lbs.
Asparagus Roots..... 1000 to 7250	Cress, 3/4 oz. to 100 ft. of drill..... 12 lbs.	Onion Sets, in drills..... 6 to 12 bush.
Barley, broadcast..... 2 to 3 bush.	Cucumber, 1 oz. to 100 hills..... 1 to 3 lbs.	Parsnips, in drills, @ 2 1/2 ft..... 5 to 10 lbs.
Beans in drills, @ 2 1/2 ft..... 1 1/2 bush.	in drills..... 5 lbs.	Parsley, in drills, @ 2 ft..... 5 lbs.
Beans Pole, Lima, @ 4x4 ft..... 15 qts.	Dill, 1/8 oz. to 100 ft. of drill..... 5 lbs.	Peas, in drills..... 1 to 1 1/2 bush.
Beet, garden, 1 oz. to 100 ft. of drill..... 7 lbs.	Egg Plant, 1 oz. to 2000 plants..... 4 oz.	broadcast..... 3 bush.
Mangel, 1 oz. to 100 ft. of drill..... 5 lbs.	Endive, 1/4 oz. to 100 ft. of drill..... 4 1/2 lbs.	Pepper, 1 oz. to 1500 plants..... 3 oz.
Broccoli, 1 oz. to 5000 plants..... 2 oz.	Flax, broadcast..... 30 lbs.	Potatoes, cut tubers..... 10 bush
Broom Corn, in drills..... 12 lbs.	Grass, Blue..... 1/2 to 3 bush.	Pumpkin, in hills, 8x8 ft..... 8 to 10 lbs.
Brussels Sprouts, 1 oz. to 5000 plants..... 2 oz.	Orchard..... 1 1/2 to 2 bush.	Radish, in drills, @ 2 ft..... 6 lbs.
Buckwheat..... 20 lbs.	Pasture..... 2 1/2 to 3 bush	Rye..... 1 1/2 to 2 bush.
Cabbage, 1 oz. to 5000 plants..... 16 oz.	Red Top or herds..... 1 1/2 to 2 bush.	Sage, in drills..... 5 to 18 lbs.
Carrot, 1/4 oz. to 100 ft. of drill..... 3 lbs.	Rye..... 1 1/2 to 2 bush.	Salsify, in drills, @ 2 1/2 ft..... 15 lbs.
Cauliflower, 1 oz. to 5000 plants .. 8 oz.	Timothy..... 12 lbs.	Spinach, broadcast..... 30 lbs.
Celery, 1 oz. to 15000 plants..... 4 lbs.	Grass—Millets, German..... 50 lbs.	Squash, bush, in hills 4x4 ft..... 4 lbs.
Chicory..... 4 lbs.	Golden..... 50 lbs.	running, in hills, 8x8 ft..... 3 lbs.
Clover, Alsike..... 12 lbs.	Hungarian..... 48 lbs.	Sudan Grass, broadcast..... 16 to 24 lbs.
Alfalfa or Lucerne..... 20 lbs.	Japanese..... 32 lbs.	in rows..... 3 to 4 lbs.
Crimson..... 12 to 15 lbs.	Hemp..... 60 lbs.	Sugar Cane or Sorghum..... 10 to 12 lbs.
Red..... 10 to 15 lbs.	Kohl Rabi..... 4 lbs.	Sunflower..... 10 lbs.
Sweet..... 25 lbs.	Kale..... 5 lbs.	Tomato Seed, in hills, 4x4 ft..... 8 oz.
White (Dutch)..... 10 lbs.	Lettuce, in rows @ 2 1/2 ft..... 3 lbs.	in frame..... 3 oz.
Collards, 1 oz. to 5000 plants..... 4 lbs.	Leek, in rows @ 2 1/2 ft..... 4 lbs.	Turnip, in drills, @ 2 ft..... 4 lbs.
Corn, Rice (shelled)..... 14 lbs.	Lawn Grass..... 100 lbs.	broadcast..... 5 lbs.
Field in hills..... 14 lbs.	Melon, Musk, in hills, 5x5 ft..... 3 to 4 lbs.	Vetches, broadcast..... 50 lbs.
Sweet, 1/4 lb. to 100 hills..... 14 lbs.	Water, in hills, 8x8 ft..... 4 to 5 lbs.	Wheat, in drills..... 1 1/4 bush.
for fodder..... 3 bush.	Mustard, broadcast..... 1/2 bush.	broadcast..... 2 bush.
Corn Salad in drills @ 10 in..... 25 lbs.	Oats..... 2 to 3 bush.	
	Okra, in drills. 2 1/2 x 1/4 ft..... 25 lbs.	

Quantity of Seed to Sow a Single Row of 100 Yards

Asparagus..... 8 oz.	Cress..... 4 oz.	Parsley..... 2 oz.
Beans, Bush..... 3 qts.	Cucumber..... 4 oz.	Peas..... 3 qts.
Beans, Lima..... 3 pts.	Egg Plant..... 1 oz.	Pepper..... 1 oz.
Beans, Pole..... 3 pts.	Endive..... 2 oz.	Pumpkin..... 2 oz.
Beet..... 5 oz.	Kohl Rabi..... 2 oz.	Radish..... 6 oz.
Broccoli..... 1 oz.	Leek..... 2 oz.	Rhubarb..... 4 oz.
Brussels Sprouts..... 1 oz.	Lettuce..... 2 oz.	Salsify..... 4 oz.
Cabbage..... 2 oz.	Melon, Water..... 3 oz.	Spinach..... 6 oz.
Carrot..... 3 oz.	Melon, Citron..... 2 oz.	Squash..... 3 oz.
Cauliflower..... 1/2 oz.	Mustard..... 4 oz.	Tomato..... 1 oz.
Celery..... 3 oz.	Okra..... 12 oz.	Turnips..... 3 oz.
Collards..... 2 oz.	Onion (for large bulbs)..... 2 oz.	Parsnip..... 3 oz.
Corn..... 1 pt.	Onion (for sets)..... 8 oz.	

REFERENCE TABLES (Continued)

Time Required for Maturity of Different Garden Crops Reckoned from Day of Planting the Seed.	Number of Plants Produced from an Ounce of Seed	Average Time Required for Garden Seed to Germinate
Beans—String..... 35 to 65 days	Plants	Beans..... 5 to 10 days
Beans—Shell..... 65 to 75 days	Asparagus..... about 300	Beets..... 7 to 10 days
Beets—Table..... 65 days	Broccoli..... " 2,000	Cabbage..... 5 to 10 days
Beets—Stock..... 150 days	Cabbage..... " 2,000	Carrot..... 12 to 18 days
Cabbage—Early..... 105 days	Cauliflower..... " 2,000	Cauliflower..... 5 to 10 days
Cabbage—Late..... 150 days	Celery..... " 3,000	Corn..... 5 to 8 days
Cauliflower..... 110 days	Egg Plant..... " 1,000	Cucumber..... 6 to 10 days
Corn..... 75 days	Endive..... " 3,000	Endive..... 5 to 10 days
Egg Plant..... 150 to 160 days	Kale..... " 2,000	Lettuce..... 6 to 8 days
Lettuce—Heading..... 65 days	Leek..... " 1,000	Onion..... 7 to 10 days
Melon—Water..... 120 to 140 days	Lettuce..... " 3,000	Pea..... 6 to 10 days
Melon—Musk..... 120 to 140 days	Pepper..... " 2,000	Parsnips..... 10 to 20 days
Onion..... 135 to 150 days	Tomato..... " 3,000	Parsley..... 15 to 21 days
Pepper..... 140 to 150 days	Sage..... " 1,000	Peppers..... 9 to 14 days
Radish..... 30 to 40 days	Thyme..... " 5,000	Radish..... 3 to 6 days
Squash—Summer..... 60 to 65 days		Salsify..... 7 to 12 days
Squash—Winter..... 125 days		Tomato..... 6 to 12 days
Tomato..... 150 days		Turnip..... 4 to 8 days
Turnip..... 60 to 70 days		

FOREIGN NAMES OF VEGETABLES AND HERBS

ENGLISH	FRENCH	ITALIAN	POLISH	SPANISH	GERMAN
Anise.....	Anis.....	Aniso, Anacio.....	Anyz.....	Anis, Matalahuga.....	Anis, Grüner Anis
Artichoke.....	Artichaut.....	Articiocca.....	Karczochy.....	Alcachofa.....	Artischoke
Asparagus.....	Asperge.....	Sparagio.....	Sparagi.....	Sparrago.....	Spargel
Balm.....	Melisse citronelle.....	Melissa.....	Balsam.....	Toronjil, Citronella.....	Citronen-Melisse
Basil.....	Basilic grand.....	Basilico.....	Bazylija.....	Albaca.....	Basilikum
Beans.....	Haricots.....	Fagioli.....	Fasola.....	Habichuela.....	Bohnen
Beet.....	Betterave.....	Barbabetola.....	Buraki.....	Remolacha.....	Rübe
Borage.....	Bourrache.....	Boragine.....	Boraz.....	Boraja.....	Boretsch
Broccoli.....	Chou Brocoli.....	Brocoli.....	Brokuly.....	Broculi.....	Spargelkohl
Brussels Sprouts.....	Chou de Bruxelles.....	Cavolo di Brusselles.....	Latorvil.....	Bretones de Bruselas.....	Rosenkohl
Cabbage.....	Chou pommé.....	Cavolo cappuccio.....	Kapusta.....	Col repello.....	Kopfkohl, Kraut
Cabbage, Savoy.....	Chou de Milan.....	Cavolo di Milano.....	Sabaudzka Kapusta.....	Col de Milan.....	Wirsing
Caraway.....	Cumin des prés.....	Carvi.....	Kminek.....	Comino.....	Feld-Kümmel
Carrot.....	Carotte.....	Carota.....	Marchew.....	Zanahoria.....	Carotten, Möhren
Cauliflower.....	Chou-fleur.....	Cavolfiore.....	Kalaflory.....	Coliflor.....	Blumenkohl
Celery.....	Céleri.....	Sedano.....	Selery.....	Apio.....	Sellerie
Celeriac.....	Céleri-rave.....	Sedano-rapa.....	Selery (Korzen).....	Apio-nabo.....	Knoll-Sellerie
Chervil.....	Cerfeuil.....	Cerfoglio.....	Czechrzyca.....	Perifollo.....	Kerbel
Chicory.....	Chicorée sauvage.....	Cicoria selvatica.....	Cykorya.....	Achicoria.....	Cichorienwurz
Coriander.....	Coriandre.....	Coriandorlo.....	Koledra.....	Culantro.....	Coriander
Corn Salad.....	Mache.....	Valeriana.....	Ziarno Salaty.....	Canonigos.....	Feldsalat
Corn.....	Mais.....	Mais.....	Kukurydza.....	Maiz.....	Mais
Cress.....	Cresson alenois.....	Agretto.....	Rzerzucha.....	Mastuerzo.....	Garten-Kresse
Cress, Water.....	Cresson de fontaine.....	Nasturzio aquatico.....	Rzerzucha wodna.....	Berro.....	Brunnenkresse
Cucumber.....	Concombre.....	Cetriolo.....	Gogrek.....	Cohombro.....	Gurken
Dandelion.....	Pissenlit.....	Dente di leone.....	Papawa.....	Diente de leon.....	Löwenzahn
Dill.....	Aneth.....	Aneto.....	Koper.....	Eneldo.....	Dill
Egg Plant.....	Aubergine.....	Petronciano.....	Gruszka milosna.....	Berengena.....	Eierpflanze
Endive, Curled.....	Chicorée Endive.....	Endivia.....	Endywia.....	Endivia.....	Endivien
Endive, Broad Leaf.....	Chicorée-Scarole Ronde.....	Endivia Scariola.....		Escarolo.....	Escarol
Fennel.....	Fenouil.....	Finocchio.....	Koper.....	Hinojo.....	Fenchel
Garlic.....	Ail.....	Aglio.....	Czosnek.....	Ajo.....	Knoblauch
Horehound.....	Marrube blanc.....	Marrubio.....	Marubium.....	Marrubio.....	Andorn
Horse Radish.....	Rairoot sauvage.....	Rafano.....	Chrzan.....	Taramago.....	Meer Rettig
Hyssop.....	Hyssope.....	Issopo.....	Hyzop.....	Hisopo.....	Isop
Kale.....	Chou vert.....	Cavolo verde.....	Solanka.....	Breton, Berza.....	Blätterkohl
Kohl Rabi.....	Chou-rave.....	Cavolo rapa.....	Kalarepa.....	Col rabano.....	Knollkohl
Lavender.....	Lavande.....	Lavanda.....	Lawenda.....	Espliego.....	Lavendel
Leek.....	Poireau.....	Porro.....	Pory.....	Puerro.....	Porree, Lauch
Lettuce.....	Laitue.....	Lattuga.....	Salata.....	Lechuga.....	Lattich, Kopfsalat
Marjoram.....	Marjolaine.....	Maggiorana.....	Majeranek.....	Majorana.....	Majoran
Melon.....	Melon.....	Popone.....	Melon.....	Melon.....	Melone
Melon, Water.....	Melon d'eau.....	Melone d'aqua.....	Melon, wodny.....	Sandia.....	Wasser-Melone
Mushroom.....	Champignon.....	Fungo pratajolo.....	Grzyb.....	Seta.....	Schwamm
Nasturtium.....	Capucine.....	Nasturzio.....	Nasturcyja.....	Capuchina.....	Kapuciner Kresse
Okra.....	Gombaud.....	Ocra.....		Gombo.....	Ocher
Onion.....	Ognon.....	Cipollo.....	Cebula.....	Cebolla.....	Zwiebel
Parsley.....	Persil.....	Prezzemolo.....	Pietruszka.....	Perejil.....	Petersilie
Parsnip.....	Panais.....	Pastinaca.....	Pasternak.....	Chirivia.....	Pastinake
Peas.....	Pois.....	Pisello.....	Groch.....	Guisante.....	Erbsen
Pepper.....	Piment.....	Peperone.....	Pieprz.....	Pimiento.....	Pfeffer
Pumpkin.....	Potiron.....	Zucca.....	Bania.....	Calabaza totanera.....	Melonen-Kürbiss
Radish.....	Radis.....	Ravanello.....	Rzodkiew.....	Rabanito.....	Radies
Rhubarb.....	Rhubarbe.....	Rubarbaro.....	Rubarbarum.....	Ruibarbo.....	Rhabarber
Rosemary.....	Romarin.....	Rosmarino.....	Rozmaryn.....	Romero.....	Rosmarin
Rue.....	Rue.....		Ruta.....	Ruda.....	Raute
Ruta Baga.....	Chou-navet.....	Cavolo navone.....		Col nabo, Nabicol.....	Kohlrübe, Wrucken
Saffron.....	Safran.....	Zafferano.....	Szafran.....	Azafran.....	Safran
Sage.....	Sauge.....	Salvia.....	Szalwija.....	Salvia.....	Salbei
Salsify.....	Salsifis.....	Sassefrica.....	Jarzy, Ostryga.....	Salsifi blanco.....	Haferwurz
Sorrel.....	Oseille.....	Acetosa.....	Szczaw.....	Acedera.....	Sauerampfer
Summer Savory.....	Sarriette annuelle.....	Santoreggia.....	Caber ogrodowy.....	Ajedrea comun.....	Bohnenkraut
Spinach.....	Spinard.....	Spinace.....	Szpinak.....	Espinaca.....	Spinat
Squash.....	Courge.....	Zucca.....	Miekurz.....	Calabaza.....	Kürbiss
Swiss Chard.....	Poiree.....	Bieta.....		Bleda.....	Beisskohl
Thyme.....	Thym.....	Timo.....	Macierzanka.....	Tomillo.....	Thymian
Tomato.....	Pomme d'Amour.....	Pomo d'oro.....	Pomidor.....	Tomate.....	Liebesapfel
Turnip.....	Navet.....	Navone.....	Rzepa, brukiew.....	Nabo.....	Weisse-Rübe
Wormwood.....	Absinthe.....	Assenzio.....	Piotun.....	Ajenjo.....	Wermuth

REFERENCE TABLES (Continued)

Number of plants to the acre at given distances

Dis. apart	No. plants	Dis. apart	No. plants	Dis. apart	No. plants	Dis. apart	No. plants
12 x 1 In.	522,720	24 x 24 In.	10,890	36 x 36 In.	4,840	60 x 60 In.	1,743
12 x 3 "	174,240	30 x 1 "	209,088	42 x 12 "	12,446	8 x 1 Ft.	5,445
12 x 12 "	43,560	30 x 6 "	34,848	42 x 24 "	6,223	8 x 3 "	1,815
16 x 1 "	392,040	30 x 12 "	17,424	42 x 36 "	4,148	8 x 8 "	680
18 x 1 "	348,480	30 x 16 "	13,068	48 x 12 "	10,890	10 x 1 "	4,356
18 x 3 "	116,160	30 x 20 "	10,454	48 x 18 "	7,790	10 x 6 "	726
18 x 12 "	29,040	30 x 24 "	8,712	48 x 24 "	5,445	10 x 10 "	435
18 x 18 "	19,360	30 x 30 "	6,970	48 x 30 "	4,356	12 x 1 "	3,630
20 x 1 "	313,635	36 x 3 "	58,080	48 x 36 "	3,630	12 x 5 "	736
20 x 20 "	15,681	36 x 12 "	14,520	48 x 48 "	2,723	12 x 12 "	302
24 x 1 "	261,360	36 x 18 "	9,680	60 x 36 "	2,901	16 x 1 "	2,722
24 x 18 "	15,520	36 x 24 "	7,260	60 x 48 "	2,178	16 x 16 "	170

Table Showing the Weight of Various Articles.

Barley	per bushel, 48 lbs.	Oats	per bushel, 32 lbs.
Beans	per bushel, 60 lbs.	Onion Sets	per bushel, 32 lbs.
Buckwheat	per bushel, 48 lbs.	Orchard Grass	per bushel, 14 lbs.
Broom Corn	per bushel, 46 lbs.	Perennial Rye Grass	per bushel, 24 lbs.
Blue Grass	per bushel, 14 lbs.	Peas	per bushel, 60 lbs.
Clover Seed	per bushel, 60 lbs.	Red Top Grass Seed	per bushel, 10 lbs.
Corn, shelled	per bushel, 56 lbs.	Rye	per bushel, 56 lbs.
Corn, on the ear	per bushel, 70 lbs.	Spinach	per bushel, 40 lbs.
Flax Seed	per bushel, 56 lbs.	Timothy Seed	per bushel, 45 lbs.
German Millet	per bushel, 50 lbs.	Top Onions	per bushel, 28 lbs.
Hemp Seed	per bushel, 40 lbs.	Turnips	per bushel, 55 lbs.
Hungarian Grass Seed	per bushel, 48 lbs.	Vetches	per bushel, 60 lbs.
Millet, Japanese	per bushel, 30 lbs.	Wheat	per bushel, 60 lbs.

Inoculate Your
Alfalfa, Clovers, Cow Peas, Soy Beans, Vetches
and
Other Legume Crops
WITH
Mulford Cultures
FOR LEGUMES

Small Cost   Large Returns   Easy to Use   No Labor Expense

Mulford Cultures contain pure, tested strains of active, vigorous nitrogen-fixing bacteria, for inoculating seeds of legumes or soil.

Mulford Cultures are scientifically prepared and tested with the utmost care and skill. Enormous numbers of these very valuable and desirable bacteria are thus available to you in every package of Mulford Culture and may readily be applied to your seed. The sealed bottle insures purity.

Legumes offer the best-known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields. They add both humus and nitrogen to your soil and thus increase your yield of wheat, cotton, corn and other non-legume crops.

The U. S. Department of Agriculture and many State Agricultural Experiment Stations recommend inoculation of legumes with nitrogen-fixing bacteria to induce a prompt "catch" and increase your yield.

Mulford Cultures are scientifically prepared and tested by experts in the biological laboratories of H. K. Mulford Co., Philadelphia, U. S. A., with the same degree of care as Mulford Antitoxins, Serums, Vaccines, etc., which are standard all over the world.

Always specify on your order what crop you want to inoculate, as there is a different strain of bacteria for each legume.

ALFALFA
CRIMSON CLOVER
SWEET CLOVER
WHITE CLOVER
RED CLOVER
ALSIKE CLOVER
Mammoth Clover

BURR CLOVER
Yellow Clover
Berseem Clover
COW PEAS
SOY BEANS
Canada Field Peas
PEANUTS

VETCH
Horse Beans
VELVET BEANS
PERENNIAL PEAS
SWEET PEAS
GARDEN PEAS
GARDEN BEANS

LIMA BEANS
Lupins
Sainfoin
Lespedeza
Beggur Weed
Kudzu
and others

Those printed in CAPITAL LETTERS can be shipped immediately from stock. The others will be prepared to order and can be supplied in a few days.

PRICES

Mulford Cultures are supplied for the varieties of legumes listed, at the following prices:

5-Acre Size, \$5.00 . . . . . ("Dollar per Acre")

1-Acre Size \$1.50

1-4 Acre Size 75

Small Size (Supplied only in 4 varieties, for Garden Peas, Garden Beans, Lima Beans and Sweet Peas) 35

These Prices include delivery on freight shipments.

FREE DESCRIPTIVE FOLDER SENT UPON REQUEST

CLOVER SEEDS

ALFALFA—Alfalfa is the most talked of and most widely planted of all the varieties of clover in the world.

The U. S. Department of Agriculture says: "In addition to the hay crop, Alfalfa at two years adds \$100 to the value of every acre on which it grows. There is no State in the Union in which Alfalfa cannot be successfully grown." This is saying a good deal but it has been proven true.

Alfalfa will produce 4 to 6 tons of hay to the acre each year and in money value is worth 45 per cent. more than other clovers and 60 per cent. more than Timothy hay. It will grow 4 crops a year and it does not exhaust the soil; it enriches the soil. Its long, branching roots penetrate far down, 15 to 20 feet, and so loosen the subsoil that it is a gigantic subsoiler, resists drought, and gets plant food where other crops would be a failure. When the plants are destroyed in order to raise other crops on Alfalfa Land, the large roots decay and produce a vast source of fertility to be used by following crops.

It is said that the feeding value of a ton of Alfalfa is equal to a ton of shelled corn.

Many other interesting facts might be given about Alfalfa. We can't say too much for it because it's a working plant which is changing the destiny of many farming sections. No farmer with stock can afford to let it go without trial.

Although fall sowing is preferable, good results can be obtained from early spring sowing. Give it care and attention, especially the first year, and your trial will show you that you cannot afford to be without it. Get it thoroughly established by first preparing your land, applying plenty of lime, and before seeding you should inoculate the seed. If your land has never had Alfalfa growing on it before be sure to inoculate the seed with nitrogen gathering bacteria for Alfalfa, for without inoculation your success is exceedingly doubtful. The Alfalfa bacteria, Mulford's Nitro Culture, is fully described on page 3.

When once established, Alfalfa is the most valuable permanent clover that can be grown. It is adapted to all parts of the United States and has the highest feeding value of any hay. Do not sow on wet ground, high and rather dry being preferable, and only cut when coming into bloom. Sow 20 lbs. per acre. Per bushel (60 lbs.) Market Price

ALSIKE CLOVER—Alsike Clover grows thicker and is finer in growth than Red Clover, making better hay and probably more and better grazing. It is also harder, resisting extremes of heat and drought and also severely cold weather to a remarkable extent. It is perennial and does not winter kill. It succeeds on a variety of soils, light upland loamy lands as well as stiff bottom lands. It will do better on moist land than any other Clover. It is sure to give a good stand and make good crops than either the Red or Mammoth Clover, and in sections where these Clovers have been uncertain Alsike is superseding them altogether. When sown with other grasses it forms a quick undergrowth and greatly increases the yield. It is well adapted for sowing with Red Clover, Timothy, Herd's Grass, as it matures with these grasses, but flowering a little later than Red Clover.

Sow in the Spring or Fall at the rate of 12 lbs. per acre. Per bushel (60 lbs.) Market Price

CRIMSON OR SCARLET CLOVER—Or more commonly called Scarlet, Italian or German Clover, is an annual of French origin, makes a growth from 20 to 30 inches high, has a bright crimson blossom from 1½ to 3 inches long, and when in full bloom with its luxuriant growth of green foliage and its crimson bloom, is a thing of beauty. It is a winter crop, and should be sown in July, August or September of each year. As a manurial crop it is worth in fertilizer value thirty to forty dollars per acre. Sow at rate of 15 lbs. per acre. Per bushel (60 lbs.) Market Price

MAMMOTH, SAPLING OR PEA VINE CLOVER—This is similar to Medium or Common Red Clover both in the appearance of the seed and its habit of growth, the difference being that it usually grows larger and is later maturing. It is considered superior as an improver on account of the extra growth. It is a good variety for thin soils, or to seed with Timothy, meadow Fescue or Herd's Grass or Red Top, as it matures about the same time as these grasses. Is best adapted for ploughing under as green manure; it grows five or six feet high, has large, coarse stalks, which are not liked by cattle. It is not ready to cut for hay until long after the common variety, and when cut leaves the ground bare, making no second growth. Sow about 12 lbs. per acre, if sown alone; or with Timothy sow 6 lbs. of the clover and 8 lbs. of Timothy which should make a liberal seeding. Per bushel (60 lbs.) Market Price

MEDIUM, OR COMMON RED—This is the most important of all varieties of Clover for practical farm purposes; makes excellent pasturage, and fine hay crops when sown with Timothy, Orchard and other grasses, as the latter ripen about the same time. It is one of the best fodders for milch cows or sheep, and improves the land by adding humus to the soil.

It is a perennial, growing to a height of 1½ to 2 feet, yields crops several years from one seeding, and on good land, yields two to three cuttings annually. It should be cut for hay when in full bloom.

Sown by itself sow, either in Fall (July 1st to Sept. 5th) or in Spring (Feb. 1st to April 15th) at the rate of twelve to fifteen pounds per acre, according to nature of the soil. Per bushel (60 lbs.) Market Price

WHITE BLOSSOM, SWEET CLOVER OR BOKHARA—Is a hardy biennial plant of an erect and branching habit.

It starts up early in the Spring and in its second year it reaches a height of from 5 to 12 feet, blooms, matures its seed and dies.

However, there is usually enough seed scattered to reseed, and the crop is continuous unless cut before seed ripens.

When young it resembles Alfalfa. Sweet Clover has a peculiar bitter taste. The flowers and leaves possess an odor like vanilla. It is an excellent bee food. Grows well in all climates and soils, whether gravel, clay or sand.

Stands droughty weather equally as well as alfalfa, yet will grow in wet places.

Is a deep rooting legume, storing up Nitrogen like Cow Peas, thus possessing great fertilizing properties. Two crops can be cut in a season. It is a good silo feed.

Sow in Fall or Spring, 15 to 20 lbs. per acre. Per bushel (60 lbs.) Market Price

YELLOW ANNUAL SWEET—This being only an annual and much smaller in growth, is not so desirable. To be sown early in Spring at rate of 25 lbs. per acre. Per bushel (60 lbs.) Market Price.

WHITE DUTCH CLOVER—A small, low growing variety, with creeping stems; mixed with Blue grass or Perennial Rye Grass, or Timothy, it makes a permanent pasture of great value. It is very largely used in lawn and pasturage mixtures, and is indigenous to the soils throughout this section. It makes a small, close, compact growth, covering the ground like a carpet. Succeeds and does well all throughout the North. Its blossoms are round, white, tinged with red, and sweet scented; stems fine and palatable, with numerous leaves of bright green color, blotched with white. Sow either in the Spring or Fall. When sown by itself, sow at the rate of ten lbs. per acre. It is better, however, sown in mixture with other grasses. Per bushel (60 lbs.) Market Price

NITROGEN GATHERING BACTERIA

If you want to increase your yield inoculate the seed before planting with MULFORD CULTURE. MULFORD CULTURE offers the best known means of maintaining soil fertility and rejuvenating over-cropped and worn-out fields.

MULFORD CULTURE: ¼ acre size, 75c.; 1 acre size \$1.50; 5 acre size \$5.00 ("Dollar per Acre").

When ordering be sure and specify what crop you want to inoculate, as each leguminous crop requires a separate culture.

FIELD AND FORAGE SEEDS

BARLEY—SIX-ROWED—Finest sort for growing in Pennsylvania or New Jersey. Makes a good stiff straw, standing up well. Is the earliest among the beardless varieties, making a quick-growing crop of excellent and nutritious green fodder, and is growing in popularity wherever used, and will also make a good grain crop, although its principal value is as an early nutritious forage crop, to feed green or to cure as hay. If for the latter, it should be cut when in the milky state.

Sow 2½ bushels per acre. Per bushel (48 lbs.) Market Price.

BROOM CORN—EARLY EVERGREEN—This variety is the most popular to sow for market. It is a very bright green color. Makes by far the best brooms of any corn grown, and commands the very highest prices. Height, 7 to 8 feet.

Sow in drills 12 lbs. per acre, or if in rows 8 to 10 lbs. per acre. Per bushel (46 lbs.) Market Price.

BUCKWHEAT—SILVER HULL—This variety has a large, plump, silvery grain. The plant continues to bloom longer than common Buckwheat, thus producing a larger crop. Per bushel (48 lbs.) Market Price.

BUCKWHEAT (Japanese)—This variety of Buckwheat is a great improvement over the old kind in the following respects: The new Japanese grows with astonishing vigor and begins to mature its grains in about fifty days, its extreme earliness insuring safety from frosts, where the other kinds often get caught. 2d. A most valuable quality is its ability to withstand wind-storms and not lodge. 3d. It holds its grain in harvesting. It has been known to stand uncut a month after its proper time for ripening, and without apparent loss from lodging or grains separating. 4th. In yield it excels, one peck yielding from 36 to 52 bushels. Its flour is the whitest and finest of all Buckwheat. 5th. It will do well on soil too rich or too poor to support the old varieties. 6th. It will withstand sunlight almost perfectly.

Sow one bushel per acre. Per bushel (48 lbs.) Market Price.

MILLET—GOLDEN MILLET—A much improved variety, medium early, growing three to five feet high; the heads are closely condensed, though the spikes are very numerous. It is an enormous cropper; should be sown not less than one bushel per acre, if less will grow coarse and woody, in which state it is not relished by cattle. Millet is somewhat difficult to cure, and if it can be matured early enough to get the warm sun of August or September, it will be a decided advantage, but sixty days is usually long enough to grow it for hay. It should be cut for hay as soon as it comes into blossom.

It must be remembered that Tennessee German Millet is the best in the world, being sown and cultivated for seed and compared with seed grown elsewhere the Tennessee grown is purer and better in every way.

Sow one to one and a quarter bushel per acre. Per bushel (60 lbs.) Market Price

MILLET—HUNGARIAN—This belongs to the millet family, growing less rank, with small stalks often yielding two to three tons of hay per acre; like millet it is an annual, and requires to be sown every season, but will produce a larger return than almost any other crop. Sow one bushel per acre and cultivate like millet; all kinds of stock eat it with avidity.

Per bushel (48 lbs.) Market Price

MILLET—JAPANESE, OR BARNYARD—Frequently called the Billion Dollar Grass. An excellent fodder plant, growing from 6 to 8 feet high, producing 12 to 20 tons of hay per acre.

INOCULATE THIS
SEED WITH
MULFORD CULTURE

CANADA FIELD PEAS

Here is a crop which is not only profitable, but will return to the land the much needed nitrogen. Peas are

second only to Clover in their soil enriching properties and can be grown under almost any condition of soil or climate. There is always a ready market for Peas, or they can be profitably ground and fed to the stock. The vines make rich, nutritious hay. If fed to milch cows, when in a green state, pods, vines and all, the flow of milk will be almost doubled.

Peas are a paying crop, and can be profitably planted in many ways.

First. When sown alone about three bushels are required to the acre. They can be matured and threshed when dry. The yield will vary from 30 to 60 bushels an acre.

Second. Peas and Oats are frequently sown together, using 1½ bushels of Peas and 2 bushels of Oats an acre. By so doing a double crop can be secured. They can be threshed at one time and readily separated in cleaning.

Third. They can be sown alone or with Oats and fed green. It is surprising the amount of fodder which is produced in this way. If sown together, the Peas should be sown first and plowed under about four inches deep, the Oats may then be drilled in.

Fourth. For plowing under when Peas and Oats are sown together and each are "in milk" they are nearly equal in value to Clover, used in the same way to enrich the soil. Sown in January, February or early March. Per bushel (60 lbs.) Market Price

COW PEAS—The Southern Cow Pea (in reality a bean) has been cultivated in the South for many years, but only in recent years has it been demonstrated that most all varieties are adapted to cultivation throughout the entire United States. They now are one of our most valuable farm products.

As a fertilizer they come next to clover, to be plowed under when they commence to blossom; they will grow on land that will not produce clover.

As a fertilizer crop it excels all others, absorbing from the air more nitrogen than clover, and drawing from the subsoil large amounts of potash and phosphoric acid, depositing these fertilizer elements in the surface soil, just where needed for succeeding crops.

Cow peas afford excellent midsummer pasturage, but the best way for using green is to cut and feed to stock. Sow 1½ to 2 bushels per acre broadcast.

BLACK—A standard trailing variety; and very extensively grown. Very prolific; early to mature; somewhat later than Whippoorwill. Makes a fine growth of foliage. Per bushel (60 lbs.) Market Price

BLACK-EYE—(Black-eyed Susan, or Sand Pea)—Later than Whippoorwill. Vines erect. Fodder long. An excellent soil improver. Similar in growth of vine and action of roots upon the soil as the other Cow Peas. Per bushel (60 lbs.) Market Price

GRAY CROWDER, OR IMPROVED WHIPPOORWILL—Very early in maturity. The vines are not runners, but grow erect in bunches. The seed is brown speckled. Per bushel (60 lbs.) Market Price

NEW ERA—Upright in growth, quicker to mature than Whippoorwill, prolific in peas. The vines make a large growth, cure easily, and make fine, dry fodder. The seeds are of a dull red color, and, being smaller than ordinary Cow Peas, less seed is required to sow an acre, 1 to 1½ bushels being ample.

Per bushel (60 lbs.) Market Price

WHIPPOORWILL—An early erect-growing bunch variety. The seed is brown speckled and more easily gathered than from the vine-growing sorts. Early in maturity and habit of growth. Good between corn.

Per bushel (60 lbs.) Market Price

VETCH—SPRING—(Vicia Sativa)—Culture same as for peas. Valuable as a cover crop. Sow 2 bushels per acre. It is quicker in growth than Winter Vetch, and makes a splendid fodder and hay crop, and is an excellent soil improver. When sown with barley or oats use 1 bushel to 30 lbs. Spring Vetch to the acre. (60 lbs. per bushel) Market Price

VETCH—WINTER (Vicia Villosa, Sand or Hairy Vetch)—Sand-Vetch is a very valuable fodder plant and is rapidly becoming extremely popular as year after year the farmers of this country are learning more of its true value. It is noted for its extreme hardiness, is highly valuable in the North as a Winter cover crop to prevent leaching; is also valuable for fodder and fertilizing purposes. It withstands hard Winters, being harder than wheat. It is an annual, but drops its seed freely and will come up year after year on the same ground. It belongs to the pea family, but the vines are nearly twice as long and leafy as peas. It may be sown in the Spring or Fall with any crop of grain. It remains green all Winter and is valuable for early pasturing as well as for fertilizing. It is extremely early and has enormous value for feeding purposes. Drought, heat and cold do not affect it. It is eagerly eaten by all kinds of stock.

If sown in April or early May it can be cut in July. Yields 12 to 20 tons green fodder to the acre. Sow ½ bushel per acre. Per bushel (60 lbs.) Market Price

WHEAT—We carry a full line of all the principal varieties of Seed Wheat when in season. Our stock is all re-cleaned on our own premises, and customers can rely upon us to furnish the best and cleanest stock, true to name. Among the sorts offered are Fulcaster, Fultz, Longberry, Miracle, St. Louis Prize and others. Per bushel (60 lbs.) Market Price

FLAX—Farmers should not lose sight of the fact that Flax can be raised where Wheat is raised, and where tried has brought better returns for the amount of labor expended than Wheat.

Sow 30 to 40 lbs. per acre. Per bushel (56 lbs.) Market Price

HEMP—This is a crop that deserves more attention. The fibre is in demand in all markets, and the seed can be marketed for feed.

Sow 1 to 1½ bushels per acre broadcast, or ½ bushel in drills.

Per bushel (40 lbs.) Market Price

SORGHUM—Early Amber—The earliest in cultivation, black hulled, most suitable for hay; is a great hog feed. Sow from April to July at rate of 1 bushel per acre broadcast. In drills, 8 to 12 lbs. Per bushel (50 lbs.) Market Price

SOJA BEAN—Mammoth Yellow—Well adapted for improving poor soils. Is an immense yielder of excellent fodder relished by all cattle. Sow May 15th to June 15th. One-half bushel per acre in drills two and one-half feet apart. Per bushel (60 lbs.) Market Price

SOJA BEAN—BLACK WILSON—An excellent variety for Middle and Eastern States. Grows 36 to 44 inches high, branches well, holds leaves and the seeds do not shatter from pods after cutting. In Delaware it matured in 115 days, and the plants held the seed well. Per bushel (60 lbs.) Market Price

KAFFIR CORN—Is becoming more valuable every year because of its drought resisting qualities. Grows 4 to 5 feet high, is very stocky and leafy; valuable alike for forage and grain. Plant from March to July, in rows 3 feet apart, drilling seed thinly like sorghum. If wanted for grain, principally, let heads mature on the stalk and then the whole stalk may be cut for fodder after the seed heads have been cut. If wanted for fodder, mainly, cut down the stalks when first seed heads begin to appear, leaving 4 to 5 inches of stubble. From this stubble will spring a second growth, making an excellent crop of forage and a fair crop of grain. Stalks keep green and juicy to the last. For poultry feed and small grain it is unexcelled.

Sow 5 lbs. per acre in rows 3 feet apart and cultivate same as corn. For fodder 1 to 1½ bushels per acre broadcast or in drills. Per bushel (50 lbs.) Market Price

OATS—WELCOME—Very plump, heavy grain, and close husks. In favorable seasons they will weigh from 40 to 45 lbs. per bushel. This variety grows from 5 to 6 feet high in rich soil and cool locations. The heads branch freely on all sides, and are from 16 to 22 inches in length. The straw is straight.

This variety is well suited to the climate of Pennsylvania and New Jersey. In warmer localities it will not produce so heavily, nor make such heavy grain. It is early in maturity, ripening one week ahead of other sorts. It will yield good crops where other varieties cannot be grown profitably. Per bushel (32 lbs.) Market Price

ONION SETS—(See page 23)

RAPE—DWARF ESSEX—This plant is one of the most valuable forage crops ever introduced into this country and is highly recommended for succulent forage from early Spring to the Winter months. For sheep, swine or poultry it is unexcelled. The feeding value is very high; it is a great fattener.

This seed may be sown in many ways to suit conditions existing in various locations. It may be sown in early Spring, or after the soil has produced an early maturing forage crop, or just before the last cultivation of corn. An acre of rape will be ready to pasture is six weeks from time of sowing.

Sow 3 lbs. to an acre in rows 2½ feet apart, or broadcast at rate of 6 lbs. to one acre. Our stock is the genuine Dwarf Essex and not the worthless annual. Per bushel (50 lbs.), price on application.

RYE—SPRING—This article has proved itself a good cropper and straw producer. It has come to stay. The growth is as tall as the Winter variety. It requires 1¾ to 2 bushels per acre, and the seed product being 20 to 25 bushels per acre. A great many people use it in preference to Winter rye, and think it pays better than oats. Distinct from the Winter rye, grain of finer quality and more productive; and can be successfully grown in any latitude. It is now being largely sown in the North in the place of oats, being a more profitable crop on account of the production of nearly four times the straw. Per bushel (56 lbs.) Market Price

RYE—WINTER—This is one of the most important of farm crops. In the first place it is a sure crop, failures being almost unknown. Every farmer should have at least a few acres of it. It is usually sown in the Fall, and as it grows very vigorously, will furnish pasture till late in the Fall, and also early in the Spring, before other grasses have made a growth. So it is of great value to dairy farmers. If sown early in the Spring it makes an early and abundant pasture, but it makes no grain crop. Grown for the grain alone it will yield good returns. It is a good Spring soiling crop, giving the earliest bite of green stuff, makes fair hay if cut in bloom or before fully headed out. Useful also for a manuring crop if turned under in early Spring. Rye improves worn-out soils. Sow at last working of corn, or by itself from July to November, at the rate of 1¾ to 2 bushels per acre. Per bushel (56 lbs.) Market Price

MINGLE'S LAWN GRASS SEEDS

Mingle's Finest Velvet Lawn Grass. The making and keeping of a lawn depends largely upon the thorough preparation of the soil before the seed is sown, as a good soil foundation is one of the essentials. The soil should be well drained and the top soil should be worked to a depth of 4 to 6 inches and none of the sub-soil brought to the surface. Work it thoroughly with a fine steel rake or fine-toothed harrow, crossing and recrossing to obtain as fine a tilth as possible. After sowing gently rake seed in, following with roller, in order to compact the soil around the seeds to promote better germination.

If grading is necessary to secure an even surface, first remove and afterwards replace the top soil after the grading is completed. Tree and shrub planting, and laying out flower beds, should be done first. Lawns properly cared for, well fertilized and kept closely mowed, will improve year after year. Weeds should be removed as far as practicable, before sowing. Lawn grass, to produce a succession of verdure, must naturally consist of a mixture of several grasses, as some are more luxuriant in the Spring, others in Summer, and others again in Autumn. A proper combination of these various sorts is required to create and maintain a perfect, carpet-like lawn, and such is MINGLE'S VELVET LAWN GRASS MIXTURE.

Sow 1 quart of seed for space 10 x 30 feet. Four to five bushels are required for one acre.

Pt., 20c.; qt., 35c.; 2 qts., 60c.; 4 qts., \$1.00; pk., \$1.75; bushel (20 lbs.), \$6.50.

Shady Lawn Grass. On many lawns are bare spots under the shade trees. Such spots are frequently sour, perhaps covered with a green scum or moss. In such cases apply hydrated lime, which is powdered fine, at the rate of one bushel per thousand square feet, removing all moss or scum first and then loosening the soil in same manner as already prescribed for regular lawn making. Our mixture of grass seed for shaded spots is one best adapted to the requirements of much shaded lawns and will grow perfectly where ordinary grass mixtures would fail. Sowing instructions same as for Velvet Lawn Grass.

Pt., 20c.; qt., 35c.; 2 qts., 65c.; 4 qts., \$1.25; pk., \$2.25; bushel (20 lbs.), \$8.00.

Golf or Putting Greens Mixture. Our mixture of this grass is giving the best of satisfaction, being composed in proper proportions of the hardy and dense growing kinds best adapted for the purpose, standing heat and drought well and of deep rooting varieties which stand the wear and tear.

Pt., 30c.; qt., 50c.; 2 qts., 90c.; 4 qts., \$1.75; pk., \$3.25; bushel (20 lbs.), \$12.00.

Terrace or Embankment Grass. Ordinary lawn grass will not hold the soil on terraces and embankments, which require a thick turf, composed of varieties which make strong roots to take hold of the soil and prevent washing by heavy rains. Our Terrace Grass is a carefully prepared combination of such grasses as will fill the requirements by making a quick growth of grass which will form a strong mat and present a good appearance. It will grow well anywhere, but it is best to enrich the soil, in order to provide nourishment to the young roots and give a vigorous start to their growth.

Qt., 35c.; 2 qts., 60c.; 4 qts., \$1.00; pk., \$1.75; bushel (20 lbs.) \$6.00.

Green Grass. This is the grass "par excellence" for lawns, making a fine close surface of dark green velvety color. It is very sensitive to good treatment, and will in most cases drive out the other grasses and take possession of the soil. Should be sown not less than four bushels per acre. **Per bushel (15 lbs.) Market Price.**

White Clover. Excellent for use on lawns; forms a close herbage and remains green throughout the season. We furnish the choicest grade of seed. $\frac{1}{4}$ lb., 20c.; 1 lb., 65c.; 10 lbs., \$6.00.

Seashore Lawn Grass. A rich, green lawn is especially desirable at the seashore, but unless the right mixture of grasses and clover are used the result will be disappointing. Our Seashore Lawn Grass is composed of strong-rooted varieties which quickly produce a good turf. In preparing the land it should first be top-dressed with about four inches of good soil, as grass will not grow well in sand, but the seeds will quickly germinate in the top-soil and make strong roots, which reach down into the sand for moisture. In order to keep the seaside lawn in good condition it should be watered liberally every evening, and also have an occasional application of pure Bone Meal in order to keep up a vigorous growth. Qt., 30c.; 2 qts., 50c.; 4 qts., 90c.; pk., \$1.60; bushel (20 lbs.), \$6.00.

Pasture Grass Seed (for permanent pastures). Having given our attention to grasses for this purpose for many years, and after practical results and experience, we have succeeded in creating a mixture which we can highly recommend.

If there is any land you wish to set in permanent pasture, we can supply you with a mixture of any description required or a special mixture admirably suited for this purpose at a very reasonable cost. We are headquarters for all kinds of grass seeds and can save you money on your purchases. Of the ingredients in it, the Timothy and the Clovers come right along and give some feed the year of sowing and a good deal of it the next year, while it isn't till that year that the Blue Grass begins to show. But where the Red Clover begins to disappear and the Timothy gets thin the Blue Grass is just setting up in business and the other grasses are not missed. And when established the Blue Grass is a stayer, and it and the White Clover, which also sticks, makes a combination that is all right.

Sow 2 to 3 bushels per acre. **Per bushel (20 lbs.) Market Price.**

Hardwood Ashes. This is also a splendid fertilizer for the lawn and garden, containing all of the fertilizing elements except nitrogen. If used on the lawn at the rate of a ton or more per acre as a first application, and an annual dressing of three hundred pounds afterwards, will insure a thrifty growth of dark color, and freedom from weeds.

Price, 25 lbs., 75c.; 50 lbs., \$1.35; 100 lbs., \$2.50.

For a Rich Velvety Lawn, Sow Mingle's Finest Velvet Lawn Seed—Experience Has Proven That Mingle's Shaded Lawn Grass Meets All Requirements.

Canada Blue Grass (*Poa Compressa*). Highest grade. A very hardy perennial grass, with creeping root-stocks. It grows on the poorest and driest soils, sandy, gravelly or clayey, standing extremes of wetness or drought, and keeping green until the severe frosts of winter. It is especially valuable for dairy pastures, cows feeding on it yielding the richest milk from which the finest butter is made. It is distinguished from the Kentucky Blue Grass by its flattened, wiry stems and by its decidedly bluer color. Sow 60 pounds to the acre. Per bushel (14 lbs.) Market Price.

Meadow Fescue—English Blue Grass (*Festuca Pratensis*). One of the grasses most used in permanent or temporary meadows for mowing or for pasture. It succeeds best in cold, moist, light soils, in well-drained meadows and in low valleys rich in organic matter. It should not be grown at all on warm, dry land. It does not reach its full development until the second or third years, when it far exceeds most other sorts in the quantity of its produce and nutritive matter. After being mown, it grows again very quickly. The forage, either green or dried, is very nourishing and much relished by cattle, especially when cut young. Sow 40 pounds to the acre. Per bushel (14 lbs.) Market Price.

Kentucky Blue Grass—June Grass (*Poa Pratensis*). Highest grade. One of the most widely distributed and valuable native grasses. It combines more points of excellence than any other sort. It is a true perennial, lasting indefinitely and improving every year. Its densely creeping root stocks, spreading habit and smooth, even growth, fine texture, and rich green color render it one of the very best grasses for lawns. It forms a close turf, starts very early in the Spring, and lasts till frost. It succeeds in almost any soil—dry, rocky, sandy or gravelly—and stands long continued dry weather and hot suns. It takes, however, two or three years to become well established, and should, therefore, be sown only in connection with other grasses. If the soil is especially suitable, it will eventually crowd these out and make the finest possible sward. It is one of our most valuable pasture grasses, very productive and nutritious. Sow 50 pounds to the acre. Per bushel (14 lbs.) Market Price.

Creeping Bent—The only true Creeping Bent Grass (*Agrostis Stoloniifera*, True). The distinctive feature of this species is, as the name implies, its compact, creeping, rooting stems. It is of rapid growth and spreading habit, and the stoloniferous roots which it sends down into the soil form a strong, enduring turf that is positively improved by constant trampling. The other varieties of *Agrostis* are distinguished from this sort by their flattened, parallel surface roots. Being of fine texture, it is most valuable for lawns and putting-greens. If sown alone, 60 pounds to the acre should be used. Per bushel (16 lbs.) Market Price.

Hard Fescue (*Festuca Duriuscula*). A sub-variety of Sheep's Fescue, growing about 2 feet high. It is a small, even, tuft-forming grass with narrow blades and still finer bottom leaves of a deep green color. It thrives on both medium and light soils, and is frequently used in lawn mixtures. Per bushel (12 lbs.) Market Price.

Herd or Red Top, Unhulled (*Agrostis Vulgaris*). A permanent and very hardy native perennial grass, succeeding best on moist land, making a good pasture when fed close; is valuable for low, wet meadows, producing large crops of good hay. It accommodates itself to a variety of soils, however, even to quite dry situations, and stands our hot climate admirably. It is, perhaps, the most permanent grass we have. It remains green for the greater part of the year; sown with Timothy and Red Clover, its stems form a very close matting turf, not affected by trampling, and of fair quality when not allowed to go to seed. Sow 2 to 3 bushels per acre. Per bushel (10 lbs.) Market Price.

Herd or Red Top (*Fancy Recleaned*). This is the pure seed of Herd or Red Top with the lighter seeds and chaff screened out, and therefore sells at a much higher price. We furnish extra clean stock only. Per bushel (32 lbs.) Market Price.

Italian Rye (*Lolium Italicum*). When sown alone early in Spring it thrives quickly and can be mowed twice the same year and produces fine fodder. The Italian Rye Grass, being an annual, is preferable to the Perennial, where a one year's stand only is required, but if the field is to stand over the second year we would prefer the Perennial, as it is stronger, but, on the other hand, the Italian gives larger yields, and is less hard and wiry. Per bushel (24 lbs.) Market Price.

Orchard Grass (*Dactylis Glomerata*). A most valuable grass for pasture or hay land, and on account of its earliness very valuable for permanent pastures. It furnishes the first green

bite in the Spring two weeks earlier than most grasses, and when fed off is again ready for grazing in a week, and the last in the Fall, and is quick to recover from close cropping, and even thrives better the more it is cropped. It is palatable and nutritious and stock eat it readily when green; it will also withstand severe drought, keeping green where many grasses wither, and will endure considerable shade as in orchards and groves. Sow 1½ to 2 bushels per acre. Per bushel (14 lbs.) Market Price.

English or Perennial Rye Grass (*Lolium Perenne*). A nutritious permanent grass for meadows and pasture, or for mixing with other grasses for lawns. Does well on sloping banks, as its roots are fibrous and mat-like. Is especially adapted for pastures, as it will endure close cropping, and is one of strong, quick and successive aftergrowth. It produces an abundance of foliage which remains bright and green throughout the season, and for this reason is also much used for lawn grass mixtures. It is also well adapted for permanent meadows, and yields large quantities of very nutritious hay, which is well liked by all kinds of stock. Does well on almost any land, but prefers rich or moist soil, such as will produce a good corn crop. Should be sown in the Spring in quantities of 1½ to 2 bushels per acre. Per bushel (24 lbs.) Market Price.

Red or Creeping Fescue (*Festuca Rubra*). A partly creeping, partly tuft-forming bottom grass, with sparse, narrow blades, useful for both grazing and hay-making purposes. It thrives on all soils, even on dry sandy bottoms, and forms a rather thickly covered turf, leaving very little room for weeds to come through. It is one of the earliest grasses, and comes to the front at a time when young fodder is most looked for. It is useful in small proportion in mixtures for permanent pastures on heavy soils. Its dark-green narrow blades make it useful grass for lawns under shade. Per bushel (12 lbs.) Market Price.

Rhode Island Bent Grass (*Agrostis Tenuis*). A creeping variety, but more tuft-forming than the Creeping Bent, and not quite so productive in fertile stems and foliage. Answers very well in lighter soils, but, unlike the Creeping Bent, it has a tendency to get hard and strawy, and when in this condition is not relished by cattle. It should be cut just before or during bloom. Sow 4 bushels per acre. Per bushel (12 lbs.) Market Price.

Sheep's Fescue (*Festuca Ovina*). A densely tuft-forming perennial grass, deep-rooted and growing 20 to 25 inches high, with very little small bottom and stalk-forming foliage. Grows well on both medium and light sandy soils, having a preference for the latter. It is of medium maturity, but secondary only in regard to yield and nutritive value. It thrives in soils too light, or in want of sufficient rainfall for other grasses to make a permanent pasture, and is extremely well adapted for sheep grazing, hence its name. It should be borne in mind, however, that Sheep's Fescue grows hard and strawy very soon, and for best results should be cut just before or when the plants are in bloom. Per bushel (14 lbs.) Market Price.

Sudan Grass. This recently introduced grass belongs to the Sorghum family, and, according to the reports of the United States Department of Agriculture, is a very valuable grass for hay, especially in sections subject to drought, making good yields nearly everywhere; it grows 4 to 9 feet high, according to cultivation, yielding 2 to 5 tons of excellent hay per acre, with as high as 9 tons under irrigation; should not be sown until the soil has become warm, about corn-planting time or a little earlier. Sow broadcast at the rate of 25 pounds to the acre. Market Price.

Timothy (*Phleum Pratense*). A native of Europe, but long ago naturalized in America, where it ranks as by far the most important of hay grasses. On moist, loamy or clayey soil it produces a larger hay crop than any other grass. It is not as well suited for light, sandy soils, though preferring a moist, temperate climate, it withstands drought and extreme heat and cold. Its hay is very nourishing and can be preserved for a long time. It should be cut when flowering, as if left later the hay becomes hard and coarse. It is often sown with Red Top Grass and Red Clover, and the nutritive value of the hay is greatly increased by this mixture. If sown alone, at least 25 pounds to the acre should be used; with Red-Top Grass and Red Clover, 15 pounds of Timothy, 12 pounds of Red-Top Grass (Fancy) and 3 pounds of Red Clover; or with Red Clover only, 20 pounds of Timothy and 5 pounds of Clover. The seed weighs 45 pounds to the bushel. Several grades are always on the market, differing in purity and vitality, but the seed we offer is of the very highest quality and extra clean. It is always most economical to buy the highest grade, known as "Fancy." Per bushel (45 lbs.) Market Price.

ILLUSTRATED AND DESCRIPTIVE CATALOGUE OF VEGETABLE SEEDS

WITH GENERAL DIRECTIONS FOR CULTIVATION

ASPARAGUS

Culture—Soak the seed twenty-four hours in warm water, and sow in drills, one foot apart. When the plants are well up, thin to three or four inches in the row, and give frequent and thorough cultivation during the summer. The second season prepare a bed by deep spading or trenching, working in a large quantity of well-rotted manure. Dig trenches four feet apart and twelve to sixteen inches deep, and spade in at least four inches of well-rotted manure in the bottom. Set the plants in the trench eighteen inches apart, covering them with about two inches of fine soil. After the plants are up, gradually fill up the trenches, and give frequent and thorough cultivation. The second season, early in the spring, spade in a heavy dressing of manure and about two quarts of salt to the square rod. Cultivate well. The next season it may be cut for the table two or three times, taking care to cut all as fast as it appears. After the final cutting, spade in a liberal dressing of fine manure and sow one quart of salt to the square rod. The next season, and ever after that, the bed should give a full crop, but should be annually manured after the last cutting and well cultivated through the remainder of the summer. The tops should not be cut until dead ripe.

Giant Argenteuil. This sort is one of the largest and most extensively used green varieties. Shoots bright green, sometimes tinged with purple at the top; very tender and of the best quality. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 65c.

Barr's Mammoth. A favorite with the market gardeners. Shoots white; very large, tender, quick growing, and thick to the top. This is the large white variety generally used in canning. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Conover's Colossal. A popular French Asparagus of great merit. It is very early, vigorous and prolific, growing large, delicious stalks. It is less liable to rust, has large dark green or purple tips, making it one of the best and most attractive asparagus grown. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Palmetto. A very early maturing and prolific variety, producing an abundance of large, deep green shoots of best quality. Its uniformly large stalks remain tender longer than any other variety, being in prime condition for several days after coming through the ground. Is disease-resistant; a heavy and sure cropper. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

ASPARAGUS ROOTS

We can supply strong two-year-old roots of the following varieties:

Early Giant French Argenteuil, \$1.25 per 100; \$8.00 per 1000.

Barr's Mammoth, \$1.50 per 100; \$10.00 per 1000.

Conover's Colossal, \$1.50 per 100; \$10.00 per 1000.

Palmetto, \$1.50 per 100; \$10.00 per 1000.

If wanted by Parcel Post, add 10 cts. per 100 to cover cost of postage and packing.

Asparagus Bunchers—See Page 69

“ Tape “ “ 69

“ Knives “ “ 69

ARTICHOKE

The seed we offer is that of the true artichoke which is an extensively used vegetable in Europe. In it the edible portion is the thickened scales at the base of the flower-heads or buds. The plant is very different from what is known in America as Artichoke or Jerusalem Artichoke, in which the edible portion is the tuber.

In February or March sow and transplant in hotbed so as to give plenty of room until danger of frost is over. Then set in very rich, well-drained soil in rows four feet apart and two feet apart in the row. The plants can be raised in seed beds out of doors, but in that case will not be likely to produce heads the first year. Late in the fall cut off the old tops and thoroughly protect the crowns with leaves or straw to prevent severe freezing.

The second year thin the starting shoots to three of the best, which will commence to form heads about July 1st. The plants may also be blanched like cardoons. This is done by cutting back the stems close to the ground in July, the rapidly growing shoots which then start up may be tied and blanched like celery. As artichoke plants do not yield satisfactorily after three or four years, it is best to start a new plantation as often as once in three years.

Green Globe. The plant of this variety is of medium height with rather deep green leaves. The buds or flower-heads are green, nearly round or somewhat elongated. The scales are rather narrow and spiny, and are moderately fleshy at the base. Pkt., 10c.; oz., 50c.; $\frac{1}{4}$ lb., \$1.60; lb., \$6.00.

No matter what you may order from the catalogue, you may rest assured of full value for your money. Proven by test, our seeds are best.

BEANS

Culture—Early beans mature earlier and succeed best in a light, warm, sandy soil, enriched with well rotted manure. Later varieties may be successfully grown in a darker, heavier soil, if rich and mellow. Dwarf beans are earlier and hardier than the pole, and can be planted earlier, but should not be planted until the ground is warm and danger from frost past. Plant shallow early, say 2 to 3 inches deep, and deep late, say 4 to 5 inches deep. For the home garden, where all cultivation is to be by hand, plant in drills 15 to 18 inches apart, and 2 to 3 inches apart in the row, covering from 2 to 5 inches deep, according to the season. For field planting, plant in drills or rows 2 to 3 feet apart, 2 to 4 inches apart in the row. If the ground is dry and irrigation necessary to sprout the beans, irrigate the ground first, planting the seed as soon as the ground is dry enough to prepare for the seed. Never irrigate immediately after planting, as it will crust the ground, preventing the beans from coming through, and often cause them to rot. Beans require very little water. After each irrigation or rain mulch the soil as soon as it is in good working condition. This will conserve the moisture and require less water. Cultivate frequently and shallow, but never when the vines are wet.

DWARF OR BUSH

Green Podded Varieties

Giant Stringless Green Pod. An exceedingly productive and very handsome sort. The plants are large, vigorous and spreading. The pods are large and nearly round, and of medium green color. They mature a few days later than those of Stringless Green Pod, average about one-fourth inch longer and more nearly straight. The quality is very good for snaps for home use. The variety is suitable also for the market. Seed long, slender, yellow. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.

Extra Early Red Valentine (Hopkins)—One of the earliest and most prolific round green podded beans. Comes into bearing earlier than the old stock of Valentines, is a wonderful producer and a perfect shipper. It will remain in a perfect condition for nearly two weeks after picking. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.

Stringless Green Pod Beans

Burpee's Stringless Green Pod. One of the finest extra early beans in cultivation. It combines unusual hardiness, extreme earliness and wonderful productivity. Pods of handsome appearance and finest quality. By repeated plantings pods may be had in succession from Spring until killed by heavy frost in the Fall. The pods are rich green, round, straight, meaty, broad, tender, brittle, and of finest flavor. Always entirely stringless, even when fully matured. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.

Bountiful. This excellent dwarf, green podded sort is similar in appearance to Early Yellow Kidney Six Weeks, but is of much better quality. The vines are vigorous and productive. The pods are very long, six to seven inches, straight, broad, flat, light green, of handsome appearance and absolutely stringless for snaps. They are tender and brittle much longer than most sorts. The pods

are longer, broader and have much longer tips than those of Long Yellow Six Weeks. Seed medium sized, kidney shaped, light yellow with brownish circle about eye. Bountiful is a most desirable early sort for snaps for the home garden. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.

Black Valentine. A very hardy and productive green podded sort with strong, vigorous vines. The pods are nearly round or slightly flattened but very handsome, are much longer, straighter and less fleshy than Red Valentine, the plant a little more spreading, and in season a little later. A large crop can be depended on and the product is very attractive on the market. It is very extensively used for shipping. The pods are medium dark green and about six inches long. Seed small to medium sized, black, oblong, slightly flattened. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.

Dwarf Horticultural. One of the best dwarf sorts for green shell beans for the home garden and market and can be used early as a green podded snap bean. The plants are very productive, compact and upright, with large leaves. The mature pods are about five to five and one-half inches in length, broad and thick, curved, with splashes of bright red on a yellowish ground. They become fit for use as green shelled beans early and in this condition the beans are very large, easily shelled and are about equal to the Lima in quality. Seed large, oval, plump, pale buff splashed with deep red. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.

Refugee or Thousand to One. A standard very productive sort, highly esteemed for late planting for snaps and very extensively used for shipping, canning and pickling. Sometimes called Late Refugee, Round Pod Refugee and Improved Refugee. The plants are very large, spreading, exceedingly hardy, with many small, smooth light green leaves. The mature pods are about five and one-fourth inches long, cylindrical, slightly curved, medium green when in condition for use as snaps but as they mature becoming light yellow, sometimes splashed with purple. Seed long, cylindrical, light drab, thickly dotted and splashed with purple. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.25.

Long Yellow Six Weeks. A well-known variety which is mostly grown for market. This variety has been a standard for many years and has constantly been improved. Plants are productive, pods flat, light green and of good quality. By express or freight, at purchaser's expense. Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.

Wax Podded Varieties

Pencil Pod Wax. This very handsome black wax sort is medium early, fairly hardy and productive. It is one of the very best sorts for home use and for near markets where highest quality is desired. The plants are strong growing with roughened leaves. The pods are long, five and one-half to six inches, straight, round, fleshy and of a bright yellow color. They are tender, absolutely stringless and are produced through a long season. Seed long, round, medium-sized, solid black. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Currie's Rust Proof Wax. Is the earliest to mature of either the green or wax beans. It is ready for market 25 days from date of planting. Its beautiful, pure golden, long, flat pods are of extra fine quality and are borne in abundance and attract the admiration of both the planter and the consumer. Entirely free from rust or blight. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., \$1.60; pk., \$2.75.

Webber Wax. A new wax bean of distinct character. The vine is strong, holding pods well up, good bearer, yellow seed, round in shape, very meaty. This bean merits a trial. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Hodson Wax. A very sturdy grower, prolific; free from rust and blight. Vigorous plants are loaded with long handsome, straight pods, averaging 7 inches in length, color of a clear, light yellow, when picked young they are stringless. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., \$1.60; pk., \$2.75.

Wardwell's Kidney Wax. The vines of this variety are very large, strong growing, but are peculiarly liable to blight, but when healthy, yield a large crop of long, nearly straight, handsome, very white and wax-like pods. They are of good quality and on this account, as well as their beauty of form and color, are easily sold. They ripen about the same time as the Golden Wax. The dry beans are large, kidney-shaped, white with dark markings about the eye. Market gardeners find this a profitable variety owing to the large size and handsome color of the pods. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

BEANS—Continued

Improved Golden Wax Beans

Improved Golden Wax Bean—

Thirty-five days—This bean has long been and still continues the standard wax variety for general use, and where many varieties have been introduced claiming to be superior in some respects and aiming to replace it, they have all sooner or later been forced to the rear as not possessing as many good qualities in as high degree. Vines medium size, erect, moderately spreading, hardy and productive, with small, smooth leaves, and small white blossoms; pods are long, nearly straight, broad, flat, golden yellow, very fleshy and wax-like, with short fleshy, green point, cooking quickly as snaps, shelling well when green, and of the highest quality in both conditions. Beans medium size, oval, white, more or less covered with two shades of purple-red.

Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Davis Wax. This is also called Davis White Kidney Wax. It is a well-known market sort, much used for shipping. The plants are very hardy and productive and the variety is very desirable where a handsome wax-podded, white seeded intermediate sort is wanted. The plants are very vigorous. The pods are remarkably long, about six inches, sometimes longer. They are handsome, light yellow, straight, very attractive and when young are crisp and tender. The dry beans are excellent for baking. Seed medium large, kidney shaped, clear white. **Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.**

Round Pod Kidney Wax. An improvement on Wardwell's Kidney Wax. Pods long and straight, a heavy bearer of good quality. **Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.**

Dwarf Beans for Shelling (*Winter use*)

Dwarf Horticultural or Cherry Bean. A crop of these beans has never failed to pay. This is a broad, long, flat, meaty bean, very productive, delicious flavor. It also makes a fine dried bean. **Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.**

White Marrowfat. Extensively grown for sale as a dry Bean for winter use. **Pkt., 10c.; pt., 20c.; qt., 35c.; 4 qts., \$1.25; pk., \$2.15.**

White Kidney or Royal Dwarf. A superior kind for baking. **Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.**

Boston Pea Bean (Navy). An excellent variety, and of very productive habit. Seeds are small, very short, almost round, and solid white. **Pkt., 10c.; pt., 20c.; qt., 35c.; 4 qts., \$1.25; pk., \$2.15.**

Red Kidney. A standard field Bean, grown almost exclusively for the dry Beans, which are long, oval shape, and purplish-brown in color. **Pkt., 10c.; pt., 20c.; qt., 40c.; 4 qts., \$1.30; pk., \$2.40.**

Pole or Running

Culture—These are even more sensitive to cold and wet, as well as to drought and hot winds, than the dwarf varieties. After settled warm weather, set poles four to eight feet long in rows north and south four feet apart, the poles being three feet apart in the row, and set leaning to the north at an angle of 35 degrees. Set in this way, the vines climb better, bear earlier, and the pods are straighter and more easily seen. Around each hill plant five to eight beans, two inches deep. When well started, thin to four plants, and start any that fail to climb, around the pole in the same way as the others, for they will not grow well otherwise.

Kentucky Wonder. Also known as Old Homestead. We believe this variety is the most practically useful of the green podded pole beans suitable for use as snaps. It is an early, very prolific sort, with showy pods which are of most excellent quality. The vines are vigorous, climbing well and very productive, bearing pods in large clusters. The pods are medium light green, very long, often reaching nine or ten inches, curved and twisted, nearly round and very crisp when young, becoming very irregular and spongy as the beans ripen. Seed long, oval, slightly flattened, dun colored. One of the very best early pole snap beans for the home garden or market. The quality of our stock is unsurpassed. **Pkt., 15c.; pt., 25c.; qt., 45c.; 4 qts., \$1.60; pk., \$2.75.**

Kentucky Wonder Wax. The Pride of the Garden. Its popularity as a home garden bean soon reached nation-wide proportions, and today is offered by nearly every seedsman in the United States. It commences to bear when scarcely higher than the average bush variety, and keeps on producing until killed by a frost. It is a rampant grower, one plant filling a pole with a mass of vines densely loaded with luscious beans. They are firm, entirely stringless, and when cooked, deliciously rich and buttery. The seed is brown, closely resembling that of the Kentucky Wonder. Plant from April to August. **Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.**

Early Golden Cluster Wax. A well-known early and very attractive sort. It is one of the best wax-podded snap pole beans. The vines are large, strong growing, vigorous and hardy, with large, light green crimped leaves. The pods are six to eight inches long, borne in abundant clusters, each containing from three to six pods varying in color from golden yellow to creamy white. The pods are very broad, thick and fleshy. They are of very good quality and stay in condition for use a long time. Seed medium sized, flattened, oval, dull white. **Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., \$1.90; pk., \$3.50.**

Lazy Wife. One of the best pole beans for snaps. The large, fleshy pods are five to six inches long and entirely stringless when young, have a rich buttery flavor. When nearly matured they are delicious when shelled and cooked while yet green. The dry beans, too, are unsurpassed by any. The seed is white, nearly round, and somewhat larger than a pea. **Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., \$1.60; pk., \$2.75.**

Horticultural Pole. Also referred to as Romaine, Cranberry, Italian and Cornfield. Its large succulent tender pods make it a desirable bean for the table. It is also one of the most desirable green shelled beans for succotash and excellent as a dry bean. **Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., \$1.60; pk., \$2.75.**

The Scarlet Runner. An old-time favorite that heretofore has been planted chiefly for ornamental purposes. But few people know that the Scarlet Runner may be planted May 1st and in six weeks attain a height of eight feet, and rapidly cover an arbor with vines twenty feet long.

The Scarlet Runner planted May 1st will bear edible pods from July 1st until late Fall. When the vines mildew trim them back to within a foot of the ground. The roots will survive the Winter, and by the following May will have the arbor again covered and bear green beans until August when the vines again mildew. Cut back as before and with proper irrigation they will bear another crop in October, and so on two crops a year indefinitely.

Be sure to build a permanent arbor, and plant some Scarlet Runner during April. **Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.**

BUSH LIMA BEANS

The dwarf lima class cannot be recommended too highly. The beans can be grown and gathered much more easily than the pole limas, as the vines require no support. They can also be grown closer together than those of any pole variety. Dwarf limas are fully equal in quality to pole limas and as a rule are earlier maturing.

Culture. Limas require a longer season for maturing than other garden beans. Do not plant till the ground is dry, weather warm and danger of frost is over. If possible select rich, light soil. Plant in drills two to three feet apart, dropping the beans three to four inches apart, and covering one and one-half to two inches deep. If planted in hills, make the hills two to three feet apart one way and two to two and one-half feet the other and plant four to six beans in a hill. Hoe often but only when the leaves are dry.

Burpee's Improved Bush Lima. A sort distinct from Burpee's Bush Lima in that it is about ten to fifteen days earlier, bears much larger and thicker pods, and larger greenish-white beans than Burpee's Bush Lima. The plants are vigorous, white heavy foliage and are about 2 feet high and of upright growth. The yield is about one-third more, and the beans of a luscious flavor. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., \$1.75; pk., \$3.25.

Burpee's Bush Lima. Vine about 20 inches high, erect and vigorous in growth; very prolific in large green pods, filled with large white beans. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Dreer's Wonder Bush Lima. This variety of Bush Lima Bean is very desirable on account of earliness, productiveness and its fixed habit of growing in the dwarf or bush form. The plants are of strong, upright growth, and are completely covered with large pods, many of which contain four beans, which are fully as large as the pole limas. The beans are flat in shape and of excellent quality. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., \$1.75; pk., \$3.25.

Fordhook Bush Lima

Fordhook Bush Lima. The pods, borne in clusters of from four to eight, are much larger, and about six days earlier than Dreer's Bush Lima, which latter they otherwise resemble.

The green beans are large, and even when of full size, when cooked, are not dry, but tender, sweet and luscious.

The bushes are decidedly erect in growth, with side branches well held up, and holding the pods from the ground, and thus protecting them from rust. A habit quite distinct from that of the low-growing growth of Dreer's Bush Lima. The foliage is large, like that of the Pole Lima. The leaves are large, smooth and of a deep, rich green color.

The Fordhook is a one-third heavier cropper than Dreer's, and is destined to supersede it in every way. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., \$1.75; pk., \$3.25.

POLE LIMA BEANS

Early Leviathan. The plant is strong and takes to the poles more readily than any other sort. It is fully a week earlier than any other pole variety, therefore can be grown successfully where other sorts would be caught by frosts of early autumn. In Northern States, or where by reason of continued cool nights, the growth is less rapid, Leviathan will be found admirably adapted. Moreover, it is a prodigious cropper, producing its pods in large clusters from base to top of pole, frequently from 5 to 10 together. These are well filled with large, fleshy Beans of excellent quality, delicate, pale green in color, and possessing in a superlative degree that rich, buttery flavor so highly esteemed by all. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Improved Extra Jersey Lima. Ninety days—Very superior quality, white seed much larger than the ordinary Lima, of greenish tinge; tender and sweet. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Challenger, or Dreer's Improved. Also known as Potato Lima. Vine very stout, vigorous and productive. The pods are much thicker than those of other limas, with an average of four thick beans set one against the other in the pod so closely that the ends of the beans are indented. It is early, continues to produce large clusters until frost. It will shell out more than the flat-podded sorts. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., \$1.90; pk., \$3.50.

Shotwell's Improved Thick Pole Lima. A well-known favorite introduced from New Jersey. Beans thick and large. A decided improvement on Dreer's Improved Lima in quality, earliness and productiveness. Highly recommended by all who have tried it. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Salem County Improved Large Lima. Ninety days. A favorite table variety, very prolific; pods borne in clusters, with five or six large beans to the pod. Far superior to other Pole Limas. Ripens early and bears until frost. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Ford's Mammoth Extra Large Lima Beans. Its pods are large in size, containing from 3 to 8 Beans. They are unsurpassed in quality and productiveness. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

King of the Garden Lima. The vines of this standard pole lima are very vigorous and productive. The pods are medium dark green, very large, five to six inches long, broad, flat, filled with four or five very large white beans of finest quality. On account of its large pods it is a favorite with market gardeners. It will come into bearing earlier and make larger pods if not more than two vines are left to grow on a pole. Seed very large, ovoid flat, white, with slight greenish tinge. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

NITROGEN GATHERING BACTERIA

If you want your bean patch to yield earlier and better, inoculate the seed before planting with MULFORD CULTURE. It encourages vigorous vines, well filled pods and makes it possible for the plants to withstand drought and disease better.

MULFORD CULTURE: 35c., per trial bottle; 75c., 1/4 acre bottle.

When ordering be sure and specify wanted for Garden Beans, as each leguminous crop requires a separate culture.

BEETS

Culture. All the varieties succeed best on a deep, rich, sandy loam. For early beets, sow as soon as the ground will admit, in drills fourteen inches apart, and thin to six inches in the row. For winter, sow about the middle of spring. Soak the seed twenty-four hours in luke-warm water before planting, and sow in freshly prepared ground.

Detroit Dark Red Beet. A splendid Beet of a dark red color, for home or market. By far the best for canning, on account of its beauty. Small, upright tops and perfectly small roots. Flesh zoned with lighter and darker bands; tender and sweet. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Crimson Globe Beet

"New Crimson Globe" Beet. This is one of the best Bunching Beets yet introduced. A handsome variety of medium size, almost globe shape, and entirely free from rootlets; a grand second early or main crop sort. The roots are of medium size. Beets average 10 inches in circumference, very handsome in shape, being a little deeper than round, with a remarkably smooth surface. The foliage is small and of a rich bronze purple, borne on slender stems which occupy but a small portion of the root. Flesh is a rich blood red, slightly zoned or ringed in a most beautiful manner, making it very attractive in appearance; never stringy. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Crosby's Improved Extra Early Egyptian Beet. An improvement on Extra Early Egyptian, being as early, but of more desirable shape, color and quality. It is very sweet and tender; a most valuable sort for early market, as it is ready before any other Beet of equal quality. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Eclipse. A globular crimson sort of very rapid growth. Bright red in color, and of fine flavor. A great improvement on its parent, the Egyptian. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Early Blood Turnip. Tops small, roots blood red, turnip shaped and very tender. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Bassano Extra Early. Top large and light green. Root turnip-shaped, pink zoned with white. Very fast grower, of good quality, sweet and tender. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Bastians Half Long Blood. Sixty days. One of the very best, unsurpassed for its winter keeping qualities. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Crosby's Egyptian Beet

Improved Long Dark Blood. Sixty-two days. The best winter variety, but apt to be tough when sown too early. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Crosby's Egyptian Blood Turnip. Forty days. This matures quicker than any other sort. Roots of fine form, medium size, smooth and dark in color, flesh dark red, fine grained, crisp and tender. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Swiss Chard or Foliage Beet

Culture. Swiss Chard is a beet grown for its leaves. The mid-rib when boiled makes delicious greens, or the leaves may be boiled and served as spinach. Sown in the spring the leaves are soon ready to eat and will continue to grow all through the summer and fall. If given a little protection it will survive the winter and make excellent greens early in the spring.

Swiss Chard Lucullus. This delicious and useful vegetable should be in every garden and on every market stall. It is really two distinct vegetables; first the leafy part of the foliage is cooked and served the same as spinach, while the stalks are cooked and served with drawn butter like tender asparagus. It grows about $2\frac{1}{2}$ feet high, the stalks are thick and broad like rhubarb, the leaves are much longer than those of the regular Swiss Chard, they are heavily crumpled like Savoy spinach. Crisp and tender pleasing flavor. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Large White Lyons. This variety possesses enormous white ribs, the leaf not being so crumpled as the Lucullus, but is equally as desirable. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Spinach or Silver. A good one. Not quite as large as Lucullus. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Sugar and Stock Beets

Culture. The Sugar and Mangel Wurzel varieties are grown for feeding stock and should be sown from April to June in drills two feet apart, and afterwards thinned out to stand one foot apart in the rows; keep them well cultivated and you will have an abundant crop.

Giant Mammoth Long Red Mangel. Our stock is a great improvement on the old variety. The roots are very large, uniformly straight and well formed. Color deep red, roots solid, tops small. Roots attain a large size. We received several reports last season of Mangels weighing 20 to 23 pounds each. Produces an immense bulk and tonnage. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 50c.

Golden Tankard. Large, round, orange-colored variety, of excellent quality, which keeps better than the Long Red, producing better crops on shallow soil. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 50c.

Red Globe Mangel Wurzel. Similar to Yellow Globe, except in color, which is light red or pink. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 50c.

Yellow Eckendorf. A handsome variety and heavy cropper; grows almost on surface of the ground, in shape broad with rounding top, flat bottom, good flavor, stock greatly relish this mangel. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 50c.

White Silesian Sugar. Sixty-five days. Grown extensively for feeding stock; also for extraction of sugar. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 50c.

Imperial White Sugar. Seventy days. A greatly improved variety of the White Silesian. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 50c.

Long Red Mangel Wurzel Beet

BROCCOLI

Culture.—Broccoli is similar to and culture same as Cauliflower. It is well adapted only to those sections where the season is long, cool and rather moist. It withstands greater extremes of temperature than Cauliflower.

Early Large White French—The best variety, large, white, compact heads which remain firm for a long time. Pkt., 10c.; oz., 60c.; ¼ lb., \$2.00; lb., \$6.00.

BRUSSELS SPROUTS

Culture.—The culture is the same as Cabbage, which plant it resembles, the edible part being the numerous small heads or sprouts formed on the stalk at each leaf joint. Leaves should be broken down in the fall to give the little heads more room to grow. They are considered more tender and delicious than Cabbage. Sow seed about May 15th.

Long Island Improved—This is a very desirable vegetable, though very little known in this country. It grows 2 or 3 feet high and produces from the sides of the stalk numerous little sprouts somewhat resembling cabbages; they are used for fall and winter greens. It can only be grown to perfection in a good soil and with a long season to complete its growth. The seed should be sown in March or April, in a frame, and the plants transplanted into the open ground and cultivated as cabbage. The plants should be watered and shaded for a week or ten days to give them a good start. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

CABBAGE

Culture—For Cabbages the ground must be highly manured, deeply dug or plowed, and thoroughly worked to insure good full-sized heads. A heavy, moist and fresh loam is most suitable. The early sorts should be sown very early, in hot-beds, hardened off, and transplanted eighteen to twenty-four inches apart, early in the spring. In the South, sow from the middle of September to middle of October, and transplant into cold frames to preserve through winter, setting into open ground as early as possible. In transplanting, they must be set in the ground up to the first leaf no matter how long the stem may be.

The late autumn or winter varieties may be sown in a seed bed, from the middle to the last of spring, and transplanted when about six inches high, three feet apart each way. Shade and water the late sowings in dry weather to get them up. It is important that the plants should stand thinly in the seed-bed, or they will run up weak and slender, and be likely to make long stems. Cultivate frequently throughout the season.

First Early

Early Jersey Wakefield

Early Jersey Wakefield—Heads very compact, of medium size, varying from nearly round to conical. An early, sure-heading sort, very popular with Eastern market gardeners. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Early Dwarf Flat Dutch—Ninety-five days—Heads of medium size, solid, flat, grows low on stump, and is of good flavor. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Early Summer Cabbage—In size, form, solidity and earliness this is truly a model Cabbage. It heads just after our Jersey Wakefield. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Early Winnigstadt

Early Winnigstadt—One of the best for general use, being a sure header, and will grow a hard head under circumstances where most sorts would fail. Heads of regular conical shape, very hard and keep well winter and summer. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Copenhagen Market—A solid, round-headed extra early of Danish origin.

Is remarkably short stemmed, with heads of large size, and of excellent quality. The leaves are light green. It is the largest of the early round-headed variety, and admits of very close planting. The crop can be cut at one time, as it matures uniformly. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.10; lb., \$4.00.

Second Early

All Seasons—An "all-season" variety, equally good for Fall and Winter as for Summer use. The heads are large, solid, round, flattened on top, and of best quality. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Early Succession Cabbage—A wonderful Cabbage for solidity, productiveness and fine, large heads. Matures early, has handsome color and fine quality. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Sure Head Cabbage—(Pedigree Stock.) True American grown. Produces large, round, flattened heads that are all head, with fewer outer leaves, very uniform, firm and weighs from 10 to 15 pounds each. Splendid shipper and of an excellent quality. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Enkhuizen Glory—An excellent round-headed sort maturing with the Large Wakefield. It remains a long time after heading without bursting. Pkt., 10c.; oz., 30c.; ¼ lb., 90c.; lb., \$3.50.

Late

Premium Large Late Flat Dutch

Premium Flat Dutch—It has long been the favorite sort for cold slaw and sauerkraut. It matures just before severe frost and keeps perfectly over Winter. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.75.

Large, Late, Drumhead Cabbage—This splendid Cabbage produces enormous heads. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.75.

We pay postage on packets and ounces. Add postage for larger quantities.

Mammoth Red Dutch—Is the largest Red Cabbage, and heads very solid and is deep red in color to the very center. No Cabbage is better for boiling or slaw, and its beautiful red color specially fits it for pickling. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.00; lb., \$3.50.

Danish Ball Head Cabbage—This is the most excellent Cabbage, is very solid and outweighs any other Cabbage of equal size. The head is round with flattened top; a good keeper; first-class shipper and sells everywhere. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

All Head Savoy—A fine strain of the beautiful curled leaf variety, and is certainly entitled to a trial. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Improved Drumhead Savoy—The best of the Savoys for general market or home use. It has a short stump, grows to a large size, is compact and solid, and closely approaches the Cauliflower in delicacy and flavor. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.75.

Danish Round Head

Danish Round Head—Short Stem—Somewhat superior to the Long Stem. Heads are larger and growing close to the ground. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

Chinese or Celery Cabbage (Pe-Tsai)

Culture. This exceptionally fine vegetable is a native of China, and possesses striking characteristics which place it in a class by itself.

Grows like Cos-lettuce and when its outer leaves are stripped off shows a picture of Lettuce and Celery combined.

Shredded, it makes the finest slaw, and stripped of its mid-ribs, which are eaten as celery, it makes a fine salad.

It possesses a very mild flavor.

Sow the seed like regular Cabbage. If for early planting sow in hot beds in February; if for later planting sow early in July.

This plant matures 12 to 15 weeks from time of sowing seed, and will not stand frost.

New Pe-Tsai "Paoting." Big, compact, tender and crisp, an excellent Pe-Tsai. We have found this to be absolutely the best firm-heading variety to grow during the summer months. It will not scald or burn and will make a head when others fail. It somewhat resembles "Kinshiu" in shape and "Shantung" in character of leaf, color and size, but the head is more compact. It will produce a head of 15 pounds and will stand long, before bolting to seed. Excellent in quality, crisp, tender and brittle, with a fine celery flavor. We recommend it either for the market gardener, trucker, or private planter as it is a perfect Chinese Pe-Tsai Cabbage in every respect, not only being of the largest size, but of handsome color and of the finest quality. It is probably the safest variety for an amateur to plant, as it does well at all seasons, and one is almost sure of getting a crop. It is vigorous and free from insects. Pkt., 10c.; oz., 45c.; ¼ lb., \$1.50; lb., \$5.50.

Shantung. A production of Shantung, a province in China. Distinctive flavor, very mild and pleasant. The outside leaves are large, round and light green in color. The heart is snowy white. We recommend this as a most excellent sort for either home garden or market planting. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

CABBAGE PLANTS

Ready May-July.

Early Jersey Wakefield, Charleston Wakefield, Winnigstadt, Early Dwarf, Flat Dutch, Henderson's Succession, Early Summer, All Seasons, Drumhead Savoy, Premium Late Flat Dutch, Improved Late Drumhead, Volga or Russian, Danish Round Head, Danish Ball Head, Copenhagen Market.

Prices on all varieties: 25 for 20c.; 100 for 50c.; 1000 for \$4.00.

If wanted by Parcel Post add 10c. per 100, to cover cost of postage and cost of packing.

All plants will be packed in live moss, insuring long shipment. No plants shipped on Saturday.

CAULIFLOWER

Culture—Sow for early use about middle September, in a bed of rich, clean earth. In about four or five weeks afterwards the plants should be pricked out into another bed, at a distance of four inches from each other each way; these should be encompassed with garden frames, covered with glazed sashes, and board or shutters. The beds must be so secured, and the tops of the beds so covered as to keep out all frosts, giving them light and air every mild day throughout the Winter; transplant in April into a bed of the richest earth in the garden, at a distance of two feet and a half each way. Keep them well hoed, and bring the earth gradually up to the stems. The late variety matures in the Autumn, and is sown and managed similarly to Winter cabbage, but is not so certain to succeed in this climate.

Early Snow Ball

Early Snow Ball—Our Snow Ball Cauliflower is the earliest, most hardy, and in fact the Cauliflower that you can plant and expect a crop of true, firm, snow-white heads. You cannot get better Snow Ball Cauliflower Seed no matter what price you pay. Many of the beautiful, shapely heads measure from 10 to 12 inches in diameter. Our Cauliflower seed is saved from absolutely perfect plants and is grown by the most experienced and critical growers in localities best suited for perfect development. Best for forcing; best for Wintering over early crop. Every plant will produce a fine head. Pkt., 15c.; ¼ oz., 75c.; oz., \$2.50; ¼ lb., \$8.00.

Early Dwarf Erfurt—Every grower of cauliflower should plant this strain especially recommended for forcing or open ground. Produces large compact heads of snowy whiteness on short stems. Pkt., 15c.; ¼ oz., 60c.; oz., \$2.00; ¼ lb., \$7.00.

Lenormands—Large, late, and short stemmed. Head swell formed. A superior variety. Pkt., 10c.; ¼ oz., 20c.; oz., 75c.; ¼ lb., \$2.50.

Mingle's Dry Weather—A very large second early variety, producing extra large compact heads, standing the heat remarkably well. Does excellent when grown for a fall crop. Pkt., 25c.; ¼ oz., 75c.; oz., \$2.50; ¼ lb., \$9.00.

CARROT

Culture—Sow in drills to 24 inches apart, using from 4 to 5 pounds to the acre, according to the distance between the rows. It is necessary to sow carrots quite thickly, on account of the young plants not having sufficient strength to come through the ground when sown thinly. Cover one-fourth inch deep and see to it that the soil is well firmed about the seed. As soon as the plants appear use the cultivator or wheel hoe, and do not let the weeds get a start. Thin to 3 to 4 inches apart in the row as soon as the plants are large enough. Gather and store for Winter use like beets or turnips.

One ounce of seed will sow a row 100 feet long. Four to five pounds will sow an acre.

Danvers Half Long

Chantenay. A most excellent, medium early, half long variety. It is one of the best in quality for the market and home garden, while its great productiveness and the ease with which it can be harvested make it desirable as a field sort. The tops are medium sized with small neck. The mature roots are thick, five and one-half to six inches in length, uniformly half long or stump rooted but tapering slightly, smooth, deep orange-red in color. The flesh is very crisp and tender. Although a medium early sort the roots are suitable for use nearly as early as any. The variety is extensively used for bunching. **Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.**

Danvers Half Long. A half long orange carrot, grown largely on account of its great productiveness and adaptability to all classes of soil. It is a desirable second early carrot for the home garden and is also suitable for field culture. The tops are of medium size. The mature roots are of medium length, six to eight inches long, tapering uniformly to a blunt point. The flesh is deep orange, tender and of good quality.

Although the roots of this variety at maturity are comparatively short they often produce as large a bulk as the longer field sorts and are more easily harvested. **Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.**

Guerande or Ox Heart. Especially desirable for soil so hard and stiff that longer rooted sorts would not thrive in it. The tops are comparatively small. The mature roots are four and one-half to five inches long, very thick, ending abruptly in a small tap root. The flesh is bright orange, fine grained and sweet. When young the roots are desirable for table use as a medium early carrot and when mature they are equally good for stock feeding. **Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.**

Half Long Scarlet Nantes, Stump Rooted. This extensively used, half long early variety has small tops and is excellent for the market or home garden. The roots are cylindrical, smooth and of a bright orange color. The flesh is orange, becoming yellow in the centre but very tender throughout. This variety is of the finest quality and is one of the most symmetrical and handsome of the medium sized sorts. The mature roots are usually five to six inches long. **Pkt., 10c.; oz., 15c.; ¼ lb., 30c.; lb., \$1.00.**

Early Scarlet Horn. One of the most popular varieties grown. Color deep orange; flesh fine grained and of excellent flavor; tops small; has a short, stump-shaped root. Grows well in shallow soil. One of the best for early outdoor planting and for table use. **Pkt., 5c.; oz., 15c.; ¼ lb., 30c.; lb., \$1.00.**

Early French Forcing. One of the earliest varieties in cultivation and very desirable for forcing. The tops are very small. The roots are reddish-orange and are nearly round when forced quickly in very rich, well prepared soil, but are somewhat longer when grown outdoors. When fully matured the roots are about two to two and one-half inches long, but they should be used before fully grown while young and tender. **Pkt., 10c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.**

CARROTS FOR STOCK FEEDING

Improved Long Orange. The roots of the improved strain of this variety we offer are very deep orange, long and comparatively thick, often twelve inches in length and three inches in diameter at the crown, tapering regularly to a point. The tops are rather large. This intermediate to late maturing sort is suitable for table use as well as stock feeding, combining great productiveness with uniform shape where grown in light, deep, rich soil. When of size suitable for the table, the roots are tender and of good quality. **Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 85c.**

Large White Belgian. Grows one-third out of the ground. Root pure white, green above the ground and has a shell top. It will grow to a very large size on rich soil and is very easily gathered. Flesh rather coarse and used exclusively for stock feeding purposes. **Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 80c.**

Large Yellow Belgian. Practically the same as the above, except that the color of the flesh is yellow. An excellent keeper. **Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., 85c.**

CELERY

Culture—Sow the seed, which is very slow to come up, early in the Spring, in rich, mellow ground, in a situation where it can be protected from the parching heat of the Summer sun; water freely in dry weather. When the plants are five to six inches high, transplant a portion in trenches well manured; the dwarf varieties three feet and the tall four feet between the rows; plant six inches apart in the rows, pressing the earth to the plants. As they advance in growth blanch by earthing up, which should be performed gradually in fine weather, taking care not to bury the heart of the plants. A light dressing of salt applied when earthing up is beneficial.

Golden Self-Blanching. A dwarf sort, with numerous heavy and solid stalks, easily blanched. Heart solid, and with the leaves of a beautiful golden yellow. **Pkt., 10c.; oz., 45c.; ¼ lb., \$1.50; lb., \$5.00.**

White Plume. 100 days. The stalks and heart are white, of good eating quality, crisp, solid, and of nutty flavor; is ornamental, resembling an ostrich feather. **Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.**

Easy Blanching Celery. A Celery with remarkably easy blanching characteristics, so much so that those who have never been successful in growing good Celery may plant it with the assurance that the crop will equal in quality and appearance Celery grown by professional growers, and it will be found useful both for early use and for keeping during the winter, characteristics extremely valuable in a Celery to be grown in the home garden. The plants make a thick, healthy growth and the stalks are thick, very tender and brittle, with a rich flavor which will quickly appeal to all who eat it. The ease with which it may be blanched, together with its long season for use, will strongly recommend it, both to the amateur gardener as well as the commercial Celery grower. **Pkt., 10c.; oz., 65c.; ¼ lb., \$2.25; lb., \$8.00.**

Winter King. Of short, stocky growth, with broad, heavy stalks. An excellent variety for winter use. When blanched the stalks are of a creamy-white color and very attractive. Its flavor, crispness and long-keeping qualities combine to make this sort one of the best winter varieties. **Pkt., 10c.; oz., 45c.; ¼ lb., \$1.50; lb., \$5.00.**

Giant Pascal. This is a green-leaved variety and is an excellent sort for Fall and Winter use. It blanches to a beautiful yellowish-white color, is very solid and crisp, having a fine nutty flavor. **Pkt., 5c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.50.**

Giant Pascal

Dwarf Golden Heart

Dwarf Golden Heart. Very fine; when blanched the heart is of a waxy, golden-yellow, rendering it a most striking and showy variety for either market or private use. **Pkt., 5c.; oz., 20c.; ¼ lb., 75c.; lb., \$2.50.**

Soup or Flavoring Celery. Seed for flavoring soups, stews, etc., not for sowing. **¼ lb., 15c.; lb., 50c.**

CELERY PLANTS

Ready July-August

White Plume, Giant Pascal, Winter Queen, Golden Self-Blanching, Dwarf Golden Heart, Winter King, Easy Blanching.

Celery Plants—50 for 40c.; 100 for 75c.

If wanted by Parcel Post add 10c. per 100, to cover cost of postage and packing.

All plants will be packed in live moss to insure long shipment. No plants shipped Saturday.

Celeriac, or Turnip Rooted Celery

Culture—This plant forms a thick root, which is used instead of the stalks. It is fit to use when about two inches in diameter. Seed should be sown and given same treatment as Celery, but the plants do not require earthing up. Plants can be set six inches apart in rows two feet apart. To keep over Winter, treat same as carrots or beets, except that moist soils should be worked up about the roots to keep them plump.

Large, Smooth Prague Celeriac. A large Celery flavored root used extensively for flavoring soups, pickles, etc.; also relished sliced as a salad with pepper and vinegar. It is also used to flavor chicken and potato salad. **Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.00.**

CHERVIL

Culture—Sow in early spring in rich, well prepared soil. The seed is slow to germinate, sometimes remaining in the earth four or five weeks before the plants appear. When the plants are about two inches high, transplant or thin to about one foot apart. They are ready for use in six to ten weeks from sowing.

Curled. It is a hardy annual with aromatic leaves which are used for flavoring soups or for garnishing meats and vegetables. **Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.**

CHICORY

Culture—Sow in open ground in June in rows 12 inches apart, selecting good, deep, rich soil. Roots should be taken up in November, selecting those that have attained a diameter of from 1¼ to 2 inches (discard divided roots and those with narrow leaves, as well as any which bear several heads). Trim off tops about 1½ inches from the neck, and any secondary shoots that appear on the sides. Cut off the lower end of roots so they are of a uniform length of eight to ten inches. Plant in a trench 16 to 18 inches deep. Place roots upright one and one-half inches apart, fill the trench completely with good, light, well-drained soil.

Witloof (French Endive). This grows in a solid oblong head and blanches ivory-white. When lifting, cut whole head with part of the roots to hold the leaves together. It is the choicest of all the winter salads, and is used to such an extent in this country that much of it is imported. **Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.00.**

CHIVES

A small, hardy, perennial plant, resembling the onion in appearance, and growing in clusters. They are grown for the young leaves, which are produced freely from early spring until late fall, and give a mild onion flavor to meats, salads and various dishes. The tops appear early in the spring, and can be cut off close to the ground when needed. They can also be grown in pots in a sunny window during the winter. **Pkt., 10c.; oz., 75c.; ¼ lb., \$3.25.**

COLLARDS

Culture—This is a tall, loose-leaved cabbage-like plant. It is extensively used for the table, as well as for stock feeding in the South, where it continues in growth and is usable throughout the entire winter. Collards usually succeed in locations where cabbage cannot be grown to perfection. Sow the seed thickly in drills, in rich ground, transplanting when about four inches high; or sow in drills where the plants are to remain and when well started thin to two or three feet apart in the row. In the South seed may be sown from January to May and from August to October.

Georgia, Southern or Creole. This is the white or green stemmed variety, growing two to three feet high and forming a large, loose, open head or cluster of leaves with a rather long stem. A frost, if not too severe, will improve rather than injure the quality of the leaves. **Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 80c.**

CORN SALAD

Culture. Sow in August or September for winter or spring about one-quarter inch deep, in rows one foot apart. Thin out and keep clear of weeds. Protect in winter by thin covering of straw or meadow hay. Ready early in spring; use same as Lettuce. For summer use sow early in spring.

Broad Leaved. Used as a small salad throughout the winter and spring. Sow early in spring in drills one foot apart and keep weeds down by frequent hoeing. For winter and early spring use, sow in drills in August and September. Cover with straw on approach of winter. **Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.**

CORN

SWEET OR TABLE VARIETIES

A rich, warm, alluvial soil is the best, but excellent sweet corn can be raised on any good, ordinary soil, if it is deeply and thoroughly worked before planting. In the north sweet corn may be planted as early as can be done without risking great loss from frosts or from rotting of the seed in the soil, but with the main crop varieties especially, it is well to wait until the ground has become warm as the sweeter varieties are more sensitive to cold and wet than field corn or varieties of inferior quality.

If planted in rows, make the rows three to four feet apart, according to the vigor of growth of the variety, and place the seed twelve to sixteen inches apart in the row, covering one-inch deep with fine soil firmly pressed down.

If planted in hills, make the hills for the early varieties three feet apart each way and plant four to six kernels to the hill. For the later sorts the hills should be three and one-half to four feet apart each way. Hoe frequently and when six inches high thin so as to leave three or four plants in the hill. Give frequent and thorough but shallow cultivation until the tassels appear.

Burpee's White Evergreen. Similar to Stowell's Evergreen, ears fully as large, but about five days earlier in maturity. The grains remain tender considerably longer than Stowell's. It retains its whiteness when canned, having no yellow tinge as has the Stowell's. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

Country Gentleman or Shoe Peg. This variety has a small, white cob, densely covered with irregular rows of very long slender, white grains of excellent quality. The ears are seven to nine inches long. The stalks are from six and one-half to seven feet high. It is well adapted for canning as well as the home garden and market, and many consider it as the best of the late varieties. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

Early Shaker Sugar. Introduced by us to the Philadelphia market years ago; grows fine long ears for an early variety and is unsurpassed by any of the other early kinds. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

Golden Bantam. This is an early sweet corn with golden yellow grain, very tender and of excellent quality. The ears are eight rowed, six to seven inches long and of the medium size found most suitable for the table. The flavor is exceptionally rich and delicious. The stalks are four to five feet high. Our stock of this splendid home garden and market variety has been very carefully selected and is decidedly superior to much that is offered. **Pkt., 10c.; pt., 20c.; qt., 35c.; 4 qts., \$1.15; pk., \$2.00.**

Golden Cream. A cross between Country Gentleman and Golden Bantam and combines the excellent qualities of both. When picked ripe is a very light yellow; after being cooked it turns darker, but not quite so much as Golden Bantam. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

Howling Mob. Superb long ears of sweetest quality. Stocks are of strong, vigorous growth $4\frac{1}{2}$ to 5 feet in height, abundant foliage and generally produces two fine ears to a stalk. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

Kendel's Early Giant. Remarkably large in ear for a second early sort and extensively grown in some localities for the market. The stalks are about five and one-half feet high. The ears are about eight to nine inches long, twelve rowed. The grain is white, rather broad and shallow, and the quality very good. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

Mammoth White Cory. We consider this the best extra early corn for the market and home garden. The ears are very large for so early a variety. The stalks are about four feet high, each generally bearing two large, finely shaped ears which become fit for use as early as those of any variety. They are twelve rowed, six to seven inches long, very symmetrical and handsome, seldom with any opening between the rows at the base. The grain is large, broad, very white and of remarkably good quality for such an early sort. We have found that Mammoth White Cory makes a large and attractive ear of good quality earlier than any other corn. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

Mammoth. This variety, also called Late Mammoth, produces the largest ears of any sweet corn. It is noted for the immense size of the ears, which are often twelve inches long, but the grain is very white, sweet, tender and delicious. They are sixteen or eighteen rowed. The stalks are very large, about eight feet high. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

Stowell's Evergreen. The standard main crop variety, much used for the home garden, market and canning. It is hardy and productive, very tender and sugary, remaining a long time in condition suitable for boiling. Our stock has been carefully grown and selected to avoid the tendency to a shorter grain and deterioration in the evergreen character of this best known of all late sorts. The ears about seven to eight inches long, fourteen to twenty rowed, with very white grain. The stalks are about seven and one-half feet high. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

Black Mexican. The sweetest and most desirable for family use. When dry the kernels are black. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

Early Evergreen

Early Evergreen. This excellent sort, has proven its merit as the best evergreen strain that is distinctly earlier than Stowell's. The strain we offer has to a remarkable degree all the qualities that have made Stowell's Evergreen the leading main crop sweet corn for so long a time. The ears of Early Evergreen are about seven and one-half inches long, with fourteen to twenty more or less irregular rows with very deep, white grain of the very best quality. Stalks about six and one-half to seven feet high. A very desirable main crop variety for home garden and market, and well adapted for canning. **Pkt., 10c.; pt., 20c.; qt., 30c.; 4 qts., \$1.00; pk., \$1.75.**

FIELD CORN

Eight Rowed Yellow. Flint variety with ears ranging from ten to twelve inches in length and one and a half inches in diameter. It is extremely well filled at both butt and tip and the kernels are large, broad and of a very distinct yellow color. Matures in 80 days. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, \$2.50.

One-Hundred-Day Bristol or White Cap Yellow Dent. This is one of the most prolific varieties of dent corn grown. Said to give better results on poor, thin or sandy soil than any other kind. The corn is yellow with a white tip or "cap" to each kernel, so that the ear looks white on the outside, but when shelled is light yellow and very handsome. The ears are of good length (about 10 inches), with 12 rows, and filled out to the tips. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, \$2.75.

Longfellow, Long Yellow. Ninety days. Ears averaging 13 inches. Very prolific. Narrow, small cob. Used quite frequently for replanting. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, \$2.50.

Mammoth Chester County. One of the very best for field culture, fine large ears, and producing a large quantity of fodder. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, \$2.50.

Mammoth Golden Dent. A cross between the Mammoth Chester County and the Oregon; we think this the most productive variety grown. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, \$2.50.

Mastodon. An early dent, of strong growth. Ears and grain large. A strong and quick grower, very productive, grains white and yellow. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, \$2.50.

Early Leaming. This variety has always been used foremost by most planters of field corn in the locality of Philadelphia. It is readily distinguished by the beautiful long ears of deep grained, uniform kernels, resplendent in a deep shade of golden orange. The cob when shelled is very small and of reddish color. The stalks grow about 7 feet high, very leafy, excellent for fodder, and on the average will produce two ears to the stalk. This strain assures the largest ears with every kernel perfect; ripens in 90 days and occasionally crops 100 bushels to the acre. Our stock is grown by the most experienced grower, who carefully selects and re-selects the seed to assure the planter a bumper crop. Every grain is uniform and perfect. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, \$2.50.

Golden Beauty. The broad, massive golden yellow dented grains are arranged very evenly on gigantic ears. Fodder is enormous, often growing 12 feet high; matures late, but fields wonderful crops; desirable for silo and ensilage purposes. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, \$2.75.

FODDER AND ENSILAGE CORN

Hickory King or White Ensilage. Remarkable for its large grain and small cob. A vigorous grower, ears round and of good size, two to four ears to the stalk, grain pure white. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, \$2.50.

Eureka Ensilage (White). This grows invariably 10 to 12 feet high, stands up during the most severe wind storms. Seed is white, very deep and broad, with a thin cob. It will yield more fodder than any other variety. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, \$2.50.

Red Cob Ensilage. An excellent silo corn, stalks tall, short jointed and very leafy, producing as high as 45 tons of fodder per acre. Ears large with pure white, deep grains; cob red. Qt., 15c.; 4 qts., 50c.; pk., 85c.; bushel, 2.50.

POP CORN

A few years ago Pop Corn was grown only in gardens, rather as a side issue from the main business of the farm. It was plentiful throughout New York and the New England States.

Now it is grown as a special crop, great quantities are raised in the Central Western States, and owing to the careful selection of seed and thorough cultivation covering a series of years, this district now produces a quality of Pop Corn superior to any heretofore raised, the White Rice Pop Corn being the most popular variety.

Who does not enjoy munching a snowy pop corn ball flavored with delicious syrup, or relish a bowl of crisp corn plentifully sprinkled with salt and butter?

White Rice. A very handsome and prolific white variety. The ears are five to seven inches long. The kernels are long, pointed and somewhat resemble rice. This excellent rather late maturing variety yields heavily and is considered the best pop corn for parching. Lb., 10c.; 3 lbs., 25c. (shelled).

Queen's Golden. Produces ears in great abundance on stalks nearly six feet high. It pops perfectly white. A single kernel will expand to nearly an inch in diameter. Lb., 14c.; 2 lbs., 25c. (shelled).

POP CORN POPPERS

1 qt. size (5x7 inches).....	25c. each.
2-qt. size (7½x9½ inches).....	35c. each.
4-qt. size (9x12 inches).....	75c. each.

Handles included.

CRESS

Fine Curled or Pepper Grass. As early in spring as the ground can be worked sow the seed in rich, well prepared soil, in shallow drills about 16 inches apart, covering with about one-half inch of fine soil firmly pressed down. When the young plants are well started thin four to six inches apart in the row. For succession plant every two weeks, thinning out as required for use. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

True Water. This is a distinct variety of cress with small, oval leaves. It thrives best when its roots and stems are submerged in water. A fair growth may be obtained in soil which

is kept wet, but does best when grown along moist banks or in tubs in water-covered soil. It is one of the most delicious of small salads and should be planted wherever a suitable place can be found. The seed is usually sown and lightly covered in gravelly, mucky lands along the borders of small, rapid streams. The plants will need no subsequent culture, as under favorable conditions they increase very rapidly by self-sown seed and extension of the roots. When gathered for the market the shoot should be cut, not broken off. In summer it is best to cut them closely, the oftener the better. Pkt., 10c.; oz., 45c.; ¼ lb., \$1.35; lb., \$5.00.

CUCUMBER

The Cucumber can be grown by any one who has a few square yards of soil with an exposure to the sun. For early use, make rich hills of well rotted manure the latter part of Spring, planting a dozen or more seeds, covering one-half inch deep, pressing the earth firmly over them. When danger from insects is over, pull all but three or four of the strongest plants; make the hills from four to six feet apart. For pickles, plant as late as middle of July.

Improved Arlington White Spine

Improved Arlington White Spine. 60 days. This is one of the best for table use now being grown. Vines vigorous, fruit straight and handsome, color light green, with few white prickles, tender and of excellent flavor. **Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.**

Japanese Climbing. A trellis variety used for shade as well as eating purposes. The vine is very ornamental producing extra big light green fruits in abundance. **Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.**

Improved Long Green is a standard main crop variety. The vines are very vigorous and productive. The fruits are very long, often 12 to 15 inches when mature. They are uniformly slender and of a beautiful dark green color. The large warts and spines are well distributed over the entire surface of the fruit instead of being clustered at one end as in inferior stocks. It is a standard variety for slicing and is very largely used for pickles. This is probably the most extensively used cucumber for the home garden and market. Ready for use in 70 days. **Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.**

Davis Perfect. Resembles a hot-house cucumber so closely that dealers cannot tell the difference, it being equally good for the hot-house or outdoor culture. It is ideal in shape, rich, dark green color, uniform and regular in size, it is exceedingly tender, and as a slicing cucumber for the table it is unsurpassed. It is almost seedless one-third of its length from the stem and the seeds contained in it, when in slicing condition, are so small and tender that they are almost unnoticed. Exceedingly productive. **Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.**

Boston Pickling. This is a very prolific and exceedingly popular variety. The fruits are short, smooth, bright green and of excellent quality. For producing medium sized pickles this variety is highly esteemed. Ready for use in 50 days. **Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.10.**

West India Gherkin (or Burr)

West India Gherkin. A small fruited variety; very prolific and used only for pickling. Fruits are thick and rounded in shape, ranging from 2 to 3 inches long and covered with sharp spines. **Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.**

Klondike. An early dark green strain, producing finely shaped fruit, slightly tapered, about 9 inches in length. They hold their color and brittleness after being cut which makes it an excellent shipper for distant markets. **Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.**

Short Green Pickle. 50 days. This is the favorite Western pickling variety and is growing in favor here every season. **Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.**

Early Fortune. The finest type of the White Spine yet produced. Early, very productive and disease resistant. Fruits 8 to 9 inches long, slightly tapering. Flesh white, very firm and crisp, with but few seeds. Color rich dark green, which does not fade when shipped long distance. A great favorite with growers for long distance shipping. Ready for table use in 60 days. **Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.**

Jersey Pickle (Selected Stock). One of the very best of pickling cucumbers, vines vigorous and productive, fruit long, firm and crisp; when small used for pickles, when large for sweet pickles. **Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.**

DANDELION

Cultural Directions—The seed is sown one-half inch deep in the open ground as soon as it can be worked in spring, in rows one foot apart, thinning the plants to about three inches apart if grown for "Greens" or if to be blanched for salad the rows should be 15 to 18 inches apart and the plants thinned to about eight inches. A gathering of young leaves may be made in eight or nine weeks from seed sowing and be continued until the growth gets too old and bitter. The plants being hardy if allowed to stand over winter will yield a very early crop of tender young leaves the following spring.

One ounce will sow 100 feet of drill.

Improved Broad Leaved. A much improved variety, by careful selection for size of leaf and for earliness. **Pkt., 10c.; oz., 60c.; ¼ lb., \$2.15; lb., \$8.00.**

EGG PLANT

Sow in hot-beds early in March, transplant middle of May to first of June, in a rich, warm piece of ground, about 30 inches apart. Draw the earth up to their stems when about a foot high. Egg-plant seed will not vegetate freely without substantial heat, and if the plant gets the least chilled in the earlier stages of growth, they seldom recover. Repeated sowings are sometimes necessary. Care should be taken in cutting the fruit so as not to disturb the roots, which injures the plants. Matures for table in 120 days.

Early Long Purple. This is one of the earliest varieties, hardy and productive, fruit long and of superior quality. **Pkt., 10c.; oz., 40c.; ¼ lb., \$1.35; lb., \$5.00.**

Improved N. Y. Purple Egg Plant

New York Improved Egg Plant—(Spineless)—A vigorous grower; fruit large, fine, free from thorns, and produce until frost; skin of a rich purple, flesh white and of a rich flavor. We can highly recommend this Egg Plant. **Pkt., 10c.; oz., 40c.; ¼ lb., \$1.35; lb., \$5.00.**

EGG PLANT—Continued

Black Beauty. Two weeks earlier than the New York Spineless Egg Plant and a splendid shipper. Fruit large and of fine flavor. Plants branch freely near the ground. Skin is a rich lustrous black. Satin gloss and rich coloring add greatly to the beauty of the fruit. The heavy leaves which attach the fruit to the stems are bright green, making a beautiful contrast with the fine dark color of the fruit. Thoroughly free from spines or thorns. Fruit sets freely. Being two weeks earlier than the New York Purple Plant they readily bring double the price. **Pkt., 10c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.35; lb., \$5.00.**

EGG PLANT, PLANTS

Ready after May 1st. Pot grown stock only. **Ea., 7c.; doz., 70c.** Not mailable.

ENDIVE

An excellent fall and winter salad, when Lettuce is getting scarce. Sow late in the spring to middle of summer in shallow drills, and thin out to a foot apart; blanch by tying the leaves together near the top.

Green Curled Endive

Green Curled is the hardest variety, with beautifully curled dark green leaves, which blanch white, and are very crisp and tender. **Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.**

Broad Leaved Batavian (Escarolle) has broad, thick, plain or slightly wrinkled leaves. It is principally used for cooking, and making a larger head, is preferred for stews and soups; if the outer leaves are gathered and tied on the top, the whole plant will blanch nicely, and make an excellent salad for the table. **Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.25.**

French Endive (Witloof Chicory). Grown extensively for salads, and commands high prices. Must be bleached similar to Celery. **Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.**

HORSE RADISH ROOTS

Culture. Horse Radish rarely produces seed, but is grown from pieces of the root. For the home garden they may be set wherever a few feet of space is available, but when grown as a crop they should be set in rich, moist, well prepared ground in rows two and one-half feet apart and about eighteen inches apart in the row. Set the roots vertically, small end down, the top of the root one to three inches below the surface. Cultivate thoroughly until the tops cover the ground, when their shade will keep down the weeds.

Maliner-Kren or Bohemian. A new variety from Bohemia producing very large, pure white roots. Strong sets. **100, \$1.00; 1000, \$8.00.**

KALE—Borecole

This is extensively grown, especially in the south during the fall, winter and spring. The leaves are used principally for greens. A favorite way is to cook them with bacon. The leaves are also used for garnishing.

Where climate permits seed may be sown any time from August to October, broadcast or preferably in drills eighteen inches apart so that the plants when small may be cultivated. The quality is improved rather than injured by frosts if not too heavy. Farther north sow in April or May in rich, light soil in rows two to three feet apart and where plants of the largest size are desired thin to two feet apart in row. It is better not to cut

or handle the plants while frozen, but if this is unavoidable, thaw them out in cold water. The young shoots which start up in the spring from the old stumps are very tender and make excellent greens.

Siberian Curled Kale. The green leaves are very large and comparatively plain in the center, but heavily curled on the edge. It is a fast grower, extremely hardy and will stand longer in the spring without bolting than any other variety. **Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 85c.**

Dwarf Green Curled Scotch

Dwarf Green Curled Scotch. Makes excellent greens for winter use, dwarf and easily protected during the winter. **Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.**

Tall Green Curled Scotch. The plant of this variety grows to three or four feet high, bearing long, plume-like, light green leaves which are deeply cut, also finely curled at edges. Very ornamental and so hardy that a moderately heavy frost improves rather than injures its quality. **Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.10.**

KOHL RABI

The edible part is the turnip-shaped bulb formed above ground. It is tender and excellent when used before fully grown, combining somewhat the flavors of cabbage and turnip.

Culture. Seed should be sown in light, rich soil as early in spring as possible in rows one and one-half feet apart and when well established thin to six inches apart in the row. Plantings at intervals of ten days will give a succession until hot weather, when they fail to grow well. Plantings may be made the latter part of July for fall use.

Early White Vienna (Extra for forcing). This variety is extremely early with distinctly small tops. The bulbs are of medium size, very light green or nearly white, and are of best quality for the table if used when about two inches in diameter. **Pkt., 10c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.**

Early Purple Vienna. Very early with small top, the leaf stems being tinged with purple. Bulbs of medium size, purple; flesh white. Desirable for forcing and early outdoor planting. **Pkt., 10c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.**

LEEK

The Leek is hardy and of easy culture; sow early in spring in trenches eight inches deep, and have the soil at the bottom fine and rich; thin six to eight inches apart, and when the plants are twelve inches high, gather the leaves together and fill the trench so as to blanch the lower part of the plant.

Large American Flag. A desirable strong growing, broad leaved leek, hardy and productive. It is a favorite with many market gardeners and is also extensively used for the home garden. **Pkt., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.**

London Flag. 90 days. This is the best variety and succeeds better in this country than any other. **Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.**

Musselburgh. Foliage fan-shaped and strong in growth. Large in size and leaves broad. A fine market variety. **Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.**

LETTUCE

There is no vegetable which is more universally used than this. It is of easy culture, and thrives best in rich, moist soil. Its quality depends largely upon rapid and vigorous growth; to secure this, have the soil rich and mellow, with frequent surface cultivation and an abundant supply of water.

Loose-Head or Cutting Varieties

Early Curled Silesian. An early variety of strong growth, leaves large, light yellow and wrinkled. It does not form a head, but is the best variety for cutting when young. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.15.

Early Curled Simpson (Black Seeded)

Early Curled Simpson. A very large loose-leaved sort, and larger than ordinary Simpson. Excellent for table. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.15.

Grand Rapids. For greenhouse forcing this variety has few equals. It is of quick growth, little liable to rot, and can stand some days after being cut. The plant is upright and forms a loose head or cluster of large yellowish-green leaves which are slightly crimped, blistered and rather thin. Is a good shipper. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.25.

Black Seeded Simpson. Very easily grown and one of the most reliable varieties. Does well both outdoors and in greenhouse, and forms beautiful, large, loose heads and is very slow to go to seed. Splendid for home garden and market. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.15.

Early Prize Head (Seed white). A large, clustering, non-heading lettuce, most excellent for the home garden and undoubtedly the most easily grown variety in cultivation. It is too tender, however, to stand shipping or handling on the market. The leaves are finely curled and crumpled, bright green tinged with brownish-red, and are very crisp, tender and sweet. Pkt., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.15.

Cabbage or Heading Varieties

New York or Wonderful (Seed white). This very large heading lettuce is desirable not only as a garden variety for summer use but is much used as a fall and winter market sort. The plant is very large but compact and tight heading; outer leaves attractive, deep green, broad, frilled at edges. The inner leaves form a large head, very sweet and tender when in condition for use. Pkt., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.25.

White Dutch Butter. The best variety for cultivation in the latitude of Philadelphia; fine large heads, and stands the heat of summer well. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.15.

Iceberg. A beautiful Lettuce, with large, curly leaves of a bright light green, with a very slight reddish tinge at the edges. Handsome heads, unusually solid because of the natural tendency to the large, strong leaves to turn in, which also causes thorough blanching. Crisp, tender and fine flavor. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.50.

May King Lettuce

May King Lettuce. Equal alike for forcing under glass or outdoor planting. The plants are of quick growth, practically all head and handsome. From early spring plantings in the open ground they grow quickly to a diameter of six to seven inches, with the broad, light green outer leaves folding closely about the round solid head. In cool weather the edges of these outer leaves are lightly tinged with brown. The inner leaves are blanched to a rich golden-yellow, and have a specially fine, rich, buttery flavor. The solid round heads are so firmly folded that they can be shipped to distant markets and arrive in the best of condition. It is the very best lettuce for early planting in the spring, and again during August and September for fall use. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.25.

Cabbage Head. Heads large and fine, pale green without, and white at centre; crisp and tender, fine summer variety. Pkt., 10c.; oz., 25c.; $\frac{1}{4}$ lb., 70c.; lb., \$2.40.

Salamander (Seed black). A very extensively used sort of excellent quality for the home garden and market. The variety withstands hot weather remarkably well. It forms a large compact, light green plant. The leaves are broad, thick, somewhat crumpled and closely overlapping so that the inner ones are very fine. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.15.

Big Boston. Very large, smooth-leaved, solid-heading variety grown more extensively throughout the east and south than any other. It is congenial to all climates, and is a good shipper. In flavor it probably excels all other smooth-leaved varieties. An excellent all year 'round lettuce. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Improved Hanson. None more reliable for outdoor cultivation. Heads grow to a remarkable size, resembling that of a flat cabbage. Extremely slow to run to seed. Outer leaves are bright green and beautifully frilled on the edges; inner leaves white and deliciously sweet, tender and crisp. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Romaine, or Cos Lettuce

Paris White Cos. Grows to a very large size, producing long-pointed, compact bunches. The inner leaves blanch readily and are of fine flavor. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.35.

LETTUCE PLANTS—Ready May 1st

Big Boston, May King, Cos, etc.
500, \$2.15; 1000, \$4.00. By Parcel Post add 5c. per 100; 25c. per 1000.
No plants shipped on Saturday.

MELON—Cantaloupe

Salmon-Fleshed Varieties

Culture—Plant early in May, when the ground has become warm and dry, in hills six feet apart each way; use well rotted manure, and if plants grow very rank, finer fruit will be secured by trimming off the ends of the shoots when about three feet long. Do not plant near pumpkins, squashes or cucumbers, as they will mix with and injure the quality of the melons.

Emerald Gem—A splendid early variety, coming in just ahead of Rocky Ford; fruit emerald green in color, globular or slightly flattened, irregularly ribbed and lightly netted; flesh very thick, of a deep rich salmon color, and having an exceedingly small seed cavity. Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.

Fordhook

Fordhook—A fine, large, early ripener. Skin dark green mixed with stripes of lighter green. Thin rind and tough skin, well adapted for shipping. Flesh bright red, crisp and sweet. Flavor one of the finest. Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.

Burrells' Gem—The golden fleshed Rocky Ford. The Burrells' Gem, which is an improved Rocky Ford, averages 2 lbs. in weight, 6 inches in length and 4½ inches across. It is very solid and has a small seed cavity. The flesh is golden in color, very thick, fine-grained and spicy. An abundant yielder and a good shipper. Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.

Golden Honey Dew—This grand new melon is a sport from Honey Dew, which it resembles except in color. The flesh is a rich golden instead of light green, very sweet, keeps a long time and by many is considered superior to the green-fleshed variety. Pkt., 5c.; oz., 20c.; ¼ lb., 50c.; lb., \$1.75.

Green-Fleshed Varieties

Rocky Ford—70 days—The flesh is deep and thick, and light green in color, except next the seeds, where it inclines towards yellow. The flavor exceedingly fine. The skin is green, regularly ribbed and thickly netted. It is a firm, solid melon, and will carry in perfect condition for a week or more after its removal from the vine. It is a heavy cropper and is in wide favor as a market melon. Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.

Honey Dew—The juicy, light green flesh frequently measuring two inches thick, entirely stringless and especially luscious in flavor, most tender and practically melting in the mouth. It is as sweet as honey. This delicious flavor extends practically to the very rind. The rind is mottled. The shell is hard and about ¼ of an inch thick. There is no seed cavity. The seeds are imbedded in a jelly-like pulp. Plant the same time you would any other cantaloupe. When the under side of the melon becomes a golden yellow it is ready to take off. By storing in a cold, dark place in sand, being careful not to allow them to touch each other, they could be kept until Christmas. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Jenny Lind Improved—65 days—Resembles the old variety only that it matures earlier and is better filled out, roughing up better, and keeping fully a week longer than any other variety. Is a handsome green fleshed sort and invaluable for a first early; and of delicious quality. Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.

Netted Nutmeg—Oval in shape; netting rough. A melon of fine flavor. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Hackensack—A popular large sized melon, flattened at the poles, deeply netted and ribbed, flesh green and well flavored. One of the best for shipping, and is a favorite with market gardeners. Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.

Montreal—Largest of the nutmeg varieties; averaging a weight of 15 lbs., nearly round, flattened at the ends, deeply ribbed, green, netted skin. Flesh green, thick, and of fine flavor. Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.

Baltimore or Acme—The fruits are medium sized, oval or long oval, slightly pointed at stem end, slightly ribbed, and are covered when ripe with coarse netting. The flesh is thick, green, well flavored and sweet. This variety is a very productive, sure cropper of good quality. Pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.10.

MELON—Watermelon

Culture—The soil for Watermelons must be light, rich and sandy, for if grown on a heavy soil the quality will be poor, and they will not be so early. When there is more danger of frost drop 8 to 10 seeds in hills 8 to 10 feet apart each way, covering about ¼ inch deep. As soon as plants commence to run, thin out to 3 best plants in a hill, and cultivate until the vines cover the whole ground. If slow to fruit, pinch off the ends of the growing shoots. Ash or air-slated lime sifted on the young plants while dew is on is good to keep insects out. One ounce will plant about 30 hills, and it takes 3 to 4 pounds to an acre.

Tom Watson—An early, large, oblong, dark green melon, with thick netting. An introduction from one of the best melon districts in the South. Rind thin, but tough, making it a favorite shipping sort. The flesh is firm, and of a bright red color, delicious, sweet and melting. An excellent sort for the private or market gardener. The average melon will weigh 35 to 40 pounds and measure 28 inches long and about 12 inches in diameter. Very prolific. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Long Light Icing—75 days—Very light green skin, flesh bright, red, crisp and sugary, excellent quality. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Cole's Early—An early variety. Large heart, flesh of fine texture and good flavor. Rind thin. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Kleckley's Sweets

Kleckley's Sweets—A handsome melon for both the private and market garden. Shape oblong, skin dark green, and slightly mottled, thin rind, flesh bright scarlet, very sweet, crisp and melting. Heart solid. One of the best melons grown. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Citron Water Melon—This is the well known melon for making preserves or condiments. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Halbert's Honey—Fully equal in quality to Kleckley's Sweet, which it resembles. It is more even in outline, is blunter at the end, and the skin is of a richer, darker color. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

MUSHROOM SPAWN

Culture — Mushrooms may be grown in cellars, under benches of green-houses, or in sheds, wherever the temperature of 50 degrees can be kept up through the Winter. The beds should be made from November to February, according to the time the mushrooms are wanted, and it requires about two months for them to begin bearing. Secure fresh horse

manure, free from straw and litter, and mix an equal bulk of loam from an old pasture with it. Keep this under cover, taking care to turn it every day to prevent heating, until the pile is large enough to make a bed the required size. Three to four feet wide, eight inches deep and any length desired are the proper proportions for a bed, but these may be varied. Prepare the mixture of loam and manure, making the bed in layers, and pounding down each with the back of the spade. Leave this to heat through for a few days, and as soon as the heat subsides to 90 degrees, make holes in the bed about a foot apart each way and about one inch deep, into which put pieces of the spawn two or three inches in diameter; fill up the holes with the compost, and at the expiration of a week or ten days the spawn will have thoroughly diffused itself through the bed. Spread a layer of fresh soil over the heap to the depth of two inches and cover with three or four inches of hay, straw or litter. Examine the bed often to see that it does not get dry. Take special care, however, when water is given, that it be at a temperature of about 100 degrees.

Brandywine Pure Culture Spawn—Per brick, 25c.; per brick (postpaid), 35c.; 5 bricks, \$1.20; 10 bricks, \$2.15. Larger lots, prices on application. English Milltrack, 15c. per brick; (post-paid), 25c. per brick; 1 doz., \$1.60. Larger lots, prices on application.

MUSTARD

Culture—As an ingredient, the green Mustard imparts a delightfully pungent flavor to the various forms of prepared salads. For early crops the seed may be sown in a hotbed in March, and for general crop at frequent intervals throughout the spring, in drills eight to twelve inches apart. One ounce will sow 75 feet of drill.

Giant Southern Curled. Large variety, forming a great mass of beautiful leaves, which are ruffled and finely curled on the edges. Hardy, vigorous, highly recommended. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 65c.

White English. This is the kind usually preferred for salad. The leaves are light green, mild and tender when young; seed light yellow. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

Brown Italian. This is a larger plant than the preceding, with much darker leaves; seed brown and more pungent. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

OKRA, OR GOMBO

Cultural Directions—Sow about the middle of May when the ground is warm, in hills about three feet apart; cover seed one-half inch and thin plants to three in a hill. Keep ground well hoed and earth up around the plants to support them. Gather pods while young and tender. Excellent for soups and stews, etc., to which they impart a rich flavor.

Perkins Mammoth Pod. A tall handsome plant producing very long, slender green pods; very prolific and a popular one. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

White Velvet. An early maturing and very productive variety, growing about three and one-half feet high. Pods white, long, smooth and very tender. This is not so deeply ribbed as the green sort and is very popular in some sections. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

ONION

Culture—Onion seed should be sown as soon as possible in the spring, even if the weather is cold, so the soil works up well. This gives them a good start ahead of the weeds, and before dry weather sets in. After thoroughly pulverizing the soil, sow thinly, four or five pounds to the acre, in drills, 14 to 16 inches apart, and about one-quarter inch deep, in strong land, well manured, keeping them well hoed and free from weeds.

The Silver-skin and Yellow Danvers are principally grown (for sets) in this vicinity. Sow the seed early in the spring, very thickly in beds or drills. As soon as the tops die off in the summer, remove them to a dry, airy place, and early in the following spring replant in rows about two inches apart, the rows wide enough apart to admit of hoeing. The onions by this process are obtained of a large size early in the season. We can also supply the sets themselves early in spring, at current market prices.

The Prizetaker may be grown to large size by sowing in drills early in March, in strong land, and thinning them out to stand two or three inches apart, keeping them well hoed.

Extra Early White Pearl. A transparent, waxy, early variety, flat, and of very mild flavor. In some sections attaining a size, five to six inches in diameter. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.

White Portugal or Silver Skin. Eighty-five days. Large flat onion of mild flavor, skin clear white; grown extensively for sets, very desirable for pickling and is the best white sort for this purpose. Used extensively in the spring for green bunch onions. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.10.

Southport White Globe. In shape same as Yellow or Red Globe, but milder, not so good a keeper. Pkt., 10c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

Yellow Dutch or Strasburg. A splendid variety for sets. The bulbs are very similar to Yellow Danvers, excepting they are a little more flattened, and have a darker yellow skin. Ripens early, and is a splendid keeper. This is the onion from which our fancy bottom sets are grown. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

YELLOW GLOBE DANVERS

Yellow Globe Danvers. 115 days. A fine variety, originating in Danvers, Mass.; above the medium size, oval shaped; skin yellowish-brown; flesh white, mild and well flavored; very productive. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.

Australian Brown. This remarkable onion is medium in size, hard and solid, most attractive in shape and appearance for the market, it having a beautiful amber-brown

color. It is one of the earliest of the globe-shaped yellows, but not so large or as heavy a cropper as some. Noted for its keeping qualities. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.50.

Large Red Wethersfield. 110 days. The standard Eastern variety. Grows to large size directly from the seed; skin deep purplish-red; form round, flat; flesh purplish-white and stronger flavored than any of the other kinds. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 55c.; lb., \$1.75.

Prizetaker

Prizetaker. Seven to nine hundred bushels to the acre, and a single specimen weighing as much as four pounds are some of the things this handsome globe onion will produce. It has a bright, clear, straw color, and grows a perfect globe-shape. Is by far the handsomest, most productive, most profitable, and best of all the yellow globe onions. Large onions can always be raised in a single season from the seed. It has always brought much better prices than any other onion in the market; it never fails to

attract attention on account of its beauty; on the city stalls it has completely taken the place of the large Spanish Onions. The Prizetaker Onion is gifted with strong drought-resisting ability, and we consider this one of its strong points. It is admitted by the most critical onion growers to be the largest, finest flavored, and most superior yellow globe onion under cultivation. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 55c.; lb., \$1.85.

ONION SETS

The Onion sets grown in the vicinity of Philadelphia are recognized everywhere as the best in the country; they are more solid and brighter, and their keeping qualities much better than those grown elsewhere. The best varieties are named below. Onions grown from sets come into market long before those grown directly from the seeds, and in consequence much higher prices are realized from them.

Extra Early Red. Strasburg. Yellow Danvers. Qt., 15c.; bushel (28 lbs.) market price.

White Portugal or Silver Skin. Qt., 20c.; bushel, (28 lbs.) market price.

WINTER SETS

Egyptian, Perennial or Tree Onions. An unusually hardy variety in the colder States, remaining in the ground with safety all winter. It starts early in the spring and may be bunched and marketed several weeks before any other variety. The quality is inferior, but the bulbs find a ready sale when other varieties of onions are wanting. Qt., 20c.; pk., \$1.00; bushel (28 lbs.), Market Price.

PARSLEY

Sow early in April in rows. Soak the seed a few hours in warm water before sowing, or it may lay two or three weeks in the ground before vegetating. A few Radish Seed mixed with the seed when sowing will mark the rows and facilitate weeding. One ounce to 150 feet of drill. Make open air sowing in April.

Double Curled Parsley

Double Curled. A dark green market variety of dwarf habit. Stands the winter better than other varieties. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Plain Leaved. This is the hardiest variety, foliage very dark green, with plain leaves, having a strong parsley flavor and much preferred in French cooking. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Hamburg Rooted. The standard rooted sort. The leaves are used for soup greens, and the roots when sliced are much esteemed. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

PARSNIP

This well-known culinary vegetable does best on a deep, rich, sandy soil; fresh manure should not be used, as it is apt to make the roots coarse and ill-shaped. The seed is sometimes slow to germinate; it should be sown early as possible, covering half an inch deep, and the soil pressed firmly over the seed; thin out so that the plants will stand four inches apart.

Sugar Parsnip

Hollow Crown Sugar Parsnip. Is fine grained, true hollow crown; has thick shoulders, tapers symmetrically to a single tap root. Are easily gathered; heavy croppers; roots run uniformly smooth, with fine grained flesh, and good quality. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.00.

PEAS

The Pea is so generally known that it is needless to give any description of it. There are many new varieties coming out every year, most of which turn out to be no better than the older sorts. We have carefully culled them over, and our list will be found to contain all that are really valuable. The Pea matures earliest in a light, rich soil; but for general crop, a rich, deep loam will be found best. The Extra Early varieties should be sown as soon as the ground can be worked in the spring, and continue every two weeks for a succession. The tall varieties require brush stuck in between rows. The wrinkled varieties are superior, more delicate in flavor, and remain longer in season than the smooth sorts, but are not so hardy.

The dwarf varieties suit best for small gardens, and can be planted in rows one foot apart. One quart for $\frac{1}{75}$ feet of drill, two to three bushels to the acre.

Early Varieties

Mingle's Selected Extra Early. Forty-eight days. For family use this is probably equal to the Improved Premier; it does not ripen so evenly, but keeps in bearing longer. [Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Mingle's Selected Extra Early

First and Best. A desirable Extra Early. Vine 3 feet, and a strong grower, continues in bearing as long as other Extra Early Sorts. Pkt., 10c.; Pt., 25c.; qt., 50c.; 4 qts., \$1.60; pk., \$2.75.

American Wonder. Fifty-two days. A hybrid between Champion of England and Little Gem; it is an enormous cropper, and ripens in about fifty days from germination. Pods two and one-half inches. Vine 10 inches. Pkt., 10c.; Pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Blue Bantam. A new dwarf, extremely early variety, very productive, bearing on 15-inch vines many large, well-filled pods of luscious deep green peas, fully as large as Gradus, numbering eight to ten peas to a pod. This pea matures as early as American Wonder and is destined to become a great Market Gardeners' variety. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Nott's Excelsior. Fifty days. A fine dwarf wrinkled sort, maturing as early as most smooth varieties. Very tender and of fine flavor. Pods $2\frac{1}{2}$ inches. Vines 14 inches. Pkt., 10c., pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Peter Pan. One of the very finest of the large podded, dwarf peas, on the order of Laxtonian, though somewhat earlier. Height, 15 inches. Vine and foliage stout, heavy and dark green; pods $3\frac{3}{4}$ inches long, very broad, straight and pointed, containing six to eight large, dark green peas of superb quality. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; pk., \$3.00.

Our satisfied customers are our best advertisement. Join the ranks.

We pay postage on packets and ounces. Add 5c. per pint and 10c. per quart for peas when ordered by mail.

PEAS—Continued

Gradus—No other pea introduced for years has met with so extensive sale and commanded so high a price. It withstands an extraordinary amount of cold and wet weather, so plant it early and your returns will surprise you. It matures and is marketed before the Pea Louse gets a chance at it. Besides being so attractive, the sweet delicious flavor and excellent quality bring back a customer who has once bought them. Foliage large and luxuriant, pale green in color; pods long, straight, slightly rounded at the point; seed large, wrinkled, cream color, tinged with green, height 3 ft. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Laxton's Prolific—Height 3 feet, an extra early. Pods 3½ inches and blunt, very prolific and well filled; seed wrinkled, cream color tinged with green. Vine 3 feet. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Alaska

Alaska—An extra early, vine about 2 feet high, seed green and round, in well filled pods, produced in abundance. Excellent for market or family use. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., \$1.50; peck, \$2.50.

Ameer—Similar to Alaska, but not quite so early. Vine a little longer, pods well filled and somewhat light green dented. Pkt., 10c.; pt., 30c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Sutton's Excelsior—A marked improvement in the dwarf wrinkled class. Similar in habit of growth to Nott's Excelsior, but bearing very large, broad pods filled with large peas, tender and of exquisite flavor. As a wrinkled sort it leads in earliness, with much larger and handsomer pods than any dwarf early wrinkled pea yet introduced. It is a pea of first-class merit, and a good cropper. Pods 3 inches long, broad, straight and well filled. Seed pale green, wrinkled. Vine 15 inches. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Little Marvel—Vines of dwarf, even growth, averaging 15 inches in height. Heavily set with fine pods and frequently borne in pairs. Ready for table fully as early as American Wonder; vines are larger and produce a much heavier crop. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., \$2.15; peck, \$4.00.

Second Early

McLean's Premium Gem—An improvement on the Little Gem, being larger and more productive. Does not ripen quite so early, is very luscious in flavor, and is a general favorite. Pods 2½ inches. Vine 14 to 16 inches. Green wrinkled seed. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., \$1.50; peck, \$2.60.

Laxtonian—Of vigorous growing habit, luxuriant foliage of dark green color. Large seed, white and green. Pods 3½ inches long, broad and pointed at the ends. This is a fine half-dwarf wrinkled sort. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., \$1.75; peck, \$3.00.

Potlatch—A vigorous growing, half-dwarf variety of luxuriant, strong foliage of dark green color. Pods 3½ inches long, of medium green color, broad, and pointed at the ends. Seed large green and wrinkled. Straw 24 inches long. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Filibasket—Height 30 inches, of branching habit; pods well filled and therefore indispensable to the market gardener, and large croppers. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Late

Dwarf Champion—44 days—very much liked by those who have tried it. In quality and flavor equal to Champion of England, and the vine only 2 feet. Equal to Little Gem. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., \$1.50; peck, \$2.50.

Daisy or Dwarf Telephone—Among the medium early dwarf sorts, ripening a week ahead of Stratagem. It is a most desirable pea on account of the large size, beautiful shape and fine quality of its well-filled pods, containing six to nine tender sweet peas. Seed green, wrinkled. Pods 4 inches. Vine 18 inches—very vigorous and quite prolific. Pkt., 10c.; pt., 30c.; qt., 60c.; 4 qts., \$2.15; peck, \$4.00.

Improved Telephone—One of the recent introductions from England, where it is highly prized; grows about 3 feet high, and is the best tall pea in existence, an enormous bearer, producing straight, showy pods, containing from nine to ten peas in a pod. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Long Island Mammoth—Very popular with the farmers in most sections who want a large, handsome pod of deep green color that carries well. Is becoming more popular every year. Height 3 feet. Pkt., 10c.; pt., 25c.; qt., 50c.; 4 qts., \$1.65; peck, \$3.00.

Yankee Prince. The king of the second early large-podded wrinkled sorts of the Telephone type. Remarkably healthy, vigorous and productive. Pods of the largest size frequently six inches in length, straight, round at the point, deep green in color and most beautifully shaped, well filled with large peas that are deep green in color and of the richest flavor. Height, four feet. We claim this to be the best of its class. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., \$1.65; pk., \$3.00.

Edible Podded Peas

Mammoth Melting Sugar. This variety is used the same as a snap-bean both pod and pea being eaten. The pods are large, extremely tender while young, finely flavored and borne in great profusion. Seed white. Height, four to five feet. Pkt., 10c.; pt., 30c.; qt., 55c.; 4 qts., \$1.75; pk., \$3.25.

Dwarf Gray Sugar. Seed gray, pods purple; large and eaten like string beans. Vine 18 inches. Pkt., 10c.; pt., 25c.; qt., 45c.; 4 qts., \$1.50; pk., \$2.60.

NITROGEN GATHERING BACTERIA

If you want your pea patch to yield earlier and better, inoculate the seed before planting with MULFORD CULTURE. It encourages vigorous vines, well filled pods and makes it possible for the plants to withstand drought and disease better.

MULFORD CULTURE: 35c. per trial bottle; 75c. ¼ acre bottle.

When ordering be sure and specify wanted for Garden Peas, as each leguminous crop requires a separate culture.

PEPPER

Culture. Sow in hot-beds in March, or in a warm border early in May, transplant and thin out to stand 16 or 18 inches apart; hoe frequently, to keep down the weeds. Edible in 100 to 120 days.

Large Bull Nose

Large Bull Nose or Sweet Mountain. Plant vigorous, compact, very productive, ripening its fruit uniformly and early. Fruit large, of blocky form, with thick flesh, usually quite hot. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.10; lb., \$4.00.

New Neapolitan. A great market variety on account of its earliness and productiveness: Two weeks earlier than Bull Nose. The fruit is of good size growing on a vigorous stalky plant. The flesh is quite thick and sweet as an Apple. Color a light green changing to a bright red when ripe. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.50.

Ruby King—Fruit 5½ x 3½, bright red in color and of distinctively mild flavor. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.10; lb., \$3.50.

PEPPERS—Continued

Early Red Squash, or Tomato Shaped. Fruit small, flat, shaped like a tomato; skin smooth, glossy red; flesh thick, mild, somewhat pungent; early and very productive. Pkt. 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Pimiento. The sweetest Pepper grown, as it does not contain the slightest trace of fieriness. The plants are productive and Peppers medium size and of a shape which is desirable for filling, and when prepared in this manner they are delicious. It may also be used in preparing salads and for flavoring. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Long Red Cayenne. Pod long, slim and pointed; color, bright red and very pungent. Pkt., 10c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.10; lb., \$4.00.

Red Cherry. Fruits small, bright red and very pungent. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., 85c.; lb., \$3.00.

Chili, Red. Small red, conical pods about 2 inches long. Very hot and prolific. Generally used for seasoning and pepper sauce. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., 85c.; lb., \$3.00.

PEPPER PLANTS

READY IN MAY.

Pot Grown Plants—Doz., 70c.; 100, \$4.00.

Transplanted—Doz., 25c.; 100, \$1.00.

Pot grown plants are not available.

All plants will be packed in live moss, insuring long shipment. No plants shipped Saturday.

PUMPKIN

Culture—Sow in hills 8 or 10 feet apart each way, or in fields of corn, about every fourth hill; avoid planting near melon or squash vines, as they will hybridize.

Sweet or Sugar Pumpkin

Sweet or Sugar—A handsome variety and very popular. Does not grow as large as the field varieties. The skin is a deep orange yellow, flesh fine grained and sweet. The most famous for pies. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.25.

Large Cheese or Kentucky Field—A very productive variety, broad and flat in shape, rich green color, flesh is very tender, good for table or stock feeding. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Mammoth Golden Cashaw (Crook Neck)

Mammoth Golden—Long Yellow Crook Neck, one of the best among pumpkins; sometimes weigh as much as 60 to 80 pounds. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

King of Mammoths—Has been grown to weigh 200 pounds, surpassing any other variety for size. The flesh and skin are both bright yellow and of excellent quality. The Mammoth is one of the best pie pumpkins grown, also a splendid keeper and valuable for feeding purposes. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Connecticut Field—Best for cattle feeding. Oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 90c.

POTATOES

Potatoes—The soil best suited to the potato is a rich sandy loam, but it seems to thrive in almost any soil and climate. Plant as early in the Spring as the ground can be worked thoroughly, covering about 4 inches in warm soil, and in wet soil 3 inches deep, cultivate to keep down weeds, and draw earth to the plants as they advance in growth.

We make a specialty of handling only first-class stock of the popular Maine-grown varieties, suited to this locality, at the proper season, March 1st to May 15th.

They are put up in original sacks of 165 pounds (or 2 3-4 bushels) each. Prices varying according to the market.

Red Skin or Cape May County Goodie—

We wish to call attention to this variety of potato which is planted long after all others are in the ground and growing up. Plantings are made of this variety from about July 15th to August 10th; it is late in maturing.

This potato is not planted in the early Spring; it will do well in most any soil, though light soil is preferable. Since this variety sets abundantly it requires plenty of plant food to produce potatoes of good size.

They are good keepers and are most excellent for table purposes, especially in the late Winter and early Spring. It is a most valuable addition to the potato crop.

Irish Cobbler—Vigorous grower, ripens uniformly, and a good keeper.

Red Bliss—Early, great producer, handsome color and resistance to disease make it most popular.

McCormack—A very late heavy yielding potato, good Winter keeper.

Early Rose—Still remains the standard early variety.

Spalding No. 4—Earliest Rose, good cropper, fine appearance.

Green Mountain—A popular main crop Potato.

Rural New Yorker—Second early large, smooth, white, wide as long, productive.

State of Maine—Another popular main crop Potato.

RADISH

Culture—Radishes must make a rapid growth to be crisp and tender. For early use seed should be sown in the hot-bed in drills 4 or 5 inches apart and half an inch deep. For an early crop in the open ground select a sandy soil and a warm south border, under the shelter of a fence, or building, if possible. A load of fresh sandy loam from the woods is better for the radish crop. As soon as the first leaves appear sprinkle with soot or ashes to save from the little turnip fly. One ounce will sow 150 feet of row.

The secret in sowing good radishes consists chiefly in the observance on the part of the grower of three points. First, they should be grown on light, quick soil. Second, they should be given plenty of water, and last, but not by any means least, the right kind of seed should be sown. Radishes grow very quickly, and if not supplied with plenty of water are apt to be pithy.

SUMMER RADISHES

Early Scarlet Globe

Early Scarlet Globe. Somewhat larger than the early turnip-shaped varieties, being globular in form, and more of a medium between the early button and the later long sorts.

Is heat-resisting and of a brilliant scarlet color. Very showy. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.25.

RADISHES—Continued

Early Red Turnip. A round, red, turnip-shaped radish with small tops and of very quick growth, deserving general cultivation on account of its rich, scarlet-red color, almost crimson and its white, crisp and tender flesh. The roots often grow one inch long by one and one-eighth inches in diameter before becoming pithy. This is a standard variety for early outdoor planting for the home garden and market. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

French Breakfast. A quick growing, small, olive-shaped radish about one and one-half inches long by five-eighths to three-fourths of an inch in diameter when fully grown. The color is beautiful deep rose-scarlet except a little clear white about the tip. This is an excellent variety for planting outdoors for the home garden. Its small tops and earliness make it also desirable for growing under glass. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Crimson Giant. A variety combining earliness and great size. It grows much larger than other extra-early varieties, but does not become pithy, even when fully twice as large in diameter and a week older; beautiful crimson-carmine; turnip-shaped; flesh firm, crisp and tender. We recommend it for outdoor garden planting as well as for greenhouse forcing. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

White Box Radish

Philadelphia White Box. An early variety, very popular with market gardeners. The radishes grow $1\frac{1}{2}$ inches in diameter, with pure paper-white skin; crisp, mild flesh. Largely planted in the field for the earliest market crop. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

White-Tipped Early Scarlet Turnip Radish. For many years we have found this variety to be the most popular of all among private gardeners, and unsurpassed as a Table Radish, where by reason of the strong contrasting colors of the root it makes a most attractive appearance. The flesh is crisp, white and tender and extremely mild. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Chartier or Sheppard. A distinct and exceedingly attractive sort; a clear rose-colored long Radish, shading into pure waxy white at the tips, attains large size. Perhaps one of the best Early Summer Radishes for the open ground. Grows very fast; ready for use or market early; keeps crisp a long time. Should not be sown until the ground is warm. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Half Long Scarlet. This variety, appreciated by many, is just the right size for table use, not too large, always tender and crisp. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Long Brightest Scarlet or Cincinnati Market. The brightest and handsomest long scarlet Radish grown. Fit for use in twenty-five days from the time of sowing, and remains in good condition until fully grown. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

White Icicle. An entirely distinct long slender, pure white variety. It is without doubt the earliest and finest long white Radish in existence. Ready for use fully as early as Long Scarlet Top, with less foliage, rendering it most desirable for forcing. In the open ground the roots continue brittle, crisp, and mild, until they are fully as large as those of the Long Bright Scarlet. The Icicle is perhaps superior to the finest long red ones. Roots 4 inches in length and half an inch in diameter; they retain their crispness and fresh, mild flavor until fully 6 inches long and an inch in diameter. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

Long Scarlet Short Top (Improved)

Early Long Scarlet Short Top (Improved). The best standard variety for private gardens or market use, is brittle and crisp, and of quick growth; color bright scarlet, small top and is uniformly straight and smooth. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

White Strasburgh. A very popular variety. Pure white. Of tender quality and remains good for a long while. Matures in 30 to 35 days. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

White Ladyfinger

White Ladyfinger. 25 days. In shape similar to Long Scarlet Short Top, sweet, mild and brittle. Annually in greater demand as one of the best long radishes. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., 85c.

No matter what you may order from this catalog, you may rest assured of full value for your money. Proven by test, our seeds are best.

RADISHES—Continued WINTER RADISHES

(50 to 75 days, according to variety.)

Winter Radishes are not appreciated as much as their merit warrants. They are easily grown, have few insect enemies and can be easily preserved through the Winter, and there is no vegetable which furnishes a more acceptable relish. While quick growth is not so essential for these as for the earlier sorts, they do best on a rich soil which has been made as fine and friable as possible. Sow late in Spring or during the Summer in rows 2 feet apart and thin the plants about four to the foot.

Round Scarlet China. A round scarlet radish of unusual merit especially valuable for sowing at intervals throughout the entire Spring, Summer and Fall seasons. It remains solid and sweet at all stages of its growth. At the size of a baseball it is as mild and brittle as when the size of a marble. This remarkable radish will mature in six weeks and the roots from Fall sowing may be so stored for Winter use. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.25.

China Rose
Winter Radish

China Rose Winter. Form conical, of a bright rose color, flesh firm and pungent flavor. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

White China Winter. This Winter Radish is as solid and juicy as an apple; pure white flesh and delicious flavor—a very choice variety. Sown any time after July 1 to the middle of August. It will keep all Winter in prime condition, mild in flavor, brittle. Never gets woody as do most Winter varieties. Market gardeners have found it to be a splendid seller and have always made money with it. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 85c.

Round Black Spanish. An excellent Round Black Winter variety. Popular among Germans. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Half Long Gray-Black Winter. This variety is intermediate in shape between the Round and the Long Black Spanish, and seems to combine the good qualities of both. The roots have grayish-black skin and crisp, pungent but well flavored white flesh. They are four to five inches long and one and one-half to two inches in diameter, sometimes approaching stump rooted form at maturity. Pkt., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.25.

Long Black Spanish. One of the latest and hardiest long garden radishes, especially adapted for winter use. The roots are long, thick, almost black, somewhat wrinkled. The flesh is white, of firm texture, decidedly pungent but well flavored. The roots when mature are usually seven to nine inches long by two to three inches in diameter at thickest part. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 85c.

RHUBARB ROOTS (Victoria)

(Ready from October to May 15th.)

Large Clumps—Ea., 9c.; doz., \$1.00.

Extra Large Clumps—Ea., 16c.; doz., \$1.75.

In lots of 100 or more, price on application.

SALSIFY OR VEGETABLE OYSTER

Sow early in the Spring, in deeply dug and richly manured soil, in drills 18 inches apart. Keep clear of weeds, and when up a few inches, thin out, so as to stand 4 or 5 inches apart. This is a hardy vegetable and can remain in the ground all Winter for early Spring use, but should be taken out before they start growing.

French. Produces a tapering straight root about a foot long. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.

Sandwich Island. Preferred on account of its larger size, and absence of stringiness. Resembles a good-sized parsnip and is very mild and delicately flavored. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.

SPINACH

The spinach is very hardy, wholesome and palatable, and makes a delicious dish for greens. Should be planted in rich ground. Sow in drills one foot apart, and commence thinning out when

the leaves are an inch wide. For early Spring use, the seed should be sown middle of Autumn, and will require through the Winter a slight protection of leaves or straw. For Spring and early Summer use, sow as early as the ground can be tilled and at short intervals, if a succession is desired. Edible in 40 to 60 days.

Bloomsdale—Savoy Leaf

Bloomsdale. A superior variety of Bloomsdale or Norfolk Savoy-leaved spinach, having a heavy re-curved bloated leaf of symmetrical form. Fine for outdoor planting in Spring or Fall, or under glass. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 55c.

Long Standing. New large crimped fleshy leaved variety; stands two weeks longer than any other variety before running to seed. Best kind of seed sowing. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 55c.

New Zealand. This variety endures heat and drought; excellent for Summer use; the leaves are small and thick. It is an enormous yielder, growing upright, one sowing can be picked from the entire Summer, a very distinct variety. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

SQUASH

Early White Bush (or Patty Pan)

Cultivate same as cucumbers or melons. The Summer varieties should be planted 4 or 6 feet apart each way, and the Winter sorts 8 feet. Three plants are sufficient for a hill.

Early White Bush or Patty Pan. 50 days. The earliest in maturing and very productive. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.00.

Long White or English Vegetable Marrow. This is similar to the *Cocozella*, but rather later in season and the fruits are much larger in size. Strong running vines bearing fruits with creamy white, smooth skin. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Golden Summer Crook-Neck. 40 days. The best of the Summer squashes, gold color, profusely covered with warty excrescences and of very superior flavor. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.25.

Golden Summer Crookneck

Golden Custard Bush Squash. Similar in shape to White Bush, but skin is a rich golden-yellow and flesh pale yellow. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.25.

SQUASH—Continued

Cocozella di Napoli (Italian Vegetable Marrow). Fruit large, oblong shaped, dark green at first, but as they mature become marbled with yellow and lighter green stripes. The young fruit when sliced and fried constitutes a vegetable delicacy superior to egg-plant. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Winter Squashes

Delicious. A very early winter variety of medium size; shell moderately hard, very thin; flesh thick, fine grained and of a light yellow color. It varies somewhat in color and form, usually oval-shaped, with green, smooth skin, sometimes slightly mottled. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Boston Marrow (or Squash Pumpkin). A fall and winter variety, very popular, oval form, thin reddish skin, when ripe, bright orange color. Excellent for pies, very sweet, and a heavy cropper. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 80c.

Fordhook Squash. This is a most desirable squash for either summer or winter use. The vines are of strong, vigorous growth and wonderfully productive. Squash oblong in form, eight or ten inches in length, slightly ridged; smooth, thin, yellowish skin; flesh very thick and of a light yellow color. If gathered young for cooking, no other squash approaches it in flavor, while if allowed to ripen on the vine they can be stored and will keep in excellent condition until late the following June. Either for baking like sweet potatoes or making pies during the winter, the squash is very fine. Pkt., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Golden Hubbard. A very superior variety, flesh bright orange-yellow; dry, sweet and rich flavored, good keeper, boils or bakes exceedingly dry. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Hubbard

Warted Hubbard. This is, in quality, one of the best winter sorts. It is attractive on the market and a ready seller. Very dark green, and flesh is dry and sweet. Very hard shell, which insures good keeping qualities. It is considered an improvement on the old type of Hubbard on account of its warted skin. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Mammoth Chili. The largest of all Squashes; grows to an enormous size. One of the most profitable sorts for stock feeding. Keeps well throughout the winter; extensively grown for prize exhibits. Flesh fine-grained, excellent for pies. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

TOBACCO

Culture—A very clean piece of land is best for the tobacco plant beds, hence it is customary to burn a piece of land in the woods for same. This destroys grass, weeds and insects, adds fertility through the action of the wood ashes, and leaves the ground in good order. The seeds are sown about February, and protected by plant-bed cloth to keep off tobacco flies. When large enough and weather is settled (about June), set the plants out in highly manured or fertilized soil in $3\frac{1}{2}$ foot rows, 3 feet between the plants. Constant care must be given, cultivating, suckering, worming, etc. Methods of curing differ according to the variety and color, whether to be sun or flue-cured, etc.

Choice Havana. An Americanized Havana, used for cigar purposes, although sometimes used as a manufacturing sort. Has a very large, long, fine quality leaf; very early; making two crops a season in some sections. Best adapted to chocolate or rich gray soils. Pkt., 10c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.25.

Connecticut Seed Leaf. Our seed is Connecticut grown; a stocky plant; leaves not very long, but of good width; suitable for cigar fillers. Pkt., 10c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.25.

TOMATO

Culture—For very early fruit, the seed should be sown in a hot-bed about the first week in March, in drills five inches apart and one-half inch deep. Later sowings may be made until the last of April. (Sufficient plants for a small garden can be started by sowing a few seeds in a shallow box or flower pot and placing in a sunny window in the house.) When the young plants are 3 to 4 inches high, they should be set 4 to 5 inches apart in another hotbed or cold-frame, or transplanted into small pots, allowing a single plant to a pot. Expose to the air as much as possible to harden them for planting out. Water freely at the time of transplanting into the open ground and shelter from the sun a few days until the plants are thoroughly established. Cultivate thoroughly as long as the vines will permit, but the last two or three workings of the soil should be very shallow or the crop may be badly injured.

Earliana—One of the new standards of recent introduction, ripening ahead of other and later varieties, medium in size, fruit growing in clusters. Very solid, and a good acquisition. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Chalk's Early Jewel—The largest, smoothest and finest flavored, extra early bright red tomato. It is a heavy cropper, with tomatoes of large size and sweet flavor, producing throughout the season. The plants are of bushy, compact growth, heavily loaded with fruit. The tomatoes are of good size, just right for market; are very solid and deep through, being almost round; color bright scarlet, ripening to stem without cracks or green core. The flesh is thick, solid, of fine flavor, with few seeds. The skin is strong enough to make it a good shipping variety. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Bonny Best—This is a superior early variety, over a week earlier than Earliana, and immensely productive, producing smooth, even-sized, globular-shaped fruit, of a rich bright scarlet color. Ripens evenly without spots or cracks, and is a valuable addition to the family or market garden. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Greater Baltimore—An excellent main-crop sort, producing large, solid, smooth fruit of a brilliant red color. It ripens evenly to the stem and is entirely free from ridges. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

John Baer—A few days earlier than Earliana, it yields a much heavier crop of larger, more uniform and more attractive fruits—generally returns the biggest profits of any extra early variety. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Acme—105 days—One of the most popular varieties; vines large, and produce abundantly until frost. Fruit in clusters, color maroon or reddish, with slight tinge of purple, invariably smooth and round, of good size and unusually solid, is a good shipper. Pkt., 5c.; oz., 30c.; $\frac{1}{4}$ lb., 90c.; lb., \$3.00.

Red Stone

Red Stone—115 days—A well known and favorite variety, rich color, solid flesh, and desirable in every way. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Dwarf Stone (Tree Tomato)—Large, red, smooth and solid; the stalk is upright with very dense foliage protecting fruit from heat of sun. A most desirable tomato. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Golden Queen—Well known as one of the best; vines of medium size, but producing large quantities of fruit, which is large, smooth, and bright yellow in color. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Beefsteak or Ponderosa—One of the best; color maroon, solid flesh, very productive. Pkt., 10c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.25; lb., \$5.00.

Red Rock—This is one of the finest large red Tomatoes ever introduced. It ranks among the latest varieties, requiring about 110 days from seed-sowing to ripe fruit. It is very solid and free from any excess of water; smooth and of a very fine and red color. Superior in texture and flavor. It is an extraordinary heavy producer and excellent shipper. Twenty-five tons of fruit have been grown to the acre. It is especially recommended to truckers and growers for canning factories, as it is very showy and productive. It has a very strong, vigorous vine protecting the fruit from sunscald. Pkt., 5c.; oz., 30c.; $\frac{1}{4}$ lb., 90c.; lb., \$3.00.

TOMATO—Continued

SMALL FRUITED VARIETIES

Yellow Plum—Fruit plum-shaped, of a clear, deep yellow color; flesh yellow and finely flavored. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.25; lb., \$5.00.

Yellow Husk, or Ground Cherry—Used for preserving and eating from the hand. The seed we offer is that of the true Yellow Ground Cherry, not the purple-fruited sort which is scarcely edible. Excellent for making pies. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.25; lb., \$5.00.

Peach—Fruit resembles a small peach in size and shape. The color is a light terra cotta red. Skin and flesh thick. Used principally for preserving and table decoration. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.25; lb., \$5.00.

Red Cherry—Fruit the size of a large cherry, perfectly round and smooth. Used for preserving. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.25; lb., \$5.00.

TOMATO PLANTS

Ready about May 1st.

Large quantities matter of correspondence.
Improved Stone, Bonny Best, Greater Baltimore, Chalk's Early Jewel Dwarf Stone, Sparks' Earliana, Livingston's Beauty, Yellow Egg.

Pot Grown—Doz., \$1.00; 100, \$5.00.

Transplanted—Doz., 40c.; 100, \$1.50.

All plants packed in live moss, to insure long shipment. No plants shipped on Saturday.

TURNIP

(Maturing from 60 to 90 days, according to variety and season.)

Early Flat Dutch—This is a quick growing, strap-leaved, white variety, resembling the Flat Red Top excepting that its top is white. A favorite sort for either the market or family garden. Has a mild, pleasant flavor, and is as desirable in every way as the Red Top Flat. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 60c.

Early Flat Red or Purple Top

Early Flat Red or Purple Top—(Strap Leaved)—Very similar to the preceding except in color, being purple or dark red on top; form round, flat, with but few leaves, which are of upright growth. This is the standard variety, and there is none better for general purposes. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 60c.

Large Purple Top Globe

Cow Horn—This variety is carrot-shaped, and grows nearly half out of the ground; is pure white, except slight shade of green at top. It is well flavored, of rapid growth, and seems to

be increasing in flavor every year. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Large Purple, or Red Top Globe—An excellent variety, globe shaped and heavy cropper; this variety is rapidly taking the lead among growers for market garden purposes; it is also a good one for stock. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 60c.

Yellow, or Amber Globe—(Strap Leaved)—This is one of the best of the rough leaved sorts, for either table use or for stock; yellow, fine grained and sweet; hardy, keeps well, is a good cropper, and grows to a very large size. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

Golden Ball—A small yellow turnip of second size. Early. and a good keeper. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

Yellow Aberdeen (Green Top)—This is a very nutritious turnip; flesh pale yellow, tender and sugary; is a good keeper, hardy and productive. It is an old favorite, and for stock purposes hard to beat. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

Yellow Aberdeen (Purple Top)—Very hardy and productive, a good keeper; globe shaped. Color pale yellow, with purple top. Very firm in texture, and closely resembling the rutabaga in good keeping qualities. Good either for table or stock. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 60c.

RUTABAGAS

SWEDISH TURNIP

Rutabaga

Kelway's Perfect Model—We cannot speak too highly of this new but justly celebrated Swede brought out by Kelway, being a fresh selection of a heavy cropping rutabaga with a small purple top, free from that stringiness found in some. Tender and sweet, the absolute acme of perfection.

Although a long keeping variety, it is remarkable for being the first in coming to maturity.

Market gardeners should not neglect the opportunity to secure this money maker. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Improved Purple Top Yellow Swede—This is the standard and most important now cultivated for stock purposes; noted for rapid growth, large size and nutritious quality, and cannot be too highly recommended. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

White Fleshed Purple Top Rutabaga—This differs mainly from the preceding in color; possesses most of the good qualities of the yellow, but is of slightly milder flavor, is not as valuable for stock as the yellow. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

HERBS

Most of the varieties of herbs thrive best on sandy soil and some are stronger and better flavored when grown on that which is rather poor. In all cases the soil should be carefully prepared and well cultivated, as the young plants are for the most part delicate and easily choked out by weeds.

Sow as early as the ground can be made ready, in drills 16 to 18 inches apart, taking pains that the soil is fine and pressed firmly over the seed, or they may be planted as a second crop—the seeds sown in beds in April and the plants set out in June. Most of them should be cut when in bloom, wilted in the sun and thoroughly dried in the shade.

Those marked with (*) are perennial, and when once obtained in the garden, may be preserved for years with a little attention.

ANISE. An annual herb cultivated principally for its seeds, which have a fragrant, agreeable smell and a pleasant taste; used medicinally for aromatic cordials, colic and nausea. The leaves are sometimes used for garnishing and flavoring. Plant of slender upright growth with deeply cut foliage; flowers small, yellowish-white, borne in large loose umbels. **Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.25.**

BASIL, SWEET. A hardy, aromatic annual. The seeds and stems have a strong flavor and are used in soups and sauces. Plant about eighteen inches high, branching, with ovate toothed leaves; flowers white or bluish-white in leafy terminal racemes or spikes. **Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.**

CARAWAY. A well known herb, cultivated for its seeds, which are used in confectionery, cakes, etc. The leaves are sometimes used in soups, for flavoring liquors and for colic in children. Plant 1½ to 2 feet high, with finely cut foliage and clusters of small, white flowers. Plants never seed till the second year. **Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.**

CORIANDER. A hardy annual cultivated for its seed, which has an agreeable taste and is used in confectionery and to disguise the taste of medicine. Gather on a dry day, bruising the stems and leaves as little as possible, for when injured they have a disagreeable odor which they impart to the seed. Plant slender, 2 to 2½ feet high, strong smelling, with smooth, finely cut foliage and small white flowers. **Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.**

*CATNIP OR CATMINT. A hardy perennial, the leaves of which are used for medicinal purposes. An excellent tonic for cats. **Pkt., 15c.; oz., 60c.**

DILL. An annual of aromatic odor and warm pungent taste. Its seeds are used for seasoning. It possesses medicinal properties but its largest use is for making Dill pickles. Plant branching, 2 to 3 feet high; leaves very much cut into thread-like segments. **Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.**

FENNEL, FLORENCE. The seeds of this aromatic herb have a pleasant taste, and are sometimes used in confectionery, also in various medicinal preparations. The young shoots are sometimes eaten raw and are used in salads, soups and fish sauces. Plant very branching, 2 to 4 feet high, with dense thread-like foliage; flowers light yellow in large loose umbels. Seed oval. **Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.**

*HOREHOUND. A perennial herb with an aromatic odor and a bitter, pungent taste. It is a tonic and enters largely into the composition of cough syrups and lozenges. Laxative in large doses. Will thrive in any soil but is stronger if grown on light, poor land. Plant spreading, one to two feet high; leaves ovate, roughened, covered with whitish down; flowers small, white, borne at axils of leaves. **Pkt., 5c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.50.**

*PENNYROYAL. Leaves are used for seasoning. It also has medicinal properties. **Pkt., 10c.; ½ oz., 40c.**

*LAVENDER. A hardy perennial, growing about two feet high. It is used for the distillation of lavender water or dried and used to perfume linen. It should be picked before it becomes dry and hard, and dried quickly. The seed is of rather slow and uncertain germination. Plant erect, with slender grayish-green leaves and small violet-blue flowers. **Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.**

MARJORAM, SWEET. An aromatic herb for seasoning. The young tender tops and leaves are used green in summer to flavor broths, dressings, etc., and are also dried for winter use. Usually grown as an annual as it is not hardy enough to endure the winter of the northern states. Plant erect but branching with small oval grayish-green leaves and small purplish or whitish flowers. **Pkt., 10c.; oz., 25c.; ¼ lb., 70c.; lb., \$2.50.**

PARSLEY. See page 24.

*ROSEMARY. A hardy perennial, with fragrant odor and a warm bitter taste. The leaves are used for flavoring meats and soups, and for medicinal drinks. Plant erect, branching with small slender leaves and small light blue flowers. The blossoms form the principal ingredient in the distillation of toilet waters. Plants do not reach a size suitable for use until the second season. **Pkt., 10c.; oz., 40c.; ¼ lb., \$1.35; lb., \$5.00.**

*SAGE. One of the most extensively used herbs for seasoning. It is also believed to possess medicinal properties. Hardy perennial, about 15 to 18 inches high. Plant very branching; flowers usually blue, sometimes pink or white; leaves grayish-green, oval, wrinkled. Cut the leaves and tender shoots just as the plant is coming into flower and dry quickly in the shade. The plants will survive the winter and may be divided. If this is done they will give a second crop superior in quality. **Pkt., 10c.; oz., 45c.; ¼ lb., \$1.35; lb., \$4.75.**

SAVORY, SUMMER. A hardy aromatic annual, 12 to 15 inches high, the dried stems, leaves and flowers of which are extensively used for seasoning, especially in dressings and soups. Plant erect, branching; leaves small, narrow; flowers small, purple, pink or white, borne in short spikes. **Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.00.**

*THYME. An aromatic perennial herb, eight to ten inches high, used principally for seasoning. Plant very branching with wiry foliage and small lilac flowers. Sometimes the leaves are used to make a tea for the purpose of relieving nervous headache. Sow as early as the ground will permit. **Pkt., 10c.; oz., 50c.; ¼ lb., \$1.75; lb., \$6.00.**

*WORMWOOD. A perennial plant of fragrant and spicy odor, but with intensely bitter taste. The leaves are used as a tonic, vermifuge and as a dressing for fresh bruises. Plant erect, two to three feet high, with much divided leaves and loose clusters of small light yellow flowers. It may be raised from seed, propagating by cuttings or dividing the roots. A dry, poor soil is best adapted to bring out the peculiar virtues of this plant. **Pkt., 5c.; oz., 20c.; ¼ lb., 70c.; lb., \$2.50.**

NURSERY STOCK

IN SEASON WE CARRY FRUIT TREES AND BERRY BUSHES IN STOCK

Strawberries—Early and late varieties.
Blackberries—In strong plants, rust-proof.
Gooseberries—All varieties, in one and two-year plants.
Currants—Many varieties, including Boskoop Black Giant.

Raspberries—The Ranere or St. Regis and various other kinds.
Grapes—All colors, early and late.
Hedge plants—California Privet, Berberis Thunbergii, Golden Privet.
Evergreens, Roses, Shade Trees, etc.

COMMON OR ENGLISH AND BOTANICAL NAMES OF POPULAR FLOWERS AND PLANTS

Abutilon—*Flowering Maple*.
 Achillea—*Milfoil, Sneezewort*.
 Aconitum—*Helmet Flower, Monk's Hood, Wolf's Bane*.
 Acroclonium—*Everlastings*.
 Adam's Needle—*Yucca*.
 Adiantum—*Maiden Hair Fern*.
 Adlumia—*Allegheny Vine, Mountain Fringe*.

Adonis aestivalis—*Pheasant's Eye*.
 African Lily—*Agapanthus*.
 Agapanthus—*African Lily*.
 Ageratum—*Floss Flower*.
 Agrostemma—*Rose Campion*.
 Allegheny Vine—*Adlumia*.
 Aloysia citriodora—*Lemon Verbena*.
 Althaea rosea—*Hollyhock*.
 Althaea—*Rose of Sharon*.
 Alyssum saxatile—*Basket of Gold*.
 Amaranthus caudatus—*Love Lies Bleeding*.
 Amaranthus tricolor—*Joseph's Coat*.
 Amarylloformosissima—*Jacobaeae Lily*.
 Amethyst—*Browallia*.
 Ampelopsis Veitchii—*Boston Ivy*.
 Anchusa—*Sea Bugloss*.
 Anemone—*Windflower*.
 Anthericum—*St. Bruno's Lily*.
 Antirrhinum—*Snapdragon*.
 Aquilegia—*Columbine*.
 Arabis—*Red Cress*.
 Aristolochia—*Dutchman's Pipe*.
 Armeria—*Sea Pink, Thrift*.
 Artemisia absinthium—*Wormwood*.
 Asparagus Fern—*Asparagus plumosus*.
 Asperula—*Waldmeister, Woodruff*.

Baby's Breath—*Gypsophila*.
 Baby Primrose—*Primula Forbesii*.
 Bachelor's Button—*Centaurea, Gomphrena, Bellis*.
 Balloon Vine—*Cardiospermum*.
 Balsam—*Lady Slipper*.
 Balsam Apple—*Momordica*.
 Basket of Gold—*Alyssum saxatile*.
 Beard Tongue—*Pentstemon*.
 Bell Flower—*Campanula*.
 Bellflower Lily—*Lilium canadense*.
 Bellis—*Bachelor's Button, English Daisy*.
 Bignonia—*Trumpet Vine*.
 Black Eyed Susan—*Thunbergia*.
 Blanket Flower—*Gaillardia*.
 Blue Bottle—*Centaurea cyanus*.
 Bluets—*Centaurea cyanus*.
 Boston Ivy—*Ampelopsis Veitchii*.
 Brachycome—*Swan River Daisy*.
 Bridal Wreath—*Spiraea prunifolia*.
 Briza—*Quaking Grass*.
 Browallia—*Amethyst*.
 Buddleya—*Butterfly Bush*.
 Bush Eschscholtzia—*Hunnemannia*.
 Buttercup—*Trollius*.
 Butterfly Bush—*Buddleya*.
 Butterfly Flower—*Schizanthus*.
 Buxus—*Boxwood*.

Cacalia—*Tassel Flower*.
 Caladium—*Elephant's Ear*.
 Calendula—*Pot Marigold*.
 California Poppy—*Eschscholtzia*.
 Callirhoe—*Poppy Mallow*.
 Campanula calyc.—*Cup and Saucer*.
 Campanula carpatia—*Hare Bell*.
 Campion—*Lychnis*.
 Canarybird Flower—*Tropaeolum Canariense*.
 Candytuft—*Iberis*.
 Canna—*Indian Shot*.
 Canterbury Bells—*Campanula*.
 Cape Jessamine—*Gardenia florida*.

Cardinal Flower—*Lobelia Cardinalis*.
 Castor Oil Beans—*Ricinus*.
 Catchfly—*Silene*.
 Catalpa—*Umbrella Tree*.
 Centaurea cyanus—*Bachelor's Button, Cornflower, Blue Bottle, Bluets, Ragged Sailor*.
 Centaurea Imperialis—*Sweet Sultan*.
 Celosia cristata—*Cockscomb*.
 Cerastium—*Snow in the Summer*.
 Chinese Bell Flower—*Platycodon*.
 Chrysanthemum frutescens—*Marguerite, Paris Daisy*.
 Clove Pinks—*Dianthus plumarius*.
 Cockscomb—*Celosia cristata*.
 Coix—*Job's Tears*.
 Columbine—*Aquilegia*.
 Cone Flower—*Rudbeckia*.
 Convolvulus—*Morning Glory*.
 Coral Lily—*Lilium tenuifolium*.
 Cornflower Aster—*Stokesia*.
 Cornflower—*Centaurea cyanus*.
 Cornus florida—*Dogwood*.
 Cowslip—*Primula veris*.
 Crane's Bill—*Geranium*.
 Cup and Saucer—*Campanula calyc.*
 Cycas—*Sago Palm*.
 Cyperus—*Umbrella Plant*.
 Cypress Vine—*Ipomea Quamoclit*.

Daisy—*Bellis perennis*.
 Datura cornucopia—*Horn of Plenty*.
 Datura—*Trumpet Flower*.
 Delphinium—*Larkspur*.
 Dianthus barbatus—*Sweet William*.
 Dianthus—*Pinks*.
 Digitalis—*Foxglove*.
 Dimorphotheca—*Orange Daisy*.
 Dogwood—*Cornus florida*.
 Dolichos—*Hyacinth Bean*.
 Dusty Miller—*Centaurea gymnocarpa*.
 Dusty Miller—*Cineraria Maritima*.
 Dutchman's Pipe—*Aristolochia*.

Echinops—*Globe Thistle*.
 Echinocystis—*Wild Cucumber*.
 Edelweiss—*Leontopodium*.
 Egyptian Lotus—*Nelumbium*.
 Elephant Ears—*Caladium*.
 English Daisy—*Bellis*.
 English Primrose—*Primula vulgaris*.
 Erianthus—*Plume Grass*.
 Eulalia—*Zebra Grass*.
 Euphorbia—*Mexican Fire Plant*.
 Evening Primrose—*Oenothera*.
 Everlastings—*Acroclonium, Gomphrena, Helichrysum, Rhodanthe, Xeranthemum*.
 Everlasting Pea—*Lathyrus latifolius*.

Fairy Lily—*Zephyranthes*.
 Feather Grass—*Stipa*.
 Feverfew—*Matricaria*.
 Flax—*Linum*.
 Fleur de lis—*Iris germanica*.
 Floss Flower—*Ageratum*.
 Flowering Maple—*Abutilon*.
 Flowering Tobacco—*Nicotiana*.
 Forget-me-not—*Myosotis*.
 Forsythia—*Golden Bell*.
 Four o'Clocks—*Mirabilis*.
 Foxglove—*Digitalis*.
 Fuchsia—*Lady's Ear Drop*.

Gaillardia—*Blanket Flower*.
 Garden Heliotrope—*Valeriana*.
 Gardenia florida—*Cape Jessamine*.
 Geranium—*Crane's Bill*.
 Gilliflower—*Stocks*.
 Globe Amaranth—*Gomphrena*.
 Globe Flower—*Trollius*.
 Globe Thistle—*Echinops*.
 Gold Dust—*Alyssum saxatile*.
 Golden Bell—*Forsythia*.
 Golden Feather—*Pyrethrum aureum*.
 Golden Rod—*Solidago*.
 Gomphrena—*Everlastings, Globe Amaranth, Bachelor's Button*.
 Grass Pinks—*Dianthus plumarius*.
 Gynerium—*Pampas Grass*.
 Gypsophila—*Baby's Breath*.

Hare Bell—*Campanula carpatia*.
 Heart's Ease—*Pansy*.
 Helenium—*Sneezewort*.
 Helianthus—*Sunflower*.
 Helichrysum—*Strawflower*.
 Helmet Flower—*Aconitum*.
 Hesperis—*Sweet Rocket, Rocket*.
 Hollyhocks—*Althaea rosea*.
 Honesty—*Lunaria*.
 Hops—*Humulus*.
 Horn of Plenty—*Datura cornucopia*.
 Hunnemannia—*Bush Eschscholtzia*.
 Hyacinth Bean—*Dolichos*.

Ice Plant—*Mesembryanthemum*.
 Indian Shot—*Canna*.
 Ipomea noctiflora—*Moonflower*.
 Ipomea Quamoclit—*Cypress Vine*.

Jacobaeae Lily—*Amaryllis formos.*
 Japan Pinks—*Dianthus Heddewigii*.
 Jerusalem Cherry—*Solanum capsicastrum*.
 Job's Tears—*Coix*.
 Joseph's Coat—*Amaranthus tricolor*.

Kalmia latifolia—*Mountain Laurel*.
 Kenilworth Ivy—*Linaria cymbalaria*.
 Kochia—*Mexican Fire Bush, Summer Cypress*.
 Kudzu Vine—*Pueraria*.

Lady's Ear Drop—*Fuchsia*.
 Lady's Slipper—*Balsam*.
 Larkspur—*Delphinium*.
 Lathyrus latifolius—*Everlasting Pea*.
 Lemon Verbena—*Aloysia citriodora*.
 Leontopodium—*Edelweiss*.
 Lilac—*Syringa*.
 Lily of the Valley—*Convallaria*.
 Lobelia cardinalis—*Cardinal Flower*.
 Love Grove—*Nemophila*.
 Love in a Mist—*Nigella*.
 Love Lies Bleeding—*Amaranthus caudatus*.
 Linaria cymbalaria—*Kenilworth Ivy*.
 Lunaria—*Honesty, Moonwort*.
 Lychnis—*Ragged Robin, Rose Campion*.

Maiden Hair Fern—*Adiantum*.
 Mallow—*Hibiscus*.
 Marguerite—*Chrysanthemum frutescens*.
 Marigold—*Tagetes*.
 Marshmallow—*Hibiscus*.
 Marvel of Peru—*Mirabilis*.
 Matricaria—*Feverfew*.
 Mesembryanthemum—*Ice Plant*.
 Mexican Fire Bush—*Kochia*.
 Mexican Fire Plant—*Euphorbia*.
 Michaelmas Daisy—*Aster perennis*.
 Mignonette—*Reseda*.
 Mimosa—*Sensitive Plant*.
 Mimulus moschatus—*Musk Plant*.
 Mirabilis—*Four o'Clocks, Marvel of Peru*.
 Mock Orange—*Philadelphus*.
 Momordica Balsamina—*Balsam Apple*.
 Monk's Hood—*Aconitum*.
 Moonflower—*Ipomea noctiflora*.
 Moonwort—*Lunaria*.
 Morning Glory—*Convolvulus*.
 Moss Pink—*Phlox subulata*.
 Mountain Fringe—*Adlumia*.
 Mountain Laurel—*Kalmia latifolia*.
 Mourning Bride—*Scabiosa*.
 Musk Plant—*Mimulus moschatus*.
 Myosotis—*Forget-me-not*.
 Myrtle—*Vinca minor*.
 Nemophila—*Love Grove*.
 Nicotiana—*Flowering Tobacco*.
 Nigella—*Love in a Mist*.

Oenothera—*Evening Primrose*.
 Orange Daisy—*Dimorphotheca*.
 Ox-Eye—*Adonis vernalis*.
 Painted Tongue—*Salpiglossis*.
 Pampas Grass—*Gynerium*.
 Paris Daisy—*Chrysanthemum frutescens*.
 Passiflora—*Passion Flower*.
 Peach Bells—*Campanula persicifolia*.
 Pentstemon—*Beard Tongue*.
 Periwinkle—*Vinca*.

Phalaris—*Ribbon Grass*.
 Pheasant's Eye—*Adonis aestivalis*.
 Phlox drummondii—*Flame Flower*.
 Phlox subulata—*Moss Pink*.
 Pincushion Flower—*Scabiosa*.
 Pinks—*Dianthus*.
 Platycodon—*Chinese Bell Flower*.
 Plume Grass—*Erianthus*.
 Polyanthus—*Primula elatior*.
 Poppy Mallow—*Callirhoe*.
 Poppy—*Papaver*.
 Pot Marigold—*Calendula*.
 Pueraria—*Kudzu Vine*.
 Pyrethrum aureum—*Golden Feather*.

Quaking Grass—*Briza*.

Rag Gourd—*Cucumis acutangulus*.
 Ragged Robin—*Lychnis*.
 Ragged Sailor—*Centaurea cyanus*.
 Red Hot Poker Plant—*Tritoma*.
 Reseda—*Mignonette*.
 Rhodanthe—*Everlastings*.
 Ribbon Grass—*Phalaris*.
 Rock Cress—*Arabis*.
 Rocket—*Hesperis*.
 Rose Campion—*Agrostemma*.
 Rose Campion—*Lychnis*.
 Rose of Sharon—*Althaea*.
 Rudbeckia—*Cone Flower*.

Sago Palm—*Cycas*.
 Salpiglossis—*Painted Tongue*.
 Satin Flower—*Godetia*.
 Scabiosa—*Mourning Bride*.
 Scabiosa—*Pincushion Flower*.
 Scarlet Sage—*Salvia splendens*.
 Schizanthus—*Butterfly Flower*.
 Sea Lavender—*Statice*.
 Sensitive Plant—*Mimosa*.
 Silene—*Catchfly*.
 Snapdragon—*Antirrhinum*.
 Sneezewort—*Helenium*.
 Sneezewort—*Achillea*.
 Snowball—*Viburnum*.
 Snow in the Summer—*Cerastium*.
 Snow on the Mountain—*Euphorbia*.
 Solanum capsicastrum—*Jerusalem Cherry*.
 Solidago—*Golden Rod*.
 Speedwell—*Veronica*.
 Spider Plant—*Cleome*.
 Statice—*Sea Lavender*.
 Stipa—*Feather Grass*.
 Stocks—*Gilliflower*.
 Stokesia—*Cornflower Aster*.
 Strawflower—*Helichrysum*.
 Summer Cypress—*Kochia*.
 Sunflower—*Helianthus*.
 Swan River Daisy—*Brachycome*.
 Sweet Rocket—*Hesperis*.
 Sweet Sultan—*Centaurea Imperialis*.
 Sweet William—*Dianthus barbatus*.
 Syringa—*Lilac*.

Tagetes—*Marigold*.
 Tassel Flower—*Cacalia*.
 Thunbergia—*Black Eyed Susan*.
 Tobacco—*Nicotiana*.
 Tritoma—*Red Hot Poker*.
 Trollius—*Buttercup*.
 Trumpet Flower—*Datura*.
 Trumpet Vine—*Bignonia*.
 Tufted Pansies—*Viola cornuta*.

Umbrella Plant—*Cyperus*.
 Umbrella Tree—*Catalpa*.

Viburnum—*Snowball*.
 Vinca minor—*Myrtle*.
 Vinca—*Periwinkle*.
 Viola cornuta—*Tufted Pansies*.
 Virgin's Bower—*Clematis*.
 Virginia Creeper—*Ampelopsis quinquefolia*.

Waldmeister—*Asperula*.
 Wallflower—*Cheiranthus*.
 Wild Cucumber—*Echinocystis*.
 Windflower—*Anemone*.
 Woodruff—*Asperula*.
 Wormwood—*Artemisia absinthium*.

Xeranthemum—*Everlastings*.

Yarrow—*Achillea*.
 Youth and Old Age—*Zinnia*.

Zebra Grass—*Eulalia*.
 Zephyranthes—*Fairy Lily*.
 Zinnia—*Youth and Old Age*.

MINGLE'S SELECTED FLOWER SEEDS

WITH GENERAL DIRECTIONS FOR CULTIVATION

Plant flowers for your table, flowers for your home, and flowers for your friends. You can never have too many flowers. An abundance of pretty bouquets can be had with so little work and so little expense that every home should have the cheering influence of flowers. The culture of many is so very simple that anyone can succeed. Flowers are divided into three classes: **Annuals** which produce flowers, mature, and die in one season. **Biennials**, which grow from seed one year and bloom and die the second year. Many of these will produce flowers the first year if sown early enough. **Perennials**, which live for several years producing flowers annually after the first season. These are grown from seed and also by setting out cuttings, slips, or divisions of roots. Perennials are very satisfactory as they live for many years and produce large quantities of very beautiful flowers. **Culture Directions** are given on the back of each packet. A general rule is to cover the seed to a depth of about four times the diameter of the seed. **Mingle's Flower Seeds** are assembled from all parts of the world and you will find in the following pages a very complete assortment of the very best varieties.

ACHILLEA (Milfoil or Yarrow)

Ptarmica—"The Pearl." Large double pure white flowers borne in great profusion from Spring until frost. Splendid cut flower for vases. Perennial. **Pkt., 10c.**

ACROCLINIUM (Everlasting)

Very pretty summer flowering annual plants for garden decoration. Flower cup-shaped, daisy-like in white and rose shades. These are the "Immortelles" so desirable for winter bouquets. Height 1 foot.

Culture. Sow the seed outdoors when all danger of frost is over. The young plants should be thinned to 4 inches apart.

Roseum fl. pl. Double Rose..... **Pkt., 10c.**

" " " " **White**..... " "

" **Double Mixed**..... **Pkt. 10c.; 1/4 oz., 20c.**

African Golden Daisy. See *Dimorphotheca*, page 41.

AGERATUM (Floss Flower)

One of the best summer flowering annuals, very profuse bloom from early summer till frost. Very satisfactory as a bedding plant because their flowers are not injured by rain nor do their colors fade.

Culture. Sow in frames, or sunny window and when warm weather sets in transplant to the open ground, setting the plants 12 inches apart in open border. Seed may be sown in open ground when danger of frost is past.

Blue Perfection. Large heads of deep amethyst blue compact growth, splendid bedder, height about 8 inches. **Pkt., 10c.; 1/4 oz., 40c.**

Little Blue Star. A variety of very dwarf and even growth plants about 4 to 5 inches high, densely covered with light blue flowers. **Pkt., 20c.**

Imperial Dwarf White. Pure white, very fine for borders or beds. Height about 8 inches. **Pkt., 5c.; 1/4 oz., 20c.**

Dwarf Mixed Imperial **Pkt., 5c.; 1/4 oz., 15c.**

AGROSTEMMA

An attractive free flowering hardy perennial, easy culture, producing crimson flowers on long stems like a single pink. Blossoms the first season.

Culture. Sow in open ground from early spring to summer. Thin out plants to 6 inches apart.

Coronaria—(Rose campion.) Bright crimson flowers, silvery-white foliage. **Pkt., 5c.**

ALYSSUM (Mad Wort)

A fragrant hardy annual, bearing spikes of small white flowers in great profusion throughout the summer and autumn. Unsurpassed for borders, hanging baskets, and rock gardens.

Culture. In the garden. Sow the seeds thickly so as to form masses early in the spring or even the previous autumn. For winter bloom sow late in August and thin the seedlings to about a dozen to a basket. After the first flowers fade cut back and others will come.

Border of Alyssum

Maritimum. (Sweet Alyssum.) Pure snow-white flower of delicious fragrance. Blooms from early spring until frost. Height, 9 inches. **Pkt., 5c.; 1/4 oz., 10c.; oz., 30c.**

Procumbens. (Little Gem or Carpet of Snow.) A very pretty dwarf variety, compact growth only. 5 inches high. A solid mass of snow-white flowers from early summer until late autumn. **Pkt., 5c.; 1/4 oz., 20c.; oz., 50c.**

Compactum Lilac. (Lilac Queen.) A distinct variety, very compact growth, only 4 inches high. Very pretty flowers of a pure lilac color. **Pkt., 5c.; 1/4 oz., 25c.**

Saxatile Compactum. (Basket of Gold.) A hardy perennial variety for beds or edging. The flowers are produced in large clusters and are of a most brilliant golden-yellow. Height, 9 inches. **Pkt., 10c.; 1/4 oz., 40c.**

AMARANTHUS

A hardy annual of easy culture. Very ornamental either in the flower border or for center of beds. The foliage is exceedingly brilliant, while some of the varieties bear curious racemes of flowers. Height, 3 to 5 feet.

Culture. Of easy culture, doing best in warm sunny location, while the exquisite foliage colorings do better in rich loam soil. Sow in hotbed in April and plant out in May. Plants to stand 2 to 3 feet apart.

Caudatus. (Love Lies Bleeding.) Rapid growing garden annual with long drooping crimson racemes. Height, 3 feet. Pkt., 5c.

Tricolor. (Joseph's Coat.) Foliage curiously variegated with bronze, green and scarlet. Very striking as a border or for center of beds. Pkt., 5c.

AMPELOPSIS**(Boston Ivy)**

A well known hardy perennial climbing plant with green leaves which turn beautiful shades of red in the autumn.

Culture. Plant early in hotbed and transplant when well established to place where there are to stand permanently. Seed may be sown outdoors after all danger of frost is past.

Veitchi. The most popular climber for covering brick or stone buildings or walls. Pkt., 10c.; oz., 40c.

AQUILEGIA**(Columbine)**

A beautiful hardy perennial, easily grown from seed. A most desirable border plant forming large clumps. Blooms early, long and abundantly. Very desirable for vases and table decorations.

Culture. Sow in boxes, $\frac{1}{8}$ -inch deep in fine soil from spring to late summer, transplanting the seedling into rich deep soil 1 foot apart.

Chrysantha. (Golden spurred yellow.) Beautiful golden-yellow color. Pkt., 15c.; $\frac{1}{8}$ oz., 45c.

Glandulosa. One of the handsomest perennial, blossoms 3 inches in diameter of the deepest blue with white corolla. Pkt., 15c.; $\frac{1}{8}$ oz., 45c.

Jaetschani. Beautiful long red spurs with light yellow corolla. Very large blossoms. Pkt., 25c.; $\frac{1}{8}$ oz., 50c.

Collection. 1 pkt. each of above, 50c.

Double Flowering Mixed. Beautiful long spurred large double flowers formed of several rows of cornucopia like petals and in various shades of yellow, blue, lavender and white. Pkt., 10c.; $\frac{1}{4}$ oz., 60c.

ASPAGUS

This makes a most attractive and graceful pot plant. Very desirable for cutting for greenery to mix with flowers.

Culture. Sow in light soil covering $\frac{1}{2}$ -inch, keeping regularly moist and transplant to small pots soon as large enough to handle. Repot as required using a very rich compost to encourage the formation of perfect fronds.

Plumosus. An excellent greenhouse climber with fern-like foliage. Pkt., 25c.; per 100 seeds, 60c.

ASPERULA

Sweet scented pretty plants for borders or rock work. Succeeds finely in shady places. Continuously in bloom throughout the summer. Height, 10 inches.

Culture. Sow in boxes covering lightly with fine earth. Transplant late in spring to six inches apart.

Azurea Steosa. Light blue flowers very adaptable for bouquets. Pkt., 5c.

ANTIRRHINUM**(Snap Dragon)**

One of the most showy and useful border plants. We offer two kinds of snap dragons. The tall growing and the half dwarf, the plants of which vary in size but have equally large blooms. Snap Dragons have large brilliantly colored spikes with exceptionally sweet fragrance. They succeed in any good garden soil, and are very effective in beds. Very desirable for cutting. Blooming from June until late autumn.

Culture. Seed may be started under glass for early flowering. Sow outdoors in May, $\frac{1}{8}$ inch deep, thinning out the seedlings in good rich soil 1 foot apart.

GIANT VARIETIES, 2 to 3 feet

Venus. Beautiful pale pink with white throat . . .	Pkt., 10c.
Ruby. Rich ruby-red	" "
Yellow. Beautiful golden-yellow	" "
Queen Victoria. Pure white	" "
Collection, 1 pkt. each of above	35c.
Giant Mixed	Pkt. 10c.; $\frac{1}{4}$ oz. 25c.

HALF DWARF VARIETIES

These semi-dwarf varieties produce as large flowers as the tall sorts, while the plants are of compact bushy growth. Height, about 18 inches.

Defiance. Fiery scarlet	Pkt., 10c.
Rose Queen. Rich rose	" "
Canary Bird. Light yellow	" "
Queen of the North. Pure snow white	" "
Collection 1 pkt. each of above	35c.
Half Dwarf Mixed	Pkt. 10c.; $\frac{1}{4}$ oz. 30c.

DWARF VARIETIES

The dwarf are excellent for bedding or edges. Height, 12 in.
Tom Thumb Mixed . . . . . Pkt., 10c.

ASTERS

The Aster, or more specifically the China Aster, in its many double varieties, is unsurpassed for bedding and cutting, and is not only one of the most profitable annuals for the professional florist but also one of the most satisfactory for the home garden. The great diversity of size, color, form and season of blooming makes it one of the most suitable plants for supplying cut flowers. The plants are usually of vigorous growth and so hardy that they endure a slight frost without serious injury. By planting the different strains and at different times, one may have in the latitude of Philadelphia a constant succession of bloom from the last of July till the middle of October without the aid of a greenhouse or even a hotbed.

Culture—Seed may be sown outdoors as early in spring as the ground is warm and dry, or for earlier blooming may be started indoors or in a cold-frame and transplanted in the open ground after danger of killing frost is over. If conditions are favorable they will usually do well in any well prepared garden soil but a strong loam that has been well fertilized the previous year is preferable. In planting cover the seed with about one-fourth inch of fine soil firmly pressed down. The rows for most of the varieties should be about one and one-half feet apart. When about one to two inches high, thin to sixteen inches apart in the row. It is desirable during warm and dry weather to water the plants thoroughly two or three times a week, preferably early in the morning or evening. It is desirable to change the location as often as practicable.

Insects, such as the red spider, may be kept at bay by frequently spraying with clear water, or for insects that eat the foliage add one-fourth teaspoonful of Paris Green to ten gallons of water. Sprinkle with tobacco water or dust to keep off the plant louse. We offer choice seed that has been grown for us from the best types by the most skilful cultivators in America and which is more certain to give good results than most of that on the market.

QUEEN OF THE MARKET

Very desirable on account of extreme earliness as well as profuse blooming and wide range of colors. The plants are of somewhat compact but branching habit, rather open and spreading, about sixteen to eighteen inches high, bearing on long stems from ten to fifteen finely formed double flowers of medium size. The blooms, although rather flattened and not so large as those of the late sorts, are fine for cutting and this class is used extensively for growing under glass. This class is known also as Queen of the Earlies.

Dark blue.....	Pkt., 10c.; 1/4 oz., 30c.
Crimson.....	" " " "
Purple.....	" " " "
White.....	" " " "
Rose.....	" " " "
Collection.	Pkt., each of above, 40c.
Finest Mixed.....	Pkt., 10c.; 1/4 oz., 25c.; oz., 85c.

HEART OF FRANCE

The best pure red Aster ever introduced. Heart of France opens red as the purest ruby, deepens with age, and retains its remarkable beauty to the very end. The flowers are large and full, with never a trace of hollow center. The plants are of branching type and very robust habit. They retain their brilliancy and lustre for a longer period than almost any other color. Pkt., 15c.; 1/4 oz., \$1.00.

LAVENDER GEM

An early or mid-season variety with large, loosely arranged flowers of the Comet type, which are borne on long slender stems. When first open the flowers are a delicate lavender which gradually deepens as they mature. A beautiful color and a very desirable sort for cutting. Pkt., 10c.; 1/4 oz., 85c.

GIANT LATE (Branching)

An exceedingly handsome Aster blooming in September. The flowers borne on long stiff stems are so very double as to appear almost like balls. The petals short and narrow are slightly folded and of durable, lasting substance. Very desirable for cut flowers. Height, 20 inches.

Shell Pink. Soft and dainty.....	Pkt., 10c.; 1/4 oz., 60c.
Rose. Deep rose.....	" " " "
Azure Blue. Soft purple.....	" " " "
Crimson. Brilliant crimson.....	" " " "
White. Pure white.....	" " " "
Collection.	Pkt., each of above, 40c.
Finest Mixed.....	Pkt., 10c.; 1/4 oz., 50c.; 1 oz., \$1.50.

KING

Similar in habit to the late branching asters but producing a little earlier very large double blossoms of distinct form, many of the petals being rather narrow and slightly quilled and curved. The inner petals are incurved, covering well the center. The plants are large and vigorous with long strong stems.

Crimson. Rich brilliant crimson.....	Pkt., 10c.; 1/4 oz., 60c.
Violet.....	" " " "
Pink. Beautiful shell pink.....	" " " "
White.....	" " " "
Collection.	Pkt., each of the above, 35c.
Finest Mixed.....	Pkt., 10c.; 1/4 oz., 50c.; oz., \$1.75.

ASTERS—(Continued)

GIANT COMET
(Ostrich Plume Asters)

Flowers of immense size composed of long wavy twisted petals, gracefully formed into loose yet densely double half globes. Height, about 2 feet.

Rose. Rose pink..... Pkt., 10c.; ¼ oz., 75c.

White. Pure snow white..... “ “ “ “

Dark Blue..... “ “ “ “

Crimson..... “ “ “ “

Collection. 1 Pkt., each of above, 35c.

Finest Mixed.....Pkt., 10c.; ¼ oz., 60c.; oz., \$2.00.

Baby's Breath. See Gypsophila, page 43.

Bachelor's Button. See Centaurea, page 38.

BALLOON VINE
(Love in a Puff)

A pretty and fast growing half hardy annual climber growing about 10 to 15 feet, bearing delicate clusters of dainty white blossoms, and numbers of large, round, inflated seed-buds resembling miniature balloons. The effect is most odd and curious. It is in every way a very attractive vine.

Culture—Sow seed outdoors early in the spring and train on a trellis, porch or fence.

Cardiospermum. Pkt., 5c.; oz., 25c.

BALSAM
(Lady's Slipper)

These favorite half hardy annuals are of the easiest culture but love hot sun, rich soil and plenty of water.

Culture. Seed may be started under glass during the end of winter or early spring, transplanting to the open ground when danger of frost is past. To grow fine specimens, plants should not be closer than 18 inches apart.

Camellia Flowered. Flowers of extra size, double and full centered with reflexed petals. Plants grow rapidly to about 2 feet and are extremely floriferous.

Camellia Flowered White. Pure white..... Pkt., 10c.

“ “ Shell pink. Light pink..... “ “

“ “ Crimson. Brilliant color.... “ “

“ “ Purple. Very rich..... “ “

Collection. 1 Pkt., each of above, 30c.

Finest Mixed.....Pkt., 5c.; ¼ oz., 25c.

Balsam Apple. See Momordica, page 46.

Balsam Pear. See Momordica, page 46.

BEGONIAS

A valuable bedding plant producing small, many colored flowers in remarkable profusion throughout the entire summer until frost. As an indoor plant it has great popularity.

Culture. Sow seeds in shallow boxes in early spring. As the seed is small, extreme care must be taken in planting. In planting smooth the surface of the soil and press seeds in lightly. When large enough to handle, pot the plants which may be set outdoors as soon as the weather is warm enough.

Semperflorens Alba. White flowers in great profusion. Pkt., 15c.

Semperflorens Vernon. Rich red flowers, bronze foliage. Pkt., 10c.

Semperflorens Rosea. Rose colored, fine for borders. Pkt., 15c.

Finest Mixed. All colors from pure white to deepest crimson. Pkt., 10c.; ⅙ oz., 25c.

BELLIS PERENNIS
(English Daisy)

An old favorite and charming hardy plant useful for edging. If sown in early spring will flower in late summer and through fall; from sowings made later the plants will bloom the following spring. Give plants protection of leaves or straw, but not until ground freezes. When sowing cover seed very lightly and transplant 6 inches apart.

Snowball. Pure snowy white.....Pkt., 10c.

Longfellow. Delicate rose..... “ “

Double Mixed.....Pkt., 10c.; ⅙ oz., 30c.

Black-Eyed Susan. See Thunbergia, page 52.

Blanket Flower. See Gaillardia, page 42.

Boston Ivy. See Ampelopsis, page 33.

BRACHYCOME
(Swan River Daisy)

A free-flowering, dwarf-growing annual; covered during the greater part of the summer with a profusion of pretty blue or white flowers. Suitable for edgings, small beds or pot culture.

Culture. Sow in fine soil in open border as soon as the weather permits. Cover the seeds very lightly, and thin out the seedlings to 6 inches apart. It makes a dainty pot plant for the window during spring.

Mixed. Blue and white.....Pkt., 5c.; ⅙ oz., 15c.

BROWALLIA
(Amethyst)

Handsome annuals, covered with blue or white flowers during the summer and autumn months. An excellent plant for bedding or pot culture during winter. Height, 18 inches.

Culture. Sow ¼-inch deep in rich soil after the ground has become warm or seed may be started under glass during early spring. Set out plants 9 inches apart. The plant may be lifted in the fall, cut back and potted when they will bloom finely indoors during the winter.

Elata Mixed. Blue and white.....Pkt., 5c.

Butterfly Flower. See Schizanthus, page 50.

CACALIA**(Tassel Flower or Flora's Paint Brush)**

A very attractive border plant with brilliant orange-scarlet flowers which are much prized for bouquets and vases. Height, 18 inches.

Culture. Sow seed in open border as soon as weather permits, afterwards thinning out or transplanting to 6 inches apart.

Mixed. Orange and scarlet.....Pkt., 5c.

CALENDULA**(Pot Marigold)**

A splendid hardy annual of easy culture, growing in any good garden soil and producing a fine effect in beds or borders. Continues in bloom from early summer until killed by frost. Valuable for pot culture, blooming in the winter and early spring. Height, 1 foot.

Culture. Sow thinly in any good garden soil and thin out or transplant it 1 foot apart. For early blooming, start the seed indoors and set out in the border.

Sulphur Crown. Large double flowered with brilliant light yellow blooms. Pkt., 5c.; oz., 25c.

Meteor. Large double yellow striped with orange. Pkt., 5c.; oz., 25c.

Orange King. Large double flower of intense golden-orange. Pkt., 5c.; oz., 35c.

Finest Mixed. All colors.....Pkt., 5c.; oz., 15c.

California Poppy. See *Eschscholtzia*, page 42.

CALLIOPSIS

Very showy and free flowering annuals, blooming throughout the summer and fall, if not allowed to go to seed. The flowers are very dainty and pleasing, admirably adapted for table decorations and bouquets. Height, 1½ feet to 2 feet.

Culture. Sow ½-inch deep in good garden soil during early spring and thin out to transplant to 6 inches apart. For early blooming the seed may be started indoors.

Drummondii. (Golden Wave.) Rich golden-yellow with small chestnut-brown center, very free bloom, height 12 inches. Pkt., 5c.; ¼ oz., 15c.

Nigra Speciosa. A strong grower with good sized flowers of rich reddish-maroon. Height, 2 feet. Pkt., 5c.; ¼ oz., 15c.

Coronata. Large rich golden-yellow flowers. Height, 18 inches. Pkt., 5c.; ¼ oz., 15c.

Finest Mixed. All colors.....Pkt., 5c.; oz., 35c.

COREOPSIS**(Perennial Calliopsis)**

Lanceolata Grandiflora. Fine hardy plants with large yellow flowers produced in the greatest abundance from June until frost. The beautiful large yellow flowers are borne on long stems and if cut young will last a week or more in water. Pkt., 5c.; ¼ oz., 15c.

CAMPANULA**(Bellflower)**

An old favorite hardy biennial plant worthy of a place in all gardens. The stately plants being literally smothered with its glorious large bell-shaped flowers in early summer.

Culture. Sow seed outdoors ⅛-inch deep from early spring to mid-summer in rich well-drained beds, thin out in the fall or transplant 18 inches apart and cover with straw or leaves as a protection over winter. The plants do not flower until the second year.

Persicifolia Grandiflora. (Peach Bells.) One of the finest of the hardy bell flowers. Height, 2 to 3 ft. with large blue flowers. Pkt., 10c.

Persicifolia Alba. White flowered peach bells. Pkt., 10c.

Pyramidalis. (The Chimney Bellflower.) A beautiful stately plant for garden or pot culture. Blue flowers. Height, 5 feet. Pkt., 10c.

Pyramidalis Alba. White flowered. Pkt., 10c.

CAMPANULA MEDIUM**(Canterbury Bells)**

Calycanthema. (Cup and Saucer.) Produce beautiful large and semi-double flowers resembling a cup and saucer. We offer three separate colors.

Blue. A clear blue..... Pkt., 10c.

White. Pure white..... " "

Pink. Delicate rosy pink..... " "

Finest Mixed.....Pkt., 10c.; ¼ oz., 40c.

CANARY BIRD FLOWER**(Tropaeolum Canariense)**

Handsome foliage with an abundance of bright canary-yellow blossoms. A good climber, fine for rock gardens and hanging baskets, etc.: excellent window vine for winter. Half hardy annual. Height, 15 feet.

Culture. Sow seed outdoors early in Spring preferably in rich light soil by the side of a fence, arbor or trellis. Plants should stand about 8 inches apart. Bloom freely from early summer until killed by the frost. Pkt., 5c.; ½ oz., 20c.

CANDYTUFT**(Iberis Umbellata)**

A beautiful hardy annual growing about 6 to 18 inches high, according to the variety. The blossoms are borne on variously long spikes and are quite large flowering and very fragrant. Of easy culture and very desirable edgings, bedding, rock gardens or for cutting.

Culture—Sow seed outdoors in April in rich ground, covering ¼ inch with fine soil, pressed down. When 2 inches high thin to 4 inches apart or plant seed indoors in Fall and transplant to open ground in Spring.

Purple. A charming purple shade adding color to the border. Pkt., 10c.; oz., 30c.

Carmine. A new and very attractive color among the Candytufts. Pkt., 10c.; oz., 30c.

Rose Cardinal. Produces very large umbels of bright rosy-cardinal flowers, so the plant presents one unbroken sheet of bloom. Height, 8 inches. Pkt., 10c.; oz., 30c.

Giant Hyacinth Flowered. A grand variety producing enormous spikes of bloom resembling a white hyacinth. The flowers often measure 7 inches long by 2¼ inches in diameter. A complete mass of pure white flowers in a pyramid of bloom. Height, about 12 inches.

To produce the finest spikes the plants should be transplanted. Pkt., 10c.; oz., 50c.

Cardinal Climber. See *Ipomoea Quamoclit Hybrida*, page 44.

CARNATION**(Dianthus Caryophyllus)**

Carnations are general favorites for their delicious fragrance and richness of colors. Being hardy and free flowering, they are easily grown either in flower beds or in pots. One of the most valuable and beautiful of our summer flowers, also very desirable for greenhouse culture in winter.

Culture. The seed is sown indoors or under glass in February or March. Use a rich sandy soil and cover the seeds over lightly. Care must be taken to maintain an even temperature of about 60 degrees. As soon as danger of frost is past, transplant the seedlings outdoors in the permanent beds setting them not closer than 18 inches apart each way.

MARGUERITE CARNATIONS

An extra vigorous race, especially adapted for outdoor culture. They are very neat in habit and remarkable for their rich profusion of flowers produced six months from sowing. Satisfactorily grown as annuals from seed every Spring.

Yellow.....	Pkt., 10c.
Fiery Scarlet.....	" "
Bright Rose.....	" "
Pure White.....	" "
Mixed. All colors Marguerite Carnations	Pkt., 10c.; ¼ oz., 50c.

Chabaud's Everblooming. A greatly improved strain originating from a famous French carnationist. Blooms in five months after being sown and continues to flower in the greatest profusion throughout the entire season.

Mixed. All colors mixed. Pkt., 10c.; ⅛ oz., 30c.

Castor Oil Beans. See Ricinus, page 49.

Catchfly. See Silene, page 50.

CELOSIA
(Cockscomb)

A rather curious and striking class of flowers with its brightly colored foliage and the dazzling reds of the blooms. It is frequently used as a tall border to relieve the sombre greens in clumps of shrubbery and trees. In solid beds it presents a mass of color.

Culture. A hardy annual. The seed may be sown outdoors, and later thinned. For early blooming start the plant indoors. They stand transplanting well.

CELOSIA CHRISTATA
(Crested Cockscomb)

Very desirable annuals, of easy culture. Producing large brilliant comb-like heads.

Glasgow Prize. Dark leaves and immense dark crimson combs. Pkt., 10c.; ¼ oz., 60c.

CELOSIA PLUMOSA
(Plumed or Ostrich Feather)

Beautiful annual foliage plants blooming in late summer and autumn. And producing large showy plumes, curled and curved, resembling ostrich feathers.

Crimson Plumed. Pkt., 10c.; ¼ oz., 60c.

CELOSIA CHILDSI
(Chinese Wool Flower)

This unique type of Celosia Plumosa forms—instead of pyramidal forms of bloom—large beautiful ball-shaped flower heads somewhat resembling balls of wool or chenille, and of a rich bright red color. The plants, 2 to 3 feet in height, branch freely, each branch terminating with a flower head. It continues in flower from early summer until frost, and is very effective for garden, either massed or grown as individuals. Pkt., 15c.

CENTAUREA

The popular Cornflower. Centaurea Cyanus is also known as Blue Bottle, Ragged Sailor and sometimes as Bachelor's Button. Bright flowered plants of the hardiest nature and simplest culture among the most attractive and graceful of all the old-fashioned flowers.

Culture—Seed may be started indoors and transplanted in the permanent bed when three inches high. May be sown in early fall for spring flowering.

CENTAUREA CYANUS
(Cornflower, Bachelor's Button)

Delightful old-fashioned flowers, borne on long stiff stem about 1 to 2 feet high. A profuse bloomer, and excellent for cutting.

Double Blue. The favorite dark blue, so much in demand for cutting..... Pkt., 15c.

Pure White. Very fine..... " "

Purple. Beautiful velvety purple..... " "

Rosea. Distinct shade, very fine..... " "

Double-flowered Mixed. All colors mixed. Pkt., 10c.; oz., 25c.

CENTAUREA—White Leaved
(Dusty Miller)

Extensively used for ribbon beds, edgings, vases, etc. The foliage is a beautiful silvery-gray.

Candidissima. Compact plants, silvery leaves, 1 foot. Pkt., 10c.

CENTAUREA IMPERIALIS
(Sweet Sultan)

A hardy annual of great beauty. The fluffy flowers borne on long stiff stems in their various colors are very beautiful. For bouquets and vases they are exceptionally beautiful. If cut when scarcely opened they will last for ten days in water. Plants are of easy culture, flowering freely in the garden the first summer from seed sown in the early spring. Height, 2 to 3 feet.

Chameleon. Bright yellow flowers..... Pkt., 10c.

Purple. Rich dark purple..... " "

Rosea. Brilliant rose-colored flowers..... " "

White. Satiny white flowers..... " "

Choice Mixed. Pkt., 10c.; ¼ oz., 25c.; oz., 75c.

Chinese Wool Flower. See Celosia Childsi.

CHRYSANTHEMUM

These annuals should not be confounded with the winter flowering sorts grown by florists. They bloom profusely from early summer until frost, and, when grown in large beds or masses, their bright colors make a splendid show.

Culture—For early blooming sow the seeds in frames or window boxes, and afterwards transplant to the garden, or seed may be sown where plants are to flower after all danger of frost is past. Thin the seedlings, 8 to 10 inches apart. Pinching back in early growth makes the plants bushy and shapely. Height, 1 to 1½ feet.

Northern Star. Very large daisy-like flowers, 3 inches across with pure white fringed petals with canary-yellow zones around a dark brown eye. **Pkt., 10c.**

Morning Star. Petals canary-yellow with halo of deeper yellow, disc dark yellow. **Pkt., 10c.**

Burridgeanum. Pure white petals with zone of rich brownish-red and inner zone of yellow surrounding the dark brown disc. **Pkt., 10c.**

Coronarum Double Sulphureum. Pale yellow..... **Pkt., 10c.**

Coronarum Double Yellow. Golden-yellow. Very fine..... “ “

Coronarum Double White. Pure white..... “ “

Coronarum Double Mixed. All colors. **Pkt., 5c.; oz., 40c.**

CHRYSANTHEMUM LEUCANTHEMUM

(Shasta Daisy)

Alaska. A splendid hardy perennial variety with flowers rarely less than five 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. **Pkt., 15c.**

CINERARIA

One of the most useful and ornamental of greenhouse, with flowers of the richest and most brilliant colors and shades, and of the finest texture. It is rather a difficult plant to grow if its requirements are not understood. The mistake usually made in growing it is in a warm location instead of a cool one.

Culture—Seed may be sown from April to September. If desired for winter blooming sow early in April in shallow box in fine soil. Drop the seed in shallow drills, cover, and press the earth rather firmly with a piece of board. Set the box where it will get the morning sun, water moderately and carefully.

Dwarf Exhibition Hybrids. Pretty tiny plants, rarely exceeding eight inches in height. The flowers are small, but many in number and gay in colors, making large heads, particularly charming. **Pkt., 35c.**

Matador. A new large flower of a brilliant scarlet red. **Pkt., 35c.**

Stellata (Star Cineraria). A charming variety with large spreading panicles of star-like flowers in a wide range of colors. The extreme grace and elegance of the plant and flowers make them wonderfully effective for the decoration of the house and conservatory. Also useful for cutting. **Pkt., 25c.**

CLARKIA

One of the prettiest and showiest of hardy annuals that bloom freely and have flowers of such various bright colors that a bed of them in full bloom is a beautiful sight. Useful for hanging baskets, vases, and as edgings to beds of larger growing plants. Height, 1½ feet.

Culture—Sow seed outdoors in early spring and grow in partial shade. The plants keep up a continuous bloom through midsummer to late autumn.

Elegans Alba. Very double. Pure white. **Pkt., 10c.**

Elegans Salmon Queen. Lovely salmon pink flowers. Very double. **Pkt., 10c.**

Elegans Double Mixed. A fine mixture including many sorts. **Pkt., 10c.; ¼ oz., 35c.**

COIX LACHRYMAE

(Job's Tears)

A curious ornamental grass, having broad blades similar to corn which are valuable for winter bouquets. It bears large dark colored seeds which resemble a tear drop. Used for beads, teething babies, or an old-fashioned remedy for sore throat. Height, two to three feet.

Culture—Sow seed outdoors early in the spring. Three seeds to a hill; eighteen inches apart each way. **Pkt., 5c.; oz., 15c.**

CLEMATIS

(Virgin's Bower)

One of the finest hardy perennial climbers. Of strong, rapid growth, with small dense cheerful green foliage, deliciously fragrant; white and purple flowers appearing in great profusion in August and September. The plants succeed in almost any position. Not only is it adapted to run up all kinds of supports, but is just as useful for rock work or sloping banks; in fact any position where a graceful vine or trailer is desired.

Culture—Start the plant indoors early in the spring. The seed germinates very slowly. When three or four inches high, transplant outdoors setting the plants about twelve inches apart. Although perennial, some protection through the winter is advised.

Assorted Hybrids. Collection of the best colors. **Pkt., 10c.**

COBAEA

(Cathedral Bells)

A very handsome climber, attaining a height of from thirty to fifty feet in one season. The foliage is dark green and the blooms bell-shaped; green in color at first and afterwards changing to a beautiful violet shade. Valuable for covering trellises, arbors, trunks of trees, etc. Will cling to any rough surface.

Culture—In sowing, place seeds edgewise to promote germination. Seed may be sown indoors, and later transplanted, after all danger of frost is past, setting the plants not closer than twelve inches apart. Give protection with straw over winter.

Scandens. Large bell-shaped purple flowers. **Pkt., 10c.; ¼ oz., 25c.**

Cockscomb. See Celosia, page 38.

Columbine. See Aquilegia, page 34.

CONVOLVULUS

(Morning Glory)

Beautiful annual climbers of easy culture, producing freely all summer long. Large funnel-formed flowers of lovely colors and combination of coloring.

Culture—Soak the seeds in warm water for several hours just before planting. Sow outdoors early in the spring, and when seedlings appear, thin out to six inches apart.

C. Major (Tall Growing Variety). Beautiful shades of assorted colors. Should be trained on strings, wires, trellis or fence. Height, fifteen feet. **Pkt., 5c.; oz., 15c.**

C. Minor (Dwarf Variety). The dwarf varieties are well adapted for beds or rock work, growing no higher than twelve inches. They bloom profusely throughout the summer and in spite of the name, Morning Glory, the flowers stay open all day. Beautiful assorted colors. **Pkt., 5c.; oz., 20c.**

Japanese Morning Glory. See Ipomea, page 44.

Coreopsis. See Calliopsis, page 37.

Cornflower. See Centaurea Cyanus, page 38.

COSMOS

One of the most notable fall flowers. A strong tall growing annual with bold flowers of exquisite daintiness and airiness. Heightened in effect by their foliage setting of feathery green. It is most effective when planted in broad masses or long background borders against evergreens or fences.

Culture—Sow seed outdoors early in spring in rather light soil, which should not be too rich as this induces excessive plant growth at the expense of the blossoms. A sunny location is preferable. Cover the seed with about one-fourth inch of soil firmly pressed down. If planted in rows, make the rows about two feet apart and when the young plants are well up, thin out from four to six inches apart in the row.

EARLY MAMMOTH FLOWERING

These early mammoth flowering bloom very early, and continue in bloom until killed by frost. The flowers are of good size, and well adapted to northern latitudes. Height, four to five feet.

Early Mammoth Flowering White.....	Pkt., 10c.
“ “ “ Pink.....	“ “
“ “ “ Crimson.....	“ “
“ “ “ Mixed. A mixture of above three colors.....	Pkt., 10c.; 1/4 oz., 15c.

DOUBLE CRESTED COSMOS

This new type of cosmos is unique and exceedingly pretty. The flowers are of good size with fully double centers, and an outer row or crest of broad petals. The plants are vigorous, attaining a height of five feet and are covered with blooms from August until killed by frost.

White Queen. Pure white, large size.	Pkt., 15c.
Pink Beauty. Lovely pale pink flowers.	“ “
Crimson King. A fine rich crimson.	“ “
Mixed. Above colors mixed.	Pkt., 10c.; 1/8 oz., 35c.

Cypress Vine. See Ipomoea Quamoclit, page 44.

CYCLAMEN

These bulbous greenhouse plants are all very beautiful and are unapproached among winter flowering plants for duration of bloom, variety of shades and wealth of coloring. They are among the best plants recommended for house culture as they thrive well and bloom profusely in the average temperature of the living room.

Culture—Sow the seed in small boxes or seed pans in a compost of well rotted manure, leaf mold and sand in the early winter months. Cover lightly with moss, which should be kept moist, and should be removed after the seed germinates. Prick out into small pots when the young plants have two leaves. If grown steadily without any check they will flower in from ten to twelve months. Height, nine inches.

PERSICUM GIGANTEUM

Album Mont Blanc. Pure white.	Pkt., 50c.
Salmonium. Bright salmon color.	“ “
Crimson King. Dark blood-red.	“ “
Roseum. Bright rose.	“ “
Persicum Mixed.	“ 25c.

DAHLIA

These well known flowers are commonly grown from the tubers, but may also be grown from seed. They are of easy culture and will grow in most any kind of soil.

Culture—Plant the seeds in shallow boxes indoors in the early spring, and transplant outdoors when all danger of frost is past. They will bloom nicely the first year.

Giant Flowered Choice Mixed. Magnificent long stemmed flowers of immense size in great variety of color. Pkt., 10c.

Dahlia Roots. (See Pages 55, 56 and 57.)

Daisy—English. See Bellis Perennis, page 36.

Daisy—Shasta. See Chrysanthemum Leucanthemum, page 39.

Daisy—Swan River. See Brachycome, page 36.

DATURA

(Angel's Trumpet)

Large branching plants, producing very large, handsome, trumpet-shaped blossoms of exquisite fragrance. Excellent for late summer and autumn flowering.

Culture—Seed may be sown outdoors after danger of frost is over, but for early blooming, sow in hotbeds and transplant about three feet apart each way. Roots may be kept all winter in cellar. Tender annual. Height, three feet.

Cornucopia (Fastuosa) “Horn of Plenty.” The most handsome variety of Datura. Immense double flowers, each blossom shading from white in the center to deep purple on the fringes. Pkt., 10c.

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; three to five feet.

Culture—Sow the seed in late May and transplant when large enough, eight to ten inches apart. No flowers appear the first year. Protect with litter over winter. Seed may also be sown in fall.

Gloxiniaeflora. Large, spotted, gloxinia-like flowers, produced on long spikes. Three and one-half to five feet.

Pale Pink.	Pkt., 10c.; 1/4 oz., 25c.
Purple.	“ “ “ “
White.	“ “ “ “
Mixed.	“ 5c.; “ 15c.

DELPHINIUM (Larkspur)

In variety and beauty of its blue tints which are as numerous as they are charming, no other plant can equal the Delphinium. The brilliant flowers are strongly effective in beds or masses in borders, shrubberies or in combination with white lilies. Improvements are continually being made in the size of the flowers, as well as in the length and fullness of the spikes. Some of the species flower both early and late. The season for all can be prolonged by cutting away the withered flower stems.

ANNUAL VARIETIES

These include the Rocket or Hyacinth flowered, so called from their long narrow flower spikes. They bloom best in a rather cool moist soil.

Culture—Sow seed in the open border, either in spring or fall, preferably the latter, so that germination may take place very early in the spring. As the seedlings grow, thin to stand six to eighteen inches apart according to variety. The varieties are seldom kept separate as they are quite as pretty and convenient for cutting when sown in mixture.

Giant Hyacinth Flowered. Finest mixed. Pkt., 10c.; oz., 40c.

Tall Double Branching (Stock Flowered). The finest class of Larkspur for cutting and borders, with long spikes of large double flowers. Two feet high. Finest mixed. Pkt., 10c.; oz., 40c.

PERENNIAL VARIETIES

These are usually taller than the annuals requiring more space between the plants. If sown in the fall or very early spring, nearly all will bloom the first season. Foliage, clean and pretty; habit, strong and neat; flower spikes long and dazzling.

Chinense Album. Large pure white flowers extra fine. Pkt., 10c.

Chinense Azureum. Beautiful distinct shade of blue. Very attractive in the border. Pkt., 10c.

Formosum. Brilliant blue-white center especially fine. Pkt., 15c.

Hybridum fl. pl. Double Mixed. All sorts in brilliant mixture. Pkt., 10c.; ½ oz., 25c.

DIMORPHOTHECA (African Daisy)

A rare and showy annual, having dark orange flowers two and one-half inches in diameter with a dark brown-disk in the center. The flowers are glossy and present a striking appearance in the sun. Excellent for summer flowering borders, especially along the roadside.

Culture—Sow seed early in the spring in rows twelve to eighteen inches apart. When three inches high, thin the plants one foot apart in the row. A sunny situation is preferable. Bloom throughout the summer.

Aurantiaca. Pkt., 10c.

DOLICHOS (Hyacinth Bean)

A fragrant, rapidly growing annual climber bearing large handsome foliage and bright flowers followed by curiously lima bean shaped pods. Very desirable for covering trellis and arbor. Height, 8 to 10 feet.

Culture—As the seed coat is very hard it should be sown an inch deep in the late fall or winter where intended to grow. If sowing in the spring cut a small piece off the skin or seed coat, and soak in warm water for 12 hours before sowing.

Darkness. Stems and under sides of foliage purplish-red. The numerous spikes of reddish-purple, pea like flowers are succeeded by showy seed pods. Pkt., 10c.; oz., 25c.

DIANTHUS

Dianthus Chinensis (Pinks). The Pinks are old-fashioned favorites and as a class are more varied in color than the Carnations but lack their fragrance. Both the single and double Pinks are well adapted for bedding and borders, and are suitable also, for cutting as the stems are of good length and the brilliantly colored flowers, often 1½ to 2 inches across, contrast vividly with the rather narrow bright light green leaves.

Seed may be sown in the open ground in spring after danger of frost is past, in the place where the plants are wanted to bloom. Use well pulverized soil, preferably sandy loam. Make the rows one foot to fifteen inches apart and cover the seed with one-fourth inch of fine soil firmly pressed down. When two inches high, thin six to eight inches apart. Plants compact, bushy, usually about one foot high. When grown for spring blooming, if in a well drained situation and protected by a light mulch of straw or leaves, the plants are less likely to winter-kill than if in a moist unprotected part of the garden during the colder months. The plants thus wintered over will produce more and better blooms than those of the first season.

DOUBLE ANNUAL PINKS

China or Indian Pinks (*Dianthus Chinensis*). Flowering from early summer to fall; strong, sturdy growers, suitable for beds and borders. Flowers very double and in unlimited variety of colors, borne on long, stiff stems.

Finest Mixed. Pkt., 5c.; ¼ oz., 15c.

Japanese Pinks (*D. Heddewigii* and varieties). A beautiful class of sturdy-growing plants, ten to twelve inches high and of the same width; handsomely marbled and mottled flowers in all imaginable colors, two inches and over in diameter.

Finest Mixed. Pkt., 5c.; ¼ oz., 30c.

HARDY GARDEN PINKS

Very desirable for beds, borders, cemetery planting, etc. The flowers are highly prized for their spicy, refreshing odor.

Single Early-Flowering Grass Pinks, Finest Mixed (*D. plumarius*). Pheasant's Eye. Many-colored, fragrant flowers, nicely fringed. Pkt., 5c.; ¼ oz., 30c.

Dianthus Caryophyllus. See Carnation, page 38.

Dianthus Barbatus. See Sweet William, page 52.

Dusty Miller. See Centaurea, page 38.

Elephant's Ear. See Caladium Bulbs, page 59.

Everlasting Flower. See *Acroclinium*, *Gomphrena*, *Rhodanthe*, *Helichrysum* and *Xeranthemum*.

Everlastings should be grown in every garden not only for summer blooming, but also as cut flowers for winter decoration. The flowers should be picked before they expand and hung with the tops downward to dry for winter bouquets.

ECHINOCYSTIS (Wild Cucumber Vine)

The fastest growing annual vine in existence; will grow 20 feet in six weeks. Pretty foliage and inconspicuous white flowers.

Culture—Soak the seed over night in warm water and sow one inch deep after all danger from frost is past and the ground has become warm.

Labata. Pkt., 5c.; oz., 35c.

ESCHSCHOLTZIA (California Poppy)

Eschscholtzias are among our most beautiful and popular annuals, being of easiest culture. From spring sown seeds they flower profusely until killed by frost. Excellent for beds, edging or masses. The plants are about of dwarf branching habit, about one foot high.

Culture—Sow the seeds early in May in permanent rows, 12 inches apart, later thinning to 8 inches in the row. The seedlings are difficult to transplant.

Crimson King. The best of the red-flowering varieties. Bright crimson, interior satiny carmine. Pkt., 10c.; $\frac{1}{4}$ oz., 25c.

California Aurantiaca. Rich golden orange. Pkt., 5c.; oz., 30c.

Caniculata Rosea. Soft flesh-pink, petals fluted or crimped. Pkt., 5c.; oz., 40c.

EUPHORBIA

Strong growing annuals for beds of tall growing plants or mixed borders; the flowers are inconspicuous; its foliage, however, is exceedingly ornamental.

Culture—Sow the seed outdoors early in the spring and thin out late to 18 inches apart.

Variegata (Snow on the Mountain). Elegant bushy plants with broad green leaves, veined and margined with white. Height, 2 feet. Pkt., 10c.; oz., 40c.

Flowering Sage. See *Salvia*, page 49.

Forget-Me-Not. See *Myosotis*, page 46.

Foxglove. See *Digitalis*, page 40.

Four o'Clock. See *Mirabilis*, page 46.

Flax. See *Linum*, page 44.

GAILLARDIA (Blanket Flower)

Splendid showy annuals, remarkable for the size, profusion and brilliancy of their flowers, which continue in bloom from early summer until November. Excellent for beds, borders or for cutting.

Culture. Seed may be started indoors early in spring and transplanted outdoors in May. Usually sown where they are to bloom. Height, $1\frac{1}{2}$ feet.

Picta Mixed. Single sorts, fine colors. Pkt., 5c. $\frac{1}{4}$ oz., 20c.

Lorenziana Mixed. A charming, profuse double-flowering strain. Invaluable for bouquets. Beautiful mixed colors. Pkt., 5c.; $\frac{1}{4}$ oz., 25c.

HARDY PERENNIAL VARIETIES

Grandiflora Mixed. Splendid combinations of reddish-brown and gold in great variety. Pkt., 10c.; oz., 40c.

GODETIA

Very neat and free flowering annuals that are highly prized for edging and for solid beds, for a blaze of color they will vie with the nasturtiums. Should not be planted in too rich soil. In bloom from June until October.

Culture—The plants may be started indoors but the seed is usually sown outdoors and the plants thinned 8 to 12 inches apart.

Crimson Glow. A splendid, free-flowering, compact variety, blood-crimson. Height, 9 inches. Pkt., 10c.; $\frac{1}{4}$ oz., 35c.

Duchess of Albany. Compact large satiny white flowers in pyramidal clusters. Height, 9 inches. Pkt., 10c.; $\frac{1}{4}$ oz., 30c.

Dwarf Mixed. Many brilliant colors. Pkt., 10c.; $\frac{1}{4}$ oz., 15c.

GOURDS—ORNAMENTAL

These are desirable in many places where an immense amount of vine is wanted quickly. Most sorts are good for 20 to 30 feet in a season and the blooms of some are quite striking and handsome. With many sorts the fruit is unique and ornamental and often useful.

Culture—Sow seeds outdoors after all danger of frost is past.

African Pipe. Odd shaped fruit. The stem ends of which are used in making pipes. Pkt., 5c.

Nest Egg. Fruit looks exactly like a hen's egg and may be used as nest eggs. Pkt., 5c.

Pear Shaped. Striped, yellow and green; very showy. Pkt., 5c.

Hercules Club. Fruit grows 3 to 4 feet long and shaped like a club. Pkt., 10c.

Dipper or Calabash. When dried may be used for dipper. 9 to 12 inches long, holding from 1 to 4 pints. Will last for years. Pkt., 5c.

Dish-Rag or Bonnet Gourd. Many women prefer a dish cloth made of this gourd to anything else, as it is always sweet and clean as long as any part of it is left. Pkt., 10c.

Spoon. Small ball-shaped fruit with slender necks, deep orange. By slicing off a part of the side of the bowl a satisfactory spoon may be made. Pkt., 10c.

Collection Offer. Pkt., each of above, 40c.

Mixed Varieties. All kinds. Pkt., 5c.; oz., 25c.

GOMPHRENA (Globe Amaranth)

Also called "Bachelor's Buttons." A showy annual everlasting flower, resemble clover heads and when dried are useful for winter bouquets; fine for bedding. Half hardy annual. Height, 18 inches.

Culture—Start the plants indoors in March. As the seeds germinate very slowly, soak several hours in water before sowing. Set plants outdoors in spring after all danger of frost is over, distance 10 to 12 inches apart.

Mixed. All colors. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.

GYPSOPHILA (Baby's Breath)

Beautiful star-shaped white flowering, very fragrant and borne in profusion on long feathery stems. Used largely for mixing with other cut flowers. A hardy perennial, blooming throughout the summer into the late fall.

Culture—Sow seed early in spring in prepared light rich soil, and thin late to 12 inches apart. A light covering of mulch is desirable for protection during the winter.

Elegans Alba Grandiflora. This is an improved large flowering, pure white form of the Baby's Breath of free and easy growth. Several sowings should be made during the season to keep up a supply. **Pkt., 5c.; oz., 25c.**

HELIANTHUS (Sunflower)

These comprise plants of majestic growth and immense showy flowers suitable for shrubberies, woodlands, wild gardens, sub-tropical gardening. The dwarfier sorts with smaller flowers are charming when grouped in mixed flower borders. Excellent for cutting.

Culture—Seed should be sown in permanent beds early in the spring and requires little care.

SINGLE ANNUAL VARIETIES

Cucumerifolius. Small single rich yellow flowers, black disk. Height, 4 feet. **Pkt., 5c.; ¼ oz., 20c.**

Stella (Miniature Sunflower). Differs from the above type by its larger and better formed flowers of the purest golden yellow with small dark disk. **Pkt., 5c.; ¼ oz., 20c.**

Orion. Artistic and effective new variety of "Stella." The pointed petals are finely twisted and curled resembling a cactus dahlia. **Pkt., 5c.; ¼ oz., 20c.**

Russian Mammoth. Gigantic single yellow flowers. Height 6 feet. **Pkt., 5c.**

Red and Gold. Strong sturdy plants branching to a height of 7 to 9 feet, producing several large flowers of refined form. The coloring varies from golden yellow splashed with red to nearly all red, but the great majority are Gaillardia colored—that is the wide zone of red surrounds the purplish-black center. The ends or tips of the petals being a rich golden yellow color. A combination that is very rich and effective. **Pkt., 10c.; ¼ oz., 35c.**

DOUBLE ANNUAL VARIETIES

Cucumerifolius Fl. Pl. The double flowering form of the popular miniature sunflower. The flowers while double are quite free and graceful of a bright golden yellow. **Pkt., 10c.; ¼ oz., 15c.**

Chrysanthemum Flowered. Magnificent flowers of rich orange color, 6 to 8 inches in diameter, densely double, the petals being long and fringed, resembling a chrysanthemum or dahlia. The plants, 6 to 7 feet high, carry many of these noble flowers. **Pkt., 5c.; ½ oz., 15c.**

HELIOTROPE (Cherry Pie)

A half hardy perennial, flowering during the whole season; its delightful fragrance makes it a most desirable bouquet flower. A splendid bedding plant, or may be trained as a greenhouse climber.

Culture—Sow seed indoors in March or April and transplant outdoors when all danger of frost is past. Will not survive the winter. For potted plants sow seed in the fall.

Mixed. A selected assortment of colors including purples, blues, and lilacs. **Pkt., 10c.; ½ oz., 40c.**

HELICHRYSUM (Straw Flower)

A hardy annual and one of the best everlastings. The plant is 2½ feet high and produces large double daisy-like flowers with prominent centers and stiff overlapping scales, which make a fine display in the garden during the summer. When dried the flowers retain their shape and color for years, and placed in vases or baskets without water, make splendid winter bouquets and decorations.

Culture—Plants succeed in any good garden soil if given plenty of space. Place at least 12 inches apart. Seed may be sown outdoors early in spring and later thinned.

Fireball. Bright red.....	Pkt., 5c.; ¼ oz., 15c.
Golden Ball. Golden yellow....	" " " "
Rose Queen. Rich carmine rose....	" " " "
Silver Ball. Glistening white....	" " " "
Mixed. All colors mixed.....	" " oz., 50c.

HUMULUS (Japanese Hop)

A rapid climber which in a few weeks' time attains a height of 20 to 30 feet. Resembles in shape the common hop, but being an annual attains full perfection the first season. Color a lively green. One of the best climbing plants for trellises. Heat, drought and insects do not trouble it.

Culture—Seeds should be planted in the open ground after all danger of frost is over, or if started in-doors, young plants can be transplanted to the open as soon as warm weather appears. A rich garden soil, deeply dug and liberally enriched with manure is best.

Japonicus Variegatus. A beautiful variety the leaves of which are blotched and striped with silvery white, light and dark green, which retain their brightness until killed by frost. **Pkt., 10c.; ¼ oz., 25c.**

HOLLYHOCK

One of the most majestic of hardy plants and a clump or line in any garden gives an effect not attainable with any other plant. For planting among shrubbery or forming a background for other flowers, it is without equal.

Culture—Sow the seed indoors or in beds early in the year, and transplant to open ground when the plants have made five leaves, setting the plants two feet apart. Seed may also be sown any time before midsummer and will produce fine plants for flowering next year.

DOUBLE VARIETIES

Chater's Double White	Pkt., 10c.; ¼ oz., 40c.
" " Pink	" " " "
" " Crimson	" " " "
" " Yellow	" " " "
" " Lavender	" " " "

Collection. Pkt. each of above five colors, 40c.

Choice Double Mixed. Splendid assortment of double varieties. **Pkt., 5c.; ¼ oz., 30c.; oz., \$1.00.**

Hyacinth Bean. See *Dolichos*, page 41.

Iberis. See *Candytuft*, page 37.

Ice Plant. See *Mesembryanthemum*, page 45.

Immortelles. See *Acroclinium*, *Gomphrena*, *Helichrysum*, *Rhodanthe* and *Xeranthemum*.

IPOMOEA

Beautiful climbing plants of rapid growth with varied flower. Suitable for covering walls, trellises and arbors.

Culture—The seed may be sown in a permanent bed early in the spring. It is well to soak the seed in warm water over night to assist in rapid germination.

Quamoclit (Cypress Vine). A tender annual with very delicate fern-like leaves and masses of beautiful small red or white star-shaped flowers.

Scarlet. Pkt., 5c.; oz., 40c.

White. Pkt., 5c.; oz., 40c.

Mixed. White and Scarlet. Pkt., 5c.; oz., 30c.

Quamoclit Hybrida (The Cardinal Climber). A new and absolutely distinct annual climber, conceded to be the most beautiful and brilliant annual climber introduced. It is a strong and rapid grower attaining a height of 30 feet or more with beautiful fern-like foliage and literally covered with a blaze of circular cardinal-red flowers about $1\frac{1}{4}$ inches in diameter. Like other Ipomoeas, it delights in a warm sunny location and good soil. The seed may be started indoors early in the spring but it is just as well to wait until the weather gets warm and settled and then sown outdoors. Pkt., 15c.

Mexican Grandiflora Alba (Moon flower). At night and during cloudy days the plants are covered with an abundance of large pure wax-like white flowers, 5 to 6 inches in diameter. A very rapid grower, covers a vast area, 30 feet high and 6 feet wide. Pkt., 10c.; $\frac{1}{2}$ oz. 30c.

I. Imperialis (Japanese Morning Glory). The flowers of this charming variety are of gigantic size, often measuring 3 to 4 inches across. The colors of the flowers, shadings and markings are unlimited. Some flowers are of deep rich velvety colors, others daintily tinted and shaded. There are reds from soft rose to crimson and garnet, daintiest blue to purple, snow white to silver gray. Some flowers are striped blotched and spotted, others have magnificent edges and throats. The foliage is luxuriant, attaining a height of from 30 to 40 feet. The leaves are slightly mottled light and dark green, white and gray.

Imperialis. Japanese Mixed. Pkt., 5c.; oz., 25c.

Japanese Hop. See *Humulus*, page 43.

Job's Tears. See *Coix Lacrymae*, page 39.

Joseph's Coat. See *Amaranthus*, page 33.

KOCHIA

(Mexican Fire Bush or Summer Cypress)

A very attractive and popular foliage or hedge plant. It grows about 3 feet high with many slender branches pressed close to the main stem and resembles a small closely sheared evergreen; the slender foliage being a delicate light green. They are very attractive and in the fall they turn to carmine and blood red, at the same time the ends of the shoots are thickly set with small bright scarlet flowers, thereby earning the name of Firebush.

Culture—Sow seed outdoor in good rich soil after all danger of frost has passed, covering the seed to a depth of about three times its size. Press soil down firmly and when plants are well established thin out or transplant to prevent crowding. Hardy annual.

Trichophylla. Pkt., 5c.; $\frac{1}{4}$ oz., 35c.

KUDZU VINE

(*Pueraria Thunbergiana*)

A rapid growing climbing vine with purple wistaria-like fragrant flowers, large leaves. Perhaps the strongest growing and most vigorous of all climbers. Will climb 25 to 30 feet in one season. It freezes down every winter and comes up from the roots each succeeding season. A fine vine for arbors, verandas, etc.

Culture—Sow when danger of frost is past in fine porous soil, $\frac{1}{4}$ -inch deep and keep moist until the seed germinates. Transplant 6 to 12 feet apart on trellis. Pkt., 10c.

Lady Slipper. See *Balsam*, page 36.

LANTANA

A beautiful and most desirable greenhouse plant, also suitable for summer bedding. The plants are constantly in bloom, the flower heads somewhat resembling verbenas. The colors range from orange, white to rose and red. Height, 2 to 3 feet.

Culture—Sow under glass early in spring, using very fine soil and transplant when large enough to handle, three inches apart or pot singly. Plant 2 feet apart in rich deep ground when all danger of frost is past.

Mixed Colors. Pkt., 10c.; $\frac{1}{4}$ oz., 20c.

Larkspur. See *Delphinium*, page 41.

LINUM

(Scarlet Flax)

This is a very pretty free flowering annual with slender foliage and bearing on delicate stems clusters of bright red flowers, saucer-shaped with black center. The flowers last only a day, but are borne uninterruptedly until frost.

Culture—If sown in hotbed and transplanted into good rich soil one foot apart the period of flowering will be much advanced, but the seed may be sown in the open ground after the weather is warm.

Grandiflorum Rubrum. The favorite scarlet flax, large flowered, height $1\frac{1}{2}$ feet. Pkt., 10c.

LOBELIA

The dwarf variety (*Erinus*) bloom very quickly from seed and flower all through the season. They are well adapted for bedding, pots or rockeries. Also very effective when planted in masses.

Culture—Seed may be sown outdoors in early spring where the plants are to grow, and thin moderately or transplant several inches apart in rich open soil, or start the plants in pots in greenhouse or hotbed and later transplant after danger of frost is past.

Crystal Palace Compacta (*Erinus Speciosa*). An exceptionally graceful sort having beautiful deep blue flowers, with very dark green foliage. Height, 7 inches. Pkt., 15c.

Love Lies Bleeding. See *Amaranthus Caudatus*, page 34.

Love in a Mist. See *Nigella*, page 47.

LUPINUS

(Lupine)

Old-fashioned favorites that thrive in almost any soil or situation. They are of robust branching habit, and throw spikes enveloped with pea-shaped flowers for most of their length. If these are cut as they mature the plants will continue in bloom for a long period.

Annual Varieties. Splendid for beds and backgrounds. Height, 2 to 3 feet.

Hartwegii (Blue).....Pkt., 5c.

“ (White)..... “ “

“ (Rose)..... “ “

Mixed.....Pkt., 5c.; oz., 40c.

Perennial Varieties. The hardy perennial varieties are extremely handsome and stately, bearing their beautiful flowers on erect graceful spikes that are more than a foot in length. Excellent for grouping or massing in separate colors, and they suit themselves to almost any position, making a good cut flower and of easy culture, requiring ordinary moist soil deep as possible, but well drained with plenty of old stable manure in any open sunny position. Height, 3 to 5 feet.

Culture—Sow seeds in April in their permanent places, transplanting or thinning as may be required.

Polyhyllus Rosens. (Rose)—magnificent.....Pkt., 25c.

“ (Blue)..... “ 10c.

“ (White)..... “ “

Mixed.....Pkt., 10c.; oz., 35c.

LYCHNIS**(Rose Campion—Ragged Robin)**

A fine perennial, useful for the mixed border. Flowering freely in early summer and almost continuously if the old flower spikes are regularly removed. The bright scarlet flowers are very striking and showy.

Culture—If sown early will bloom the first season. Seed may be started under glass or sown in the open as soon as the ground is in condition and danger of frost is past. Transplant or thin out to 9 inches apart.

Chalcedonica (Scarlet). Height, 2 feet. Pkt., 5c.

MARIGOLD

The African and French Marigolds are old favorite free-flowering annuals of easy culture. Both are extremely effective and are well adapted for large beds or mixed borders. They succeed best in a light soil with full exposure to the sun. A vase or bowl of any of the rich yellow sorts in combination with a few blue Larkspurs or Cornflowers is very striking.

Culture—For early blooming sow in sunny window or frame in early spring or in good rich soil in the open after all danger of frost is past. Transplant or thin out, 10 to 16 inches apart.

DWARF DOUBLE FRENCH MARIGOLD

Few annuals are as effective as the French Marigolds for so long a period. They all form dense bushes not over 12 inches high and are unequalled for beds or borders.

Golden Ball. A splendid pure golden yellow; large flowers; very effective for beds. Pkt., 10c.

Mahogany. Rich velvety mahogany brown. Pkt., 10c.

French Mixed. Splendid mixture of all double sorts. Pkt., 5c.; $\frac{1}{4}$ oz., 20c.

DWARF SINGLE FRENCH MARIGOLD

Legion of Honor (Little Brownie). This is a single dwarf bushy variety, and is very desirable for borders. The plants bear in profusion, rich golden yellow flowers marked with a large spot of velvety crimson at the base of each petal. Begin flowering early and continuing until frost. Height, 12 inches. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.

DOUBLE AFRICAN MARIGOLD

Splendid for beds or borders. The tall varieties growing about 3 feet high.

Orange Prince. A high bred, tall growing variety, bearing large perfect double quilled flowers of a rich deep golden orange color. The finest of all and very showy. Pkt., 10c.; $\frac{1}{4}$ oz., 25c.

Lemon Queen. A counterpart of Orange Prince, except in color which is a soft lemon yellow, and forming a fine contrast to the rich orange of the former. Pkt., 10c.; $\frac{1}{4}$ oz., 50c.

Tall Double Mixed. A splendid mixture, containing all the colors of the African varieties. Height, 2 to 3 feet. Pkt., 5c.; $\frac{1}{4}$ oz., 20c.

Marvel of Peru. See *Mirabilis*, page 46.

MESEMBRYANTHEMUM**(Ice Plant)**

Profuse flowering plants having leaves covered with ice-like globules. Very effective in beds, baskets or edgings, and for rock work.

Culture—Thrive best in dry sunny situations. Start plants indoors, transplanting into the garden when danger of frost is past. May be propagated by cutting.

Crystallinum (Ice Plant). Height, 6 inches. Pkt., 5c.

MIGNONETTE**(Reseda)**

A well known hardy annual producing dense cone-shaped flower spikes made up of thickly set florets of modest colors. It is often used for cutting to combine in bouquets with other more pretentious flowers lacking its delicate and pleasing fragrance.

Culture—Seed is usually sown out doors after danger of frost is past, but if sown at intervals in spring and early summer a succession of bloom is assured till frost. Well pulverized soil, preferably light sandy loam, should be used, covering the seed about $\frac{1}{4}$ inch deep. Make rows one foot apart thin out to six inches. For early blooming seed may be sown in the fall or started indoors and transplanted. Thrives in cool temperature. May also be grown in pots.

Red Goliath. One of the finest, being of strong growth, healthy and deep-rooting. The average spikes of flowers are immense, measuring six to eight inches long by $2\frac{1}{2}$ inches in diameter, and are compactly filled with giant florets, measuring $\frac{1}{2}$ -inch across and packed full, even in the center, with anthers, or three times as many as the older Mignonettes contain, consequently this variety is correctly called a *double* Mignonette. The color of the florets—fire-red—is strengthened on account of the density of the florets and spikes, thus presenting almost solid columns of brilliant-red, effectively contrasted against the healthy, rich green foliage. The fragrance is delightfully rich and powerful. For cutting it is perfection, remaining fresh for eight to ten days in water. Pkt., 10c.; $\frac{1}{8}$ oz. 25c.

Golden Machet. Distinct variety of Machet with massive spikes of golden-yellow blossoms. Pkt., 5c.; $\frac{1}{4}$ oz., 20c.

Sweet-scented (*Reseda Odorata*). The popular garden variety, with rather small spike, but very sweetly scented. Pkt., 5c.; oz., 15c.

MIMOSA**(Sensitive Plant)**

Curious and interesting annuals which bear pinkish-white flowers. The leaves close and droop when touched or shaken.

Culture—Start indoors in March, set out in May after danger of frost is past, six inches apart.

Pudica. Height, 18 inches. Pkt., 5c.

MIMULUS

Tender little plants with singularly shaped and brilliant colored flowers, blotched in every conceivable manner. Excellent for baskets or vases.

Culture—Sow in fine soil in boxes or pots placed in a sunny window or frame. Transplant the seedlings when large enough to handle.

Moschatus (Musk Plant). An old fashioned favorite plant of spreading or trailing habit with a peculiar and pleasing musk odor. Succeeds best in cool, moist locations or partial shade. **Pkt., 10c.**

MIRABILIS

(Four-o'Clock, Marvel of Peru)

The flowers of this old time favorite open about 4 o'clock in the afternoon and fade the next morning. Two feet high with bright foliage and fragrant flowers of desirable colors. Makes a nice hedge if set a foot apart.

Culture—Seed should be sown in the open ground where plants are desired. The roots may be taken up in the autumn and preserved through the winter for spring planting in the same manner as dahlias.

Mixed. All colors. **Pkt., 5c.; oz., 20c.**

MOMORDICA

Handsome and ornamental climbing half hardy annuals with warted golden-yellow fruit which when ripe, opens and discloses its seeds and brilliant carmine interior. Excellent for covering trellises, rockwork, etc. Height ten feet.

Culture—Sow seed outdoors in May.

Balsamia (Balsam Apple). Apple shaped fruit, glossy, green foliage, often used for its medicinal properties. **Pkt., 5c.**

Charantia (Balsam Pear). Pear shaped fruit, heavy green foliage. **Pkt., 5c.**

Moonflower. See *Ipomoea Mexicana*, page 44.

Morning Glory. See *Convolvulus*, page 39, and *Ipomoea*, page 44.

Mourning Bride. See *Scabiosa*, page 50.

MYOSOTIS

(Forget-me-not)

These popular charming little plants, producing star-like flowers, love cool, moist soil and like pansies, bloom most freely in fall and early spring. They make beautiful close borders or edgings and will bloom nicely in winter in a cool room or cold-frame.

Culture—Start indoors in February, if blooms are wanted first year, and transplant in warm sunny border in April. They establish themselves by self-seeding. Seed may also be sown in fall.

Alpestris-Victoria. A favorite sort with fine head of large globular sky-blue flowers. Plants bushy and compact, fine for borders, pots or cutting. **Pkt., 10c.**

NASTURTIIUMS

No other hardy annual excels Nasturtiums for their ease of culture, brilliancy of coloring and lavish profusion of flowers for so long a time with the small outlay of time and labor. The maximum of bloom is produced on thin soil and never flags through the hottest weather. In soil too rich leaves predominate and the plants are apt to rot off in wet weather, especially if standing too close. The tall varieties make a very effective display when trained on fences or trellises and the dwarf sorts are fine for edging and massing.

The varieties offered below were selected as being the best and most distinct.

DWARF OR TOM THUMB VARIETIES (*Tropaeolum Nanum*)

These have a neat compact habit and attractive foliage. They bloom in two months from sowing and furnish the greatest abundance of long-lasting, sweet-scented cut-flowers.

Chameleon. Is unique in bearing flowers of quite distinct coloring on one and the same plant.

Crystal Palace. Sulphur, maroon blotches.

Empress of India. Very dark leaves, fiery-crimson flowers.

Golden King. Pure golden-yellow.

King Theodore. Velvety red flowers, dark foliage.

King of Tom Thumb. Intense dark scarlet, dark leaves.

Prince Henry. Cream, spotted and tipped red.

Rose. Soft carmine-rose.

Vesuvius. Salmony-rose, dark leaved.

Price: Any of the above sorts, **pkt., 5c.; oz., 20c.; ¼ lb., 60c.**

Collection: One pkt. each of the above varieties, **35c.**; one oz. of each of the above varieties, **\$1.50.**

Finest Mixed. Tom Thumb varieties, all colors. **Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.**

TALL VARIETIES

(*Tropaeolum Majus*)

Elegant and luxurious climbers for trellises, etc. May also be used to cover unsightly railings and to trail over rough ground with fine effect.

Jupiter. Large rich golden-yellow flowers.

King Theodore. Deep crimson-maroon, dark foliage.

Moonlight (Pearl). Creamy-white.

Dunnetts Orange (Sunlight). Bright orange flowers, no markings.

Prince Henry. Light yellow, marbled scarlet.

Schulzi. Rich deep scarlet.

Vesuvius. Salmon-rose, dark leaved.

Price: Any of the above tall sorts, **pkt., 5c.; oz., 15c.; ¼ lb., 50c.**

Collection: One pkt. each of the above varieties, **25c.**; one oz. of each of the above varieties, **85c.**

Finest Mixed: Tall or climbing varieties, all colors, **pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.25.**

IVY LEAVED NASTURTIUMS

All with fine fimbriated petals. Colors intense and very striking. Foliage also very beautiful, like ivy, and vines exceedingly graceful. For a garden they are superb, but for window culture they are very fine.

Ivy Leaved Tall Mixed. Pkt., 10c.; oz., 20c.

NEMOPHILA
(Love Grove)

Very pretty dwarf-growing hardy annuals of easy culture. Has small cup-shaped, exquisitely colored blossoms about one inch in diameter. Good in pots, edgings, rockeries, or beds, doing best in moist soil and partial shade.

Culture—Seed may be sown outdoors after danger of frost has passed, thinning out when the plants are well established to prevent crowding. May be started indoors, transplanting to the open after ground has become warm.

Mixed. All colors. Pkt., 5c.

NICOTIANA
(Flowering Tobacco)

Half hardy annuals, of bushy habit, literally ablaze with tubular shaped flowers all summer. A handsome bedding plant. Height 3 to 4 feet.

Culture—Sow seed outdoors, in good rich soil, after all danger of frost is past, thinning out or transplanting after the plants are well established. Seeds may be started indoors, and later transplanted after ground has become warm, and the weather thoroughly settled.

Sanderæ Hybrids. A splendid type in a great variety of colors. Pkt., 5c.

NIGELLA
(Love in a Mist)

Another popular name for this fine old annual is "Devil in the Bush." With the blue and white flowers surrounded by a mist of slender fibrous leaves, it is always pretty and attractive. Of easy culture and useful for cutting.

Culture—Sow seed $\frac{1}{4}$ -inch deep in open ground after weather has become thoroughly settled, thinning out to 6 inches apart.

Damascena. Blue and white mixed. Pkt., 5c.

PANSIES

PANSIES are too well known to require any description as they are favorites with all. For best results you must start with a good strain. The finest Pansies are, as a rule, shy seeders, which accounts for the difference in the price of the various mixtures offered.

Pansy seed germinates and the plants grow more freely in the cool, early days of spring, and for summer-blooming should be sown by the latter part of April, or early in May, in the vicinity of Philadelphia. A soil containing a proportion of leaf mould, well enriched with well-decayed cow manure, will be the most satisfactory for the growing of this flower, and it should be well dug and made fine and level.

Sow the seeds in drills, covering them not more than four times their diameter and firming the soil well above them. The seeds germinate in from 8 to 12 days, and should not be allowed to dry out during this period. Covering the seed bed with newspapers will prevent this and hasten somewhat the period of germination.

As soon as the plants are up and large enough to handle, they should be thinned out or transplanted to stand nine inches apart in the rows. Thorough cultivation should be given from the start, as Pansies will not thrive when obliged to share the beds with a mass of weeds.

It is a mistake to plant Pansies in the shade of a tree or buildings. An open exposure, where the wind has a free sweep over the bed is far better, and Pansies so planted are free from the long, straggling branches which produce few and inferior flowers. During dry weather the bed should be watered daily, and in extreme cases twice a day for the best results.

Seeds sown in April or May will produce blooming plants by the last of June, which will give an abundance of flowers throughout the remainder of the season. About the middle of August is the best time for starting Pansy seeds for early spring blooming, as this allows the plants to go into winter in vigorous condition.

GIANT TRIMARDEAU PANSIES

We have discarded the ordinary Pansies in separate colors in favor of this type which produces very large flowers, plants of strong, robust growth and well adapted to the trying conditions of our climate.

Emperor William. Ultramarine-blue with violet-purple eyes. Very pleasing shades. Pkt., 10c.; $\frac{1}{4}$ oz., 65c.

Fairy Queen. Bright blue, margined with pure white; large flowers, extra fine. Pkt., 10c.; $\frac{1}{4}$ oz., 65c.

Goldelse. Pure spotless canary-yellow. Pkt., 15c.; $\frac{1}{4}$ oz., 75c.

King of the Blacks. Almost jet-black, extra large, fine flowering. Pkt., 10c.; $\frac{1}{4}$ oz., 65c.

Lord Beaconsfield. Top pale lavender, shading to purple-violet on lower petals. Very large and exquisitely marked. Pkt., 10c.; $\frac{1}{4}$ oz., 65c.

Snow White (Candidissima). Extra fine, pure spotless white. Pkt., 15c.; $\frac{1}{4}$ oz., 75c.

Yellow (with black eye). Extra large, a splendid bedding variety. Pkt., 15c.; $\frac{1}{4}$ oz., 75c.

Collection. One pkt. each of above seven varieties, 75c.

Giant Trimardeau. A fine mixture of all colors. Pkt., 10c.; $\frac{1}{4}$ oz., 50c.; oz. \$1.50.

Cassier's Giant. A grand mixture of the finest blotched varieties; splendid in every way, being large in size and rich in coloring. Pkt., 25c.; $\frac{1}{8}$ oz., \$1.25.

Mingle's Giant Mixture. This mixture comprises a large number of colorings and is intended to supply the want of a first-class mixture at a moderate price. Pkt., 20c.; $\frac{1}{8}$ oz., 75c.

ORCHID-FLOWERED PANSIES

In the new Orchid-Flowered Pansies we have some rare and exquisitely dainty shades. The new and unusual combinations of color tones suggest the delicate tropical colors of the aristocratic Orchid, which may truly be said to "beggars description." The flowers are gigantic in size, of perfect shape and borne on long stems. The petals are beautifully ruffled and their velvety texture intensifies the rich effect of the dainty shades of color.

Orchid Mixed. Rare light shades, large frilled flowers, very attractive. Pkt., 15c.; $\frac{1}{8}$ oz., 75c.

VIOLA CORNUTA
(Tufted Pansies)

While the flowers of the Tufted Pansies are not so large as the regular type, yet they bloom so freely that they are superior to pansies where *effect* is wanted, the colors being particularly clear and distinct; they also bloom for a longer time. Seed sown in April produces flowering plants by June, and from then on until frost they are a sheet of bloom.

Papillo (Butterfly Violet). Lovely violet-lilac, with small, dark eye. Pkt., 15c.

Lutea Splendens. Rich golden-yellow. Pkt., 15c.

Admiration. Large dark-blue flowers. Pkt., 20c.

Mixed. A splendid mixture of the best varieties. Pkt., 10c.; $\frac{1}{4}$ oz., 75c.

PASSIFLORA (Passion Flower)

A magnificent half hardy perennial climber with beautiful flowers, blooming luxuriantly from early summer until fall.

Culture—Sow indoors in spring, and transplant after danger of frost has passed. Train vines along fence or trellis.

Coerulea. Sky-blue flowers. **Pkt., 10c.**

PENSTEMON (Bearded Tongue)

Handsome half hardy perennials, growing about two feet high, and are very effective for beds and borders. The flowers, bell-shaped or tubular about two inches long, are borne on long graceful spikes and include a wide range of colors, from pure white to maroon with all intermediate shadings.

Culture—Sow seed outdoors in well pulverized rich soil after ground has become warm and weather thoroughly settled, thin out or transplant after plants have become established to prevent crowding. May be started indoors, setting plants out in the open after danger of frost has passed.

Mixed. A great variety of kinds and colors. **Pkt., 10c.**

PETUNIA

We have no better plants than the Petunias for beds and masses, borders, window-boxes, baskets and vases. Once fairly started, they grow almost as easily as weeds and furnish a glorious succession of bloom from early summer until frost. The large-flowered strains are very beautiful and of almost endless variety. Seed of the double and giant-flowered Petunias is made expensive by the great amount of labor involved in hand-fertilization, and it is well to handle seed and tiny seedlings with some care.

Culture—Sow in hotbed, coldframes, or in boxes of fine soil in the sunny windows of a warm room in April or May, and transplant about one foot apart in garden beds. Seed of the double varieties has not so much vitality as that of single sorts and needs a little more care in watering to be sure of germination.

SINGLE LARGE FLOWERING

Giants of California. Flowers very large, in great variety of colors and markings with deep yellow throats. **Pkt., 35c.**

White. Clear paper-white flowers of unusual size. **Pkt., 25c.**

Single Mixed. **Pkt., 10c.**

SINGLE BEDDING VARIETIES

Smaller flowered sorts, most valuable for beds and masses. Height, one foot.

Howard's Star. Rich crimson distinct white star in the center, very showy and attractive. **Pkt., 10c.; 1/8 oz., 50c.**

Rosy Morn. Bright rosy-pink with white throat, very charming, compact and free flowering, for bedding. **Pkt., 10c.**

Single Mixed. All colors. **Pkt., 5c.; 1/4 oz., 30c.**

DOUBLE LARGE FLOWERING

Double Large Flowering. Beautiful varieties in mixture. **Pkt., 20c.**

Fancy, Large Flowered, Fringed, Mixed. Flowers of large size and beautiful shape, deep-throated and of varied and brilliant colors beautifully fringed. **Pkt., 20c.**

PHLOX DRUMMONDII

The hardy annual Phloxes are dazzling in effect, particularly so when sown in masses or ribbon beds of contrasting colors. Few flowers are as easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost and care. There are few desirable colors beyond their range, and if given good soil and plenty of water, they will furnish a long supply of delicate flowers.

Culture—For pot culture dwarf varieties are valuable and as an undergrowth for tall, bare-stemmed plants they are also valuable. The first sowings should be made as soon as the frost is out of the ground in spring, later ones in May, either where the plants are to bloom, or in a seed-bed, as the Phlox transplants readily. In transplanting set the taller kinds about a foot apart; if planted too thickly they suffer from mildew. Cutting away the flowers and seed-pods makes the plants more bushy and compact, and lengthens their blooming time. Average height, one foot.

GRANDIFLORA VARIETIES

This section has beautiful, round-petaled flowers, larger than in the older sorts; showy and constant, blooming in the greatest profusion from early summer to frost. Our strain is far superior to that ordinarily sold.

Alba. Pure white flowers, borne in great profusion. **Pkt., 10c.**

Crimson. Bright color. " "

Coccinea. Large brilliant scarlet, very free flowering. " "

Primrose. Cream color, very fine. " 15c.

Rosia. Rose color. " 10c.

Violacea. " "

Grandiflora Mixed. Contains a mixture of all colors and makes a very showy border or bed. **Pkt., 5c.; 1/4 oz., 30c.**

STAR PHLOX

Of dwarf habit with very pretty star-shaped flowers. A novel variety.

Cuspidata Mixed. All colors, very fine. **Pkt., 10c.; 1/4 oz., 40c.**

Periwinkle. See Vinca, page 52.

Pinks. See Dianthus, page 41.

POPPY (Papaver)

Before tulips are fairly gone our gardens begin to be gay with Poppies. Few flowers have the same grace of stem, airiness of poise, and delicacy of tissue. For beds and borders, with a back ground of green, there is nothing finer. Some sorts are admirable for naturalizing in open wooded grounds; others, like the Shirley, are beautiful for cutting.

Culture—A sandy loam suits Poppies best, and, as their strong tap-roots are difficult to transplant, it is well to sow the seed where the plants are to bloom. Sowings made in fall and at intervals in spring will provide a long succession of flowers. Sow thinly, covering very lightly, and thin the plants to stand about a foot apart. The best plants are those grown from early sowings while the soil is cool and moist.

SINGLE ANNUAL POPPIES

Shirley. A splendid strain of annual poppies of the greatest variety of colors. They range in color from the purest white through the delicate shades of pale pink, rose, and carmine to the deepest crimson and deep red. Of easy culture and very free bloomers.

Shirley Single Mixed. **Pkt., 5c.; 1/2 oz., 20c.**

Admiral. A single peony-flowered variety of surpassing beauty, having large, smooth-edged flowers of glistening white, with a broad band of brilliant scarlet round the top. These two colors form a striking contrast, and when planted in groups produce a magnificent effect. **Pkt., 10c.; 1/4 oz., 20c.**

Danebrog, or Danish Cross. Very showy variety, producing large flowers of brilliant scarlet, with a silvery white spot on each petal, forming a white cross. **Pkt., 5c.; oz., 20c.**

King Edward. A new variety of gorgeous coloring, being a deep scarlet, shaded crimson-red, each petal marked with a large black blotch for half its length from the base, against which the yellow anthers stand out in bold relief. The plant grows 2 1/2 feet high, and produces its very large flowers with great freedom. **Pkt., 10c.; 1/4 oz., 25c.**

Tulip Poppy (Papaver Glaucum.). One of the most brilliant; the flowers are three inches across and closely resemble the brilliant Scarlet Gesneriana Tulip. Height two feet. **Pkt., 10c.; 1/4 oz., 30c.**

Single Mixed. All colors. **Pkt., 5c.; oz., 20c.**

DOUBLE ANNUAL POPPIES

American Flag. A beautiful variety, large double snow-white flowers bordered with scarlet. **Pkt., 5c.; oz., 45c.**

"Mikado" (The Striped Japanese Poppy). This beautiful Poppy is very distinct in character and color. The flowers are brilliant scarlet and white with elegantly curved petals, resembling a Japanese Chrysanthemum. **Pkt., 5c.; oz., 30c.**

Carnation, Flowered. Splendid double-fringed flowers, all colors mixed. **Pkt., 5c.; oz., 25c.**

HARDY PERENNIAL POPPIES

Orientele (The Large Oriental Poppy). A charming summer-flowering hardy plant, producing numerous leafy stems about 2½ feet high, with large deep crimson flowers; having a conspicuous black blotch on each petal, exceedingly showy. **Pkt., 10c.; ¼ oz., 30c.**

Nudicaule (Iceland Poppy). These hardy perennials flower the first year from seed, blooming almost as quickly as the annual sort. They are of graceful, neat habit, with bright green fernlike foliage, formed in tufts, from which issue slender stalks about 12 inches high, bearing their brilliant flowers in endless profusion; most useful for cutting, for which purpose pick when in bud, and, if the seed pods are picked off, continue in flower the entire season. They remain evergreen throughout the winter, coming into bloom early the following spring.

Finest Mixed. Pkt., 10c.; ¼ oz., 25c.

PORTULACA

This charming little hardy annual is unrivaled for brilliancy among bedding plants. Through the driest, hottest seasons it flourishes amazingly, carpeting the ground with a mat of succulent foliage that in the afternoon is hidden by gayest of flowers. Fine for massing in beds, edging rockwork and frequently used to cover sunny banks. As an undergrowth for taller plants it is also valuable.

Culture—The seed does not germinate until hot weather, and should be sown late, plants require little care and can be transplanted in full flower. A good plan is to mix the seed with three or four times as much sand or dry earth to get a more even distribution in sowing.

SINGLE VARIETIES

Single White	Pkt., 10c.
“ Yellow	“ “
“ Red	“ “
“ Mixed. Pkt., 5c.; ¼ oz., 20c.	

DOUBLE VARIETIES

These flowers are so full and perfect as to resemble tiny roses, increasing in size and beauty as the season progresses.

Double Yellow	Pkt., 15c.
“ Rose	“ “
“ Scarlet	“ “
“ White	“ “
“ Mixed. A splendid assortment of all colors. Pkt., 10c.; ¼ oz., 60c.	

PRIMULA**(Primrose)**

The Primula stands in the front rank among greenhouse plants and is fine for winter and spring blooming. It is free flowering and is especially valuable for cut flowers and for house and window culture. A cool place suits it best.

Culture—Sow the seed in drills in a light rich soil in shallow boxes at any time from the middle of March to the end of May, the earliest seed sown will naturally produce the first blooms. Cover the seed about ¼ inch and press the soil on them with a bottom of a pot or a board. Water moderately, avoid forcing the seed. The plants must be well ventilated, well watered and slightly shaded.

CHINESE PRIMROSE

Crimson King. Crimson, fine shade, beautifully fringed. **Pkt., 35c.**

Alba Magnifica. Pure white fringed, extra choice. **Pkt., 25c.**

Rosy Morn. Beautiful soft pink color, very large blooms, solid and erect, extra free flowering and extremely attractive. **Pkt., 40c.**

Stellata Mixed. A very pretty form with large heads of star-shaped flowers of various colors, splendid for decorative purposes. **Pkt., 25c.**

Chinese Mixed. Contains a mixture of the finest fringed large flowering sorts. **Pkt., 25c.**

PYRETHRUM

Showy, hardy perennial growing two feet in height with most brilliant and lasting flowers. *P. Aureum* is the well-known variety so much used for edging, bedding, and borders.

Culture—Sow seed outdoors early in the spring. May be started indoors for early flowering.

Parthenofolium Aureum (Golden Feather). Yellow, fern-like leaves, fine for edgings. Height about eight inches. **Pkt., 5c.; ¼ oz., 25c.**

Single Mixed. Pkt., 10c.

Double Mixed. Pkt., 25c.

RHODANTHE

A charming half hardy annual, valuable for pot culture or for the garden. Flowers are everlasting, much prized for winter bouquets. Glaucous-gray foliage.

Culture—Sow thinly in boxes of fine soil under glass, and transplant after ground has become warm and weather settled, setting plants about nine inches apart.

The flowers should be cut before they are fully expanded and dried slowly, hung stem ends up, keeping them out of the sun.

Maculata Rose. Rose with dark center.....	Pkt., 10c.
“ Alba. Pure white.....	“ “
“ Mixed	“ 5c.

RICINUS
(Castor Oil Bean)

Picturesquely showy and imposing, the Ricinus gives to the garden magnificent semi-tropical effects. Grown as a specimen it makes a perfect pyramid of gigantic leaves; a dozen plants in a large bed show a glorious mound of glistening colors and may be admired from a long distance; planted thickly it soon forms a handsome screen or hedge.

Culture—Sow seed outdoors when all danger of frost is over, sow two inches deep, about three feet apart. Seed may be started under glass and later transplanted.

Zanzibariensis Mixed. A distinct class which surpasses in size and beauty all varieties. The different varieties included in our mixture have light and dark green leaves and some of coppery-bronze changing to dark green, with reddish ribs. The seeds are beautifully marked. **Pkt., 5c.; oz., 20c.**

SALVIA
(Flowering Sage)

A standard bedding plant that keeps the garden bright with color until late in autumn. For pot culture, for cutting and for borders, etc., it is very valuable.

Culture—Start plants indoors, in February or March, and transplant to the garden about May 15th. May be taken indoors in the fall as a house plant.

SPLENDENS
(Scarlet Sage)

These are the well-known bedders, single plants of which carry many long flaming flower spikes open at one time, keeping up the display until frost.

Grandiflora. A rich-flowered bedder, long spikes. Height, three feet. **Pkt., 5c.; ¼ oz., 60c.**

Bon Fire. Our well-known compact Salvia, the freest blooming of all, seemingly on fire all the time with dense flaming scarlet spikes. Height, two feet. **Pkt., 10c.; ¼ oz., 75c.**

SALPIGLOSSIS
(Painted Tongue)

Half hardy annuals bearing beautiful funnel-shaped flowers, having dark veins on a ground which varies from white to crimson, yellow, orange, etc., and intermediate shades. Very effective in beds, borders, or edgings. Height, two feet.

Culture—Start seed in March, indoors, for early flowering. Set outdoors in May one foot apart each way. Begins to bloom in August and continues until frost.

Rose and Gold	Pkt., 10c.
Violet	“ “
Yellow	“ “
Niagra. Very dark.....	“ “
Finest Mixed. Pkt., 10c.; ¼ oz., 40c.	

SCABIOSA**(Mourning Bride—Pincushion Flower)**

Well-known hardy annuals, its great abundance and long succession of richly colored cone or pin cushion shaped blossoms, borne on long stems make it one of the most decorative of all garden flowers. The flower stems are long and the blossoms last for about a week after being cut. Height, two to three feet.

Culture—Sow seed outdoors in good rich soil after all danger of frost has passed, thinning out to two feet apart or transplant to prevent crowding. If started indoors young plants should not be set out until the ground has become warm and weather thoroughly settled.

LARGE FLOWERED DOUBLE

Azure Fairy. Light blue.....	Pkt., 10c.
Flesh	“ “
Fiery Scarlet	“ “
Lilac	“ “
Royal Purple. Very dark purple.....	“ “
Snowball	“ “
Collection. Pkt. each of above sorts, 50c.	
Mixed. All colors. Pkt., 5c.; ¼ oz., 20c.; oz., 60c.	

Scarlet Runner Beans. See Pole Beans, page 10.

SCHIZANTHUS
(Butterfly Flower)

Wonderfully showy annuals; very decorative for garden beds and unsurpassed in pots for the conservatory, where by successive sowing a continuous display may be enjoyed almost the year round. The plants are of compact, branchy growth, 1½ to 2 feet high, and are literally sheeted with exquisite, butterfly-like flowers which include beautiful new color combinations.

Culture—Seed may be sown indoors, but usually sown in the garden where plants are to remain.

Wisetonensis Hybrids, Large-flowering, Mixed Colors. Beautiful colors and combinations in great variety. Pkt., 15c.

Sensitive Plant. See Mimosa, page 45.

SILENE
(Catchfly)

An easy growing hardy annual, very free flowering, producing dense clusters of pink, white and red blossoms. The plant is covered with a glutinous moisture from which flies cannot disengage themselves, hence the name. Height, 18 inches.

Culture—Seed should be planted in the open ground after danger of frost is past, or may be started indoors, transplanting to the open as soon as warm weather appears. A rich garden soil, liberally enriched with manure is best.

Mixed. Red, white and pink shades. Pkt., 5c.

SMILAX

A graceful climbing plant with small, beautiful, glossy green foliage which is used for table decoration and with bouquets.

Culture—Soak seed in warm water for 24 hours before planting, as it germinates slowly. Even then it requires eight weeks before the plant appears. May be planted in pots or baskets. Pkt., 10c.

Snapdragon. See Antirrhinum, page 34.

Snow on the Mountain. See Euphorbia, page 42.

STOKESIA
(Cornflower Aster)

This popular hardy perennial bears large lavender colored cornflower-like blossoms which continue in bloom all summer. Useful for borders, beds, also fine for cutting.

Culture—Start plants indoors and transplant to the garden in May not closer than eight inches apart. May be, also, started indoors and later transplanted after weather has become settled.

Cyanea. Blue flowers. Pkt., 10c.

STOCKS

Stocks have good habit, fine leaves, beautiful and fragrant flowers, a long season of bloom and adaptability to many conditions of culture. They are unsurpassed for edging, borders, or for pot culture and for cutting. Average height, 1 to 1½ feet.

Culture—For early flowers, sow seed under glass in March or April, transplanting the seedlings when an inch high into other pots or boxes, or into fine soil spread over some discarded hot bed. In May transfer to garden beds of deep rich soil, setting the plants one foot apart. Transplanting several times in the early stages of growth tends to make the plants more dwarf and compact. For later flowers, seed may be sown in the open in May. If plants that begin to bloom late are carefully potted in the fall, they will flower finely all winter in a house that is moderately cool and moist.

DOUBLE FLOWERING DWARF TEN-WEEK STOCKS

Early maturing, large flowering, particularly suited for pot culture, beds or edging. Height, eight inches.

Canary Yellow	Pkt., 10c.
Crimson	“ “
Dark Blue	“ “
Rose	“ “
White	“ “

Collection. Pkt. each of above five sorts, 40c.

Mixed. All colors. Pkt., 10c.; ¼ oz., \$1.00.

DRESDEN PERPETUAL OR CUT AND COME AGAIN
STOCKS

Excellent for cutting, very fine for outdoor planting.

Canary Yellow	Pkt., 10c.
Crimson	“ “
Rose	“ “
Violet	“ “
White	“ “

Collection. Pkt. each of above five sorts, 40c.

Mixed. All colors. Pkt., 10c.; ¼ oz., \$1.25.

Strawflower. See Helichrysum, page 43.

Summer Cypress. See Kochia Trichophylla, page 44.

Sunflower. See Helianthus, page 43.

Swan River Daisy. See Brachycome, page 36.

SWEET PEAS

Every garden should have a row of Sweet Peas. A nice row of them will provide you with a beautiful bouquet day after day. Plant them early, give them good rich soil, pick the blossoms every day and you will be richly rewarded for your trouble.

Culture—Sweet Peas do best in good, rich soil that is inclined to be a little clayey. Fall is the best time to prepare the soil, especially if manure is used. Pea vines like moist soil and often the heat originated by the manure combined with the heat from the sun is too much for the vines. They turn yellow and die. Use a good commercial fertilizer or else apply the manure in the fall. Dig a trench a foot deep and about 16 inches wide and mix in this about six inches of top soil with good manure or commercial fertilizer. Plant the seeds in this trench in two rows, dropping the seeds about two inches apart. Cover about two inches deep and then gradually fill the trench as the plants grow. The trench should be made so the water will drain off. The seed should be planted just as early in the spring as possible, as late sowing produces rank growth but few flowers. Provide a trellis, wire or brush for the vines to climb on and pick the flowers every day. An application of bone dust and nitrate of soda will hasten the blooming time.

SPENCER SWEET PEAS

PRIMROSE

Dobbie's Cream. The largest and best strain of "Primrose Spencer" flowers. Large, of splendid substance, magnificently waved. Color. Cream-yellow. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

RED

King Edward Spencer. A beautiful rich carmine-scarlet of largest size and beautifully waved. A strong, vigorous grower, bearing its flowers on long strong stems. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

The President. A glowing orange-scarlet, surpassing all in its class, its coloring equaling the oriental poppy. Flowers of largest size and beautifully waved. Extra fine. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

Vermilion Brilliant. Bright scarlet of largest size and best Spencer form. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

BLUE AND PURPLE

Royal Purple. Rich, wavy, rosy-purple flowers of immense size. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

Wedgewood. Bright silvery-blue. A beautiful and popular color. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

Blue Monarch. A splendid dark blue self of large size and good substance. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

ORANGE AND SALMON PINK

Lewis. Orange-pink with bright orange standard. Very showy. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

Illuminator. Rich salmony-orange overlaid with bright cerise-pink. The effect being a light orange-scarlet. Flowers of large size. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

Mrs. Hugh Dickson. Beautiful salmon-pink and cream ground. Color effect a rich apricot. Extra fine. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

MAROON

Othello Spencer. Rich, deep maroon. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

LAVENDER

Asta Ohn. Soft pinkish-lavender self. Very large and wavy. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

Margaret Madison. A soft clear azure-blue self. Flowers of good substance and very large. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

WHITE

King White. Hailed as the King of Whites, because of the perfect finish of the flower in every detail, form, size, waviness and glistening immaculate whiteness. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

Constance Hinton. Splendid large wavy white flowers of giant size and perfect form, beautifully waved. A good strong grower and very free flowering. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

PINK

Apple Blossom Spencer. Standard bright rose color, wings creamy blush. A very robust, profuse and large flowering "bicolor." Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

Margaret Atlee. Standard bright rose color, wings white, slightly flushed with pink flowers of largest size and beautifully waved. Extra fine. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

Countess Spencer. A lovely clear pink, shading deeper at the edges. Flowers of enormous size and very wavy. A strong vigorous grower bearing its giant flowers on long strong stems. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

STRIPED

American Spencer. A very beautiful flaked variety. The ground color is ivory-white. Beautifully striped with brilliant crimson-red. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.15.

SPENCER MIXED

Mingle's Superb Spencer Mixture. A combination blended by ourselves of the most beautiful and gigantic in size. This unsurpassed mixture includes all the best Spencer sorts. Great attention being given to secure a beautiful mixture and yet include all shades nicely balanced. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

Collection Offer. Twelve packets of the above Spencer Sweet Peas—your selection \$1.00.

DWARF CUPID SWEET PEAS

Compact plants growing six inches high, and forming a line of emerald-green foliage a foot wide. From early June until late summer a sheet of bloom.

Finest Mixed. All colors. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

GRANDIFLORA SWEET PEAS

The grandiflora is the well-known type which has been grown for many years. The flowers are not quite as large as the Spencer sorts, but are easier grown and less expensive. We offer the best grandiflora sorts.

Blanche Ferry. Rose and white.

Captain of the Blues. Standard purple. Wings blue.

Dorothy Eckford. Large pure white.

Hon. Mrs. Kenyon. Primrose-yellow.

Janet Scott. Bright pink and buff.

King Edward. Bright crimson-scarlet.

Lady Grisel Hamilton. Silver-lavender.

Lord Nelson. Deep navy-blue.

Miss Wilmot. Orange and salmon pink.

Collection Offer. One packet each of the above nine varieties, \$1.00.

Price: Any of the above varieties, pkt., 5c.; oz., 15c.; ¼ lb., 50c.; lb., \$1.75.

Mingle's Grandiflora Mixture. A superb mixture containing only the finest grandiflora varieties blended with the greatest care so as to produce the best color effect. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

Mulford Cultures. An ideal preparation for treating Sweet Pea seed when planting. Makes larger and more flowers, longer stems; prolongs the blooming period. Garden size, 35c.

SWEET ROCKET**(Hesperis)**

Favorite hardy perennials, very effective in the garden border. The plants form large clumps, two to three feet in height, covered with showy terminal spikes of flowers resembling stocks. The colors range from white through lilac to pink and purple, splendid for cut flowers.

Culture—Seeds may be sown outdoors in spring so that plants will bloom during late summer and fall, or started in early fall, plants will produce a profusion of blooms the following spring and summer.

Plants should have a light mulch of manure for protection during the winter.

Mixed Colors. Pkt., 5c.

Sweet Sultan. See *Centaurea Imperialis*, page 38.

SWEET WILLIAM**(Dianthus Barbatus)**

For many years the Sweet William has been esteemed as one of our finest hardy garden plants, being of easy culture, thriving in any good garden soil, and lasting for years. The best varieties of Sweet Williams are of exceedingly beautiful colors and the large fragrant flowers are borne in trusses of great size. They make a splendid show as a border flower and last well as cut flowers.

Culture—Sow seed early in spring when danger of frost is over, in rich, mellow soil, covering the seed about $\frac{1}{4}$ inch with fine pressed soil, well pressed down. When two inches high thin to six inches apart. Seed can also be sown in fall. There are usually no flowers until the second season, unless started very early under glass and transplanted when blooms may be had in autumn. Old roots may be divided and reset each spring.

Scarlet Beauty. Large single flowers of intense scarlet. Pkt., 10c.

Pink Beauty. Large single flowers of pure pink. Pkt., 10c.

Hunts Perfection. Single flowered, various shades with white eye and white bordered. Pkt., 5c.

White. Pkt., 5c.

Giant Double Mixed. Pkt., 5c.; $\frac{1}{4}$ oz., 50c.

Tassel Flower. See *Cacalia*, page 37.

THUNBERGIA**(Black Eyed Susan)**

A very pretty, rapidly growing, tender climber, that is usually grown as an annual. Useful for hanging baskets, vases, trellises, window boxes, etc. Height, six feet.

Culture—Sow seed outdoors early in spring, no special care required.

Mixed. Flowers, white, orange, and buff shades. Pkt., 5c.

TRITOMA**(Red-Hot Poker Plant)**

This splendid half hardy perennial, also known as the Torch Lily, should be given a prominent place among hardy bedding plants. Easily grown from seed, many flowering the first year. Large gorgeous spikes of bloom resembling a red-hot poker.

Grandiflora. Flowers scarlet, orange, and yellow, on a very prominent spike. Pkt., 10c.

VERBENA

Few flowers are more deserving of a place in the garden than the Verbena. For beds, borders, mounds, vases, and window boxes they are particularly fine. May also be used for an undergrowth for tall plants. They produce large clusters of showy and often fragrant flowers in great profusion in constant succession from June until frost.

Culture—For early flowering plants should be started indoors; otherwise sow seed outdoors in April or May and thin out or transplant not closer than 18 inches apart, as the plants will cover the ground. Hardy annual.

MAMMOTH VERBENAS

The trusses and individual flowers are of the largest size of brilliant colors, free blooming, and of vigorous habit.

Mammoth White. Dense heads of finely shaped pure white flowers. Pkt., 10c.; $\frac{1}{4}$ oz. 45c.

“ **Purple.** Deep purple. . . . “ “ “ “

“ **Scarlet.** Brightest scarlet. “ “ “ “

“ **Blue.** . . . . . “ “ “ “

“ **Pink.** . . . . . “ “ “ “

Collection. One Pkt. each of above five varieties, 40c.

Mammoth Mixed. Flowers of large size in beautiful shades of white, scarlet, blue, purple, and rose. Pkt., 5c.; $\frac{1}{4}$ oz., 40c.

VINCA**(Madagascar Periwinkle)**

Handsome free-flowering evergreen shrub with dark glossy, green foliage, and handsome flowers that bloom luxuriantly and most profusely all summer. Useful for bedding or borders, a fine cut flower, every bud opening when placed in water.

Culture—It is best to start the seed early indoors or in a hot-bed, but they begin flowering, from seed sown outdoors, in May or as soon as the ground is warm, continuing until frost, or they may be potted in the fall and kept in bloom during the winter. Height, two feet.

Rosea Mixed. All the colors. Pkt., 10c.; $\frac{1}{4}$ oz., 50c.

VIOLETS**(Sweet Scented)**

Well known hardy perennial plants, much prized for spring blooming. Very fragrant and hardy doing best in a cool, moist location. Violet seed takes a long time to germinate.

Culture—Seeds may be sown outdoors early in spring so that plants will bloom during late summer and fall, or started in early fall, plants will produce a profusion of blooms the following spring and summer.

Plants should have a light mulch of manure for protection during winter.

Viola Odorata. Large dark blue. Pkt., 10c.

WALLFLOWER

Wallflowers should be better known. Their adaptability for pot culture and outdoor bedding and the peculiar sweet fragrance of their flowers should win favor. The oriental coloring of the flowers in their rich reds and yellows is very effective. They are easily grown and last long as cut flowers. Half hardy perennial. Height, two feet.

Culture—Sow seed indoors February or March and pot when two inches high. Set outdoors May 15th, twelve inches apart. In September remove indoors and plants will bloom all winter. Will not winter outdoors in the northern states.

Cloth of Gold. Golden-yellow, large single flowering. Pkt., 10c.

Goliath. A splendid single variety; flowers of a rich shining-red with a black-velvety sheen. “ “

Single Mixed. All colors Pkt., 5c.; ¼ oz., 20c.

Double Finest Mixed. Pkt., 15c.

Wild Cucumber. See Echinocystis, page 41.

WILD FLOWER GARDEN

A mixture of easily grown annual flowers which will furnish a profusion of blooms throughout the season, without the attention necessary for more formal plantings. This mixture will be found invaluable for the decoration of children's gardens, shrubberies along fences, and on embankments, and will convert many an unsightly spot into a place of beauty.

Culture—Sow seed broadcast in spring covering lightly with fine soil.

Mixture. Pkt., 5c.; oz., 25c.; ¼ lb., 75c.

Woolflower. See Celosia Childsi, page 38.

XERANTHEMUM**(Everlasting or Immortelle)**

This well-known hardy annual is one of the oldest and prettiest of the everlasting flowers and in winter bouquets retain their color and form for years.

Culture—Seed may be sown in the open ground early in May, growing readily in any open sunny position remaining in bloom from early summer till frost. Height about 3 feet.

Double Mixed. Pkt., 10c.; ¼ oz., 30c.

ZINNIA**(Youth and Old Age)**

The well-known bush-like plants of Zinnias produce a profusion of large double flowers borne on stiff stems. They are much used for bedding and are suitable for borders and for cutting.

There is much satisfaction in a bed of Zinnias with their twisted and recurved petalled flowers in many bright colors, and when nearly every other flower has been killed by frost this plant is still in full bloom. Few flowers are more easily grown or bloom more abundantly throughout the season, and the wide range of color is not less remarkable than their unusual depth and richness.

Culture—Sow the seed early in spring in open ground in good rich soil preferably in rows one and one-half feet apart and covering about one-fourth inch deep. When the young plants are one to two inches high thin to six inches apart. Half hardy annual, tall growing, usually about one and one-half to two feet high.

GIANT DOUBLE

An improved strain which produces immense double flowers 3 to 4 inches in diameter in an extremely wide range of colors. The plants are hardy, of very vigorous growth, often 3 feet high and remain in bloom from early summer until killed by frost.

Giant Double Crimson	Pkt., 10c.; ⅛ oz., 30c.
“ “ Golden-Yellow	“ “ “ “
“ “ Orange	“ “ “ “
“ “ Flesh-Pink	“ “ “ “
“ “ Purple	“ “ “ “
“ “ Scarlet	“ “ “ “
“ “ Salmon	“ 15c. “ 40c.
“ “ Sulphur-Yellow	“ 10c. “ 30c.
“ “ White	“ “ “ “

Collection Offer. One pkt., each of the above nine varieties..... 80c.

Giant Double Mixed. A choice mixture of the above varieties..... Pkt., 5c.; ¼ oz., 40c.; oz., \$1.25.

ELEGANS DWARF DOUBLE

Elegans Double Golden-Yellow	Pkt., 5c.; ⅛ oz., 15c.
“ “ Flesh-Pink	“ “ “ “
“ “ Orange	“ “ “ “
“ “ Purple	“ “ “ “
“ “ Scarlet	“ “ “ “
“ “ White	“ “ “ “

LARGE FLOWERING CANNAS

All of the following are Dormant Roots

GREEN-FOLIAGED CANNAS

Pink

CITY OF PORTLAND—A wonderful bright rosy-pink, much deeper in color than Mrs. Alfred Conard or Hungaria, a free-flowering vigorous grower; 3½ feet. Ea., 20c.; doz., \$2.00.

MRS. ALFRED CONARD—One of the very best Cannas in commerce today. The large exquisitely shaded-salmon pink flowers are produced in great abundance on robust upright stalks; 4 feet. Ea., 20c.; doz., \$2.00.

MORNING GLOW—A color contrast of more than usual picturesqueness; foliage an olive green striped, and veined with bronze. Flowers exquisite, soft shell pink with orange-red center; 3½ feet. Ea., 25c.; doz., \$2.50.

ROSEA GIGANTEA—Rich soft rose-pink flowers of gigantic size; a prolific bloomer. The large broad petals and the massive heads of bloom invariably create a sensation; 3½ feet. Ea., 25c.; doz., \$2.50.

Red

METEOR—Magnificent bedding variety with massive erect trusses of deep blood-red flowers, produced with a freedom that leaves nothing to be desired. The best deep red large-flowered Canna; 5 feet. Ea., 20c.; doz., \$2.00.

FIERY CROSS—Color, vivid scarlet shading to crimson. So firm are the glistening petals that they do not wilt in the brightest sun. The foliage is beautiful lustrous blue-green. It is entirely free from blight and disease; 4 feet. Ea., 20c.; doz., \$2.00.

THE PRESIDENT—When the Canna Firebird was introduced its immense florets and bright red color insured its immediate popularity. In offering the President we may best describe it as possessing all the good qualities of Firebird, enhanced by extraordinary vigor and perfect healthy foliages. It grows to a height of 5 feet, and produces its immense trusses of giant florets in great profusion. The most sensational introduction of recent years. Ea., 35c.; doz., \$3.50.

WINTZER'S COLOSSAL—Without a doubt the largest-flowered Canna yet produced. Flowers of vivid scarlet, sometimes measuring eight inches across; 5 feet. Ea., 20c.; doz., \$2.00.

Yellow

GOLDEN EAGLE—A grand clear golden-yellow, of free upright growth. The flowers are produced in large clusters well above the foliage; 4 feet. Ea., 20c.; doz., \$2.00.

ORANGE BEDDER—Color a bright orange with enough scarlet suffusion to intensify the dazzling mass of color; 4 feet. Ea., 15c.; doz., \$1.25.

YELLOW KING HUMBERT—Like King Humbert in habit of growth and flowering, and produces golden-yellow flowers, blotched red; 4 feet. Ea., 15c.; doz., \$1.25.

White

EUREKA—Our own introduction and the best white Canna for all purposes. The large substantial flowers are very freely produced on strong, vigorous plants; 4½ feet. Ea., 15c.; doz., \$1.25.

FLAG OF TRUCE—A large-flowered, creamy-white with faint pink dots on each petal. The general effect is white. Not as white nor as tall as Eureka, but quite distinct and valuable; 4 feet. Ea., 20c.; doz., \$2.00.

BRONZE-FOLIAGED CANNAS

Red

KING HUMBERT—The most popular Canna. Great orange-scarlet flowers surmount the vigorous dark bronze foliage throughout the season; 5 feet. Ea., 15c.; doz., \$1.25.

WYOMING—A splendid bedder, with bright orange flowers, on 6-foot massive purplish-bronze foliage, making a strong contrast. Ea., 10c.; doz., \$1.00.

HARMONY—Great clusters of good-sized, well-formed geranium-red flowers arranged on good stems in such a manner as to give the trusses an almost globular appearance. Carmine-bronze foliage; 3½ feet. Ea., 15c.; doz., \$1.25.

Pink

SHENANDOAH—Flowers salmon-pink borne in large clusters, foliage rich ruby-red; 4 feet. Ea., 10c.; doz., \$1.00.

Yellow

SAN DIEGO—Chinese-orange or Persian yellow. The crimped petals are remarkable for substance, which enables them to withstand the hot summer sun without wilting. Another charm is the dark bronze color of the buds, which harmonize with the rich bronze foliage; 4 feet. Ea., 25c.; doz., \$2.50.

DAHLIAS

DAHLIAS will grow in almost any kind of soil, but it should not be too rich. The soil should be plowed or spaded deeply as early as possible and then again just before planting. If it is already fertile, use no manure or fertilizer. If it is poor, broadcast any kind of manure before the first spading. If manure is not obtainable, use some good fertilizer, not too rich in Ammonia or Nitrogen. Apply this at the rate of one-half ton to the acre.

There is a good deal of difference in opinion as to the proper time to plant. Formerly everybody planted dahlias as early as possible. Lately many authorities recommend planting as late as July 1st. It is often difficult, however, to keep the roots in good condition so late. Plant the roots four to six inches deep and two to four feet apart. Allow but one stalk to the root; cut the others off. If you wish, you can make new plants from these sprouts, as they root in soil very readily.

The soil around the roots of dahlias should never be allowed to crust. Cultivate deeply until the buds begin to open. After this, one to two inches. By this method plants may be successfully carried through very dry summers.

The roots should be stored in cool cellars away from furnace heat.

Our counter displays during September and October attract much favorable attention, at which time many buyers make selection.

Cactus Dahlia

Cactus Dahlias

CANDEUR. Beautiful white, very rich; an extra good one. Each, 35c.

COUNTESS OF LONSDALE. Salmon tinted apricot. The flowers are large and double of perfect form. A free bloomer. Each, 25c.

CRYSTAL. One of the very finest, clear soft pink cactus. Flowers are of large size with long narrow incurved petals and full centers. A strong vigorous grower and profuse bloomer. An excellent variety for exhibition and garden. Each, 40c.

EDITH CARTER. A soft bright yellow, suffused and heavily tipped bright rosy-carmine. Of fine form, good size and produced freely on long stiff stems. An unusually lovely variety. The plant is an early, free and continuous bloomer. Each, 60c.

ETENDARD DE LYON. Everyone stops to admire this beautiful carmine-rose giant, which we consider one of the finest varieties for garden decoration. The flowers are distinct in shape from all others; the petals are broad, curled and wavy, and form a flower fully six inches in diameter and four inches deep, a very large flower, yet without any stiffness or formality; its color is a rich carmine-rose, or Royal-purple, with a brilliant suffusion difficult to describe. Each, 50c.

F. W. FELLOWS. Flowers of immense size. Composed of numerous long narrow incurved petals of a lively orange-scarlet. This is one of the largest and finest autumn shade varieties. Should be in every collection. Each, 85c.

FRANCES WHITE. Pure white, shading to sulphur-white at centre. One of the finest white cactus dahlias grown. Each, 30c.

FLAME. Flaming red; cheery and effective. Each, 25c.

GENERAL BULLER. Rich velvety crimson, variegated; white tips. Very free bloomer. Each, 15c.

GOLDEN WEST. This is a California variety that is in a class by itself, in its color—the rich golden, bronzy-yellow, with the scarlet shading at the base of the petals and the center. It is a wonderful grower, strong and sturdy, with heavy, clean, healthy leaves, and branching habit, producing the large flowers freely on long stiff stems. The flower is large, six to eight inches across, the outer petals reflexing somewhat, and a full high center, making it very deep. It is the greatest seller as a cut flower, a winner for exhibition, and a wonder as a garden plant. Should be in every collection. Each, \$1.00.

GOLDEN GATE. Flowers often eight inches across, bright golden-yellow; a first class dahlia in every respect. Each, 25c.

J. H. JACKSON. Still one of the best and most reliable of the so-called black dahlias; rich velvety maroon, with white tip, the darkest one known. A fine large flower and a free bloomer. Each, 20c.

KALIF. A truly majestic flower, frequently measuring over nine inches in diameter, of perfect cactus form, in color a pure scarlet. The habit of the plant is all that can be desired, growing with us about 4½ feet high; the gigantic flowers, which are produced very freely, are held erect on strong stiff stems, making it a most effective and useful variety for cutting as well as for garden decoration. Each, 60c.

LIBELLA. A beautiful purple, one that you will appreciate. Each, 20c.

MARJORIE CASTLETON. The best standard pink cactus dahlia. It is much softer than most of the pinks, and is an early, continuous bloomer. The color is soft rosy pink, tinting lighter toward the centre. It is a very rapid grower, with good stems and keeps well after cutting. Each, 35c.

MARGUERITE BOUCHON. Magnificent shade of brilliant, yet soft rose, with very large white centre, and distinctly defined white tips. Each, 30c.

MRS. WARNAAR. One of the best of the Holland productions. Of mammoth size, fine form and substance. Color, creamy-white with apple blossom suffusion. An acquisition. Each, 50c.

PROFESSOR MANSFIELD. A remarkably large variegated dahlia. Flowers are of sparkling yellow, with clear white tips. A tinge of rosy-red is noticeable toward the centre. A free bloomer. Each, 25c.

PINK PEARL. Deep hollyhock-pink, gradually shading to white at the tip of the petals, the effect being a soft rosy-pink; flowers of medium size and good form. Each, 30c.

QUEEN OF HEARTS. A beautiful white. Large flowers, free bloomer. Each, 25c.

ROSY MORN. Carmine rose. A very pretty flower and a free bloomer. Fine for cutting. Each, 25c.

SEQUOIA. Deep saffron-yellow, suffused with red. A free bloomer and will give entire satisfaction. Each, 25c.

WODAN. Old gold at centre, shading to salmon-rose. This variety is in a class by itself, in-so-far as it is an extremely vigorous, almost rampant, grower, producing the big flowers profusely on very long stems. One of the best. Each, 75c.

Hybrid Cactus

ATTRACTION. A beautiful dahlia that is greatly admired. The flowers, which measure fully six inches in diameter, are composed of gracefully arranged curled or twisted petals of a lively, yet soft silvery mauve-rose, with white suffusion. Each, 85c.

BREAK O'DAY. A new giant flowered dahlia that should be in every collection. Its immense size is relieved by a beautiful irregular formation and its soft color. A delicate clear sulphur yellow, tinting to sulphur white at the tips. The petals are of great substance, illuminated by a satiny sheen, giving the flowers a waxy appearance. A strong vigorous grower and free bloomer with long erect stems. An acquisition. Each, 60c.

BIANCA. A magnificent new hybrid cactus that is in a class by itself, of giant size and splendid form. The color is white, suffused and overlaid an exquisite soft mauve-pink. A strong vigorous grower of splendid habits and a very free bloomer. The gigantic flowers are facing and held erect on long stiff stems. Each, 60c.

GEORGE WALTERS. Not only one of the very best autumn shade varieties, but one of the best in existence. The flowers are of immense size with rather broad, heavy petals of great substance and good keeping qualities. The plant is a strong vigorous grower, producing the flowers on long stiff stems, making it fine for cut flowers and exhibition, as well as one of the best garden varieties. The color is a rich coppery old gold shading to buff at the center. Should be in every collection. Each, \$1.00.

MRS. W. E. ESTES. An incomparable white novelty of marvelous beauty. The largest and finest pure white dahlia grown. Profuse bloomer, with long erect stems. Each, \$1.50.

TOM LUNDY. A huge crimson carmine beauty of full formation on erect stems. Very satisfactory. Each, 60c.

Paeony Flowered Dahlias

Paeony Dahlia

AVALANCHE. An enormous flower; pure white. Each, \$1.25.

F. R. AUSTIN. Shades and tints running from carmine, pink and yellow to cream. One of the best. Each, 25c.

BEETHOVEN. Lovely shade of amber; very free; one of the best for gardens. Each, 30c.

GEISHA. Showy and attractive, unique in form and color; rich colored flowers are original in form, consisting of peculiarly twisted and curled petals of an effective rich combination of scarlet and gold. Each, \$1.00.

HAMPTON COURT. Hydrangea pink. A large handsome flower. Each, 25c.

JANS OLIESLAGERS. Deep primrose yellow, rich and very effective; flowers large and full. New. Each, 30c.

KING ALBERT. Handsome, large, royal purple; one of the finest. Each, 75c.

M. McLAREN. This dahlia is a leader in the paeony-typed variety. It is a clear pink suffused with a beautiful salmon color. Flowers are large and it is a free bloomer. Each, 35c.

Show Dahlias

Show Dahlia

ARABELLA. Light sulphur yellow, shaded peach blossoms on edges, a fine flower. Each, 20c.

CUBAN GIANT. Very large ball-shaped flowers of a bright maroon; free and early. Each, 25c.

DREER'S WHITE. In color a pure white. Has been much admired at the exhibitions where shown, and has in most cases been awarded the premier prize as the finest snow white show variety. Very free. Each, 25c.

EMILY. Delicate lavender, over-spread with white. The daintily blended colors make this an exceptionally beautiful dahlia. Long, stiff stems. Each, 15c.

LIVONIA. Yellow, Purple and Pink. Three separate colors. Resembles the show dahlias. When ordering, state color wanted. For beauty add one of these to your collection. Each, 15c.

PENELOPE. Small ball, white flaked, rosy lake, always in bloom. Each, 25c.

RED HUSSAR. A beautiful shade of red. A pleasing flower for garden and cutting. Very vigorous. Each, 15c.

W. W. RAWSON. In form similar to Dreer's White; flowers of good size, stems erect; color a glistening white delicately flushed and suffused lilac. Each, 25c.

WHITE SWAN. A reliable pure white. Each, 20c.

YELLOW DUKE. Large flowers and plenty of them. Very attractive. Each, 25c.

Century Dahlias

ROSE PINK. Flowers six inches and over in diameter, clear rose-pink color, a strong grower with long, stiff stems, for cutting. Free bloomer. Each, 25c.

TANGO. Cadmium yellow, shaded scarlet orange. Each, 25c.

Collarette Dahlias

MAURICE REVOIR. Ox-blood red with deeper shading in the center of petals and a pure white fringed collar. Each, 15c.

Duplex Dahlias

CANARY. A clear yellow. Flowers measure seven to eight inches across. Very vigorous. Each, 25c.

KOERNERS WHITE. New; one of the very best of its class. Each, 35c.

Decorative Dahlias

CHIEFTAIN. Clear, light red, heavily streaked and splashed canary yellow; some flowers all red; very large and attractive, fine for exhibition. **Each, 60c.**

COPPER. The largest and one of the very best. Often ten inches across. A beautiful copper color shading to bronze and apricot. Has long stems and is a free bloomer. **Each, 40c.**

DR. TEVIS. One of the largest and most attractive dahlias grown, color bronzy old gold, shaded and suffused violet rose. Flowers borne on erect stems. Fine for exhibition, and a dahlia of real merit. Has a tremendous record as a prize winner. **Each, \$1.00.**

DREAM. An ideal variety for exhibition. The flowers are frequently seven inches and over in diameter. The petals are broad, yellow at the base and pink at the outer ends. **Each, 60c.**

DELICE. One of the most popular pink varieties. Its beautiful soft, yet lively color, a glowing rose-pink, together with its perfect shape, stout, stiff stems, and the fact that when cut it retains its freshness for a long time, makes this one of the most valuable for cutting or decorative sorts in the garden. **Each, 40c.**

D. M. MOORE. Rich, dark, velvety maroon, almost black. Very large, free and of good form. **Each, 50c.**

EVENTIDE. White, edged with a faint flush of delicate rose. A splendid flower of perfect form and large size. **Each, 25c.**

FIREBURST. This gigantic dahlia is a seedling from the well-known French variety, Le Colosse. The flower is more flatly built, has broader and longer petals, and is a far more intense scarlet, slightly shaded orange-red. This is a variety of great value, producing specimens which measure eight inches and over in diameter. The finest scarlet colossal dahlia. **Each, 50c.**

HARMONY. Pale rose. A very pretty flower and an excellent bloomer. **Each, 25c.**

HORTULANUS FIET. The general color effect is lilac rose, while the petals shade from golden yellow at base to pale lilac at tips, with deep lilac rose suffusion. Colossal size, some blooms measuring nine inches across; good stem; free flowering. **Each, 60c.**

JACK ROSE. Brilliant crimson-red, similar in shade to the popular "Jack Rose," which suggested its name; perfect for garden decoration or for cutting. **Each, 25c.**

KING OF THE AUTUMN. This is a great dahlia, both as a cut flower as well as for garden decoration. Its habit of growth is ideal, producing an abundance of flowers of good size, six inches or more in diameter, which can be cut with stems four feet long. It is of true decorative form excepting late in the season, when it often develops flowers of the peony type. In color it is one of the most effective and pleasing autumnal tints, a luminous salmon-pink passing to a golden suffused buff near the edges which is particularly pleasing under artificial light. King of the Autumn, we are convinced, is a winner, and a variety that will become one of the most popular. **Each, 50c.**

LE GRAND MANITOU. A superb giant of excellent form; color, Bishop's violet mottled and striped French purple; some blossoms self-colored. **Each, 50c.**

MILLIONAIRE. Clear violet mauve shading to white at centre, very deep and massive. One of the finest and largest exhibition varieties. **Each, \$1.50.**

MESSENGER. New; large blooms, good stems, no end of flowers both early and late. **Each, 25c.**

MINNIE McCULLOUGH. One of the most popular art-flower varieties now grown; particularly valuable for use under artificial light. Color, soft yellow, overlaid with bronze; a beautiful autumnal tint. **Each, 15c.**

MINA BURGLE. This is one of the finest dark red dahlias yet introduced. Flowers often measure eight inches across. A perfect beauty. **Each, 25c.**

W. F. GUDE. A pure white flower of large size. Long stems which make it a fine flower for cutting. **Each, 25c.**

MONT BLANC. An early, free, continuous flowering, creamy-white on good stiff stems. A most important cut flower variety. **Each, 25c.**

Decorative Dahlia

MRS. J. GARDNER CASSATT. A large flowered mauve-pink of a shade that is very pleasing; a fine cut flower. **Each, 25c.**

MRS. C. H. BRECK. Cream-colored centre, shading to soft red. Ends of petals dark red. Flowers large. We highly recommend this flower for the garden. Has long stems and is a free bloomer. **Each, 35c.**

OREGON BEAUTY. Intense Oriental-red with golden sheen and garnet suffusion, makes it one of the varieties that stands out prominently among all of its neighbors. Add to this large size, long stiff stems, with an unusual freedom of bloom, makes it one of the most desirable garden varieties. **Each, 45c.**

OFFENBACH. Clear yellow, graceful flowers, petals slightly twisted, remarkable bloomer on strong stems. **Each, 35c.**

PAUL BONYON. A most desirable autumn tint, a beautiful salmon-pink with a golden sheen which intensifies the coloring, flowers of perfect form, large size, and very free. **Each, 30c.**

PINK FLAMINGO. A dahlia of fine form, sometimes showing an open centre. Color violet rose over-laid Tyrian rose; very free flowering and early. **Each, 35c.**

PRINCESS JULIANA. An ideal pure white for all purposes. A splendid cut flower and a good decorator for the garden. It is one of the earliest to flower, and continues in good shape throughout the season. It holds its flowers well above the foliage on stiff, wiry stems. **Each, 35c.**

QUEEN MARY. Rose pink. An ideal flower for cutting. Holds up well and is a free bloomer. **Each, 25c.**

MRS. ROOSEVELT. The flowers are of giant size and borne on long stems. Color a lovely shade of enchantress pink. The plant is a strong vigorous grower. **Each, 25c.**

SOUVENIR DE GUSTAV DOAZON. Of mammoth proportions, which, under ordinary cultivation, will produce flowers six inches across, and can be grown to measure full nine inches. It is of free growth and pure red in color. **Each, 25c.**

SYLVIA. Soft, pleasing mauve-pink, gradually turning to white in the centre. A fine cut flower. **Each, 25c.**

GLADIOLI

Gladioli. Of recent years the interest in Gladioli has been tremendous and where as only a few dozen were planted, thousands of bulbs are used annually. Wonderful improvements by the American hybridizers have produced some of the very best Gladioli, being noted for their strong, free growth, free flowering qualities, purity of color and their ability to produce satisfactory results under the most ordinary conditions.

As a garden flower it is useless to compare them with other flowers, because they are so unlike, so individual and the qualities so peculiarly their own. For cutting purposes there is not a flower to compare with them. Beautiful as it is in the garden, it is even more beautiful when cut and tastefully arranged for interior decorations. Cut when the first bud blossoms and given fresh water daily, it will open every bud to the last one, which will be as beautiful as the first. As the lower flowers wither they should be removed.

Culture—Gladiolus will grow and bloom in almost any kind of soil, if it can only have full exposure to the sun; it requires no fussing over. It is free from disease and insects. It will stand more dry weather than most flowers; it will even survive outright neglect, returning good for evil by its wonderful blooms. The easiest and most common method of planting is to prepare the bed in the fall by covering it well with manure, spading it in to the depth of 8 or 10 inches. If prepared in the spring use well rotted manure. The Gladiolus plant is very hardy and will survive considerable frost. Therefore, may be planted early in the season. In the latitude of Philadelphia, planting can begin about the middle of April and continue at intervals until the middle of June, when a continuous supply of flowers will be had from July until killed by cold in the fall. Plant the larger bulbs in rows, from 12 to 18 inches apart, and from 4 inches to 6 inches apart in the row, and about 4 inches deep. Plant the bulblets in the same manner, only an inch or so apart in the row, and about 2 inches deep. Cultivate them well once a week, and with an ordinary amount of moisture they should begin blooming within 60 to 70 days after planting, and continue until killed by frost.

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Our counter displays during August and September attract much favorable comment, at which time many buyers make selection.

◆

AMERICA—The most popular Gladiolus in cultivation. Splendid large, broadly-opened flowers of a beautiful clear flesh-pink color, with petals well rounded. The plants are vigorous growers, not subject to disease, and make extra good bulbs. Ea., 6c.; doz., 60c.

AUGUSTA—Fine white, faintly tinged with lavender. Flowers freely and has a long season, producing many side branches. Ea., 6c.; doz., 60c.

BARON HULOT—Large flowers, well arranged on long spikes. Color is a deep indigo-blue, slightly marked white at the base of the throat. Ea., 10c.; doz., \$1.00.

CONSPICUOUS—Fine large flowers of velvety bishop's violet, shaded with purple and yellow; rich and novel and very effective as a cut flower used in conjunction with one of the yellow sorts. Ea., 15c.; doz., \$1.50.

EMPRESS OF INDIA—Rich, dark mahogany—almost black. Dwarf growing, but flowers of good size and free. Ea., 10c.; doz., \$1.00.

GOLIATH—Of great value as a garden flower if planted in generous quantity; the mass of dark, purplish-blue flowers making a wonderful effect among the prevailing light shades of other Gladioli. Ea., 12c.; doz., \$1.25.

HALLEY—Large flowers of a lovely salmon-pink, lower segments blotched yellow, with carmine markings. An excellent variety; early. Ea., 7c.; doz., 70c.

L'IMMACULEE—Undoubtedly the best commercial white Gladiolus in existence. Very tall spike, well set with large flowers of great substance. Ea., 15c.; doz., \$1.50.

MRS. DR. NORTON—New. This novelty has a distinct new form which is impossible to describe. Like a waxy cattleya, it resembles the finest orchid. Its stem is slender but tall, and its greatest charm is its color—a pale apple-blossom-pink, so fresh that it seems as if the blossom is just opening. We consider this the most exquisite Gladiolus today. Ea., \$1.00.

MRS. FRANK PENDLETON—All experts agree that this is one of the finest varieties yet introduced. The flowers are of largest size, borne on strong, straight spikes. In color a lovely salmon-pink with brilliant deep red blotches in the throat. A color combination rivalling many of the finest orchids in its richness, exquisite in every way. Ea., 10c.; doz., \$1.00.

MRS. FRANCIS KING—A most beautiful flame pink. Immense flowers on a spike growing 4 feet high, with from 18 to 20 flowers, 6 to 8 being open at one time. Ea., 6c.; doz., 60c.

MRS. WATT—A most distinct and beautiful sort of a rich deep cherry-red. Ea., 10c.; doz., \$1.00.

NIAGARA—Of America character, but somewhat larger; rich cream color deepening to canary-yellow on lower petals. A faint carmine blush at tips of petals and streak at throat, with purple stamens and carmine stigmas, make a lovely combination. Ea., 10c.; doz., \$1.00.

PANAMA—One of the choicest varieties, similar in habit to America, but in color a rich rose-pink. This variety should be in every collection. Ea., 10c.; doz., \$1.00.

PEACE—A grand white flower, very large, with pale violet feathering on lower petals; flowers correctly placed on a tall graceful spike. Should be planted early. Ea., 10c.; doz., \$1.00.

PINK PERFECTION—This magnificent sort is a soft apple-blossom-pink with chamois suffusion that is very attractive. Ea., 15c.; doz., \$1.50.

PRINCE OF WALES—This is in our estimation one of the best novelties of recent introduction. The flowers are large and well placed and the color is a most charming coral-pink. It is evidently a sport of "Halley" but an improvement on it in every way, being larger and of taller growth and also somewhat earlier; also it has a more delicate tint and is practically without throat markings. We are very certain that this is a variety of superior merit and recommend it to our customers unreservedly as one of the best of its shades. A lovely coral-pink. Ea., 15c.; doz., \$1.50.

SCHWABEN—A most meritorious variety of wonderful vigor, with strong erect spikes and large well-expanded flowers of a clear canary-yellow with a small blotch of deep garnet in the throat. This may now be considered the best and freest growing yellow variety. Ea., 12c.; doz., \$1.25.

WAR—A magnificent dark variety with tall spikes well filled with large flowers of a rich blood-red shaded with crimson-black. Ea., 12c.; doz., \$1.25.

MINGLE'S POPULAR MIXTURE—We pay particular attention in making up this mixture, and in it are included not only practically all the modern varieties of Gladioli in greatest variety of color, but also a goodly proportion of the higher-priced sorts. Doz., 35c.; per 100, \$2.50.

PAEONIES

BEAUTIFUL FLOWERS FOR DECORATION DAY

Red Shades

AUGUSTIN D'HOOR—Brilliant rosy-red. The plants are of robust growth and produce extra large very full blossoms. One of the earliest and best red varieties. Ea., 60c.; doz., \$6.00.

FELIX CROUSSE—Very large pure ruby-red, without any shades of violet or purple. Very dependable as a cut flower. Very free bloomer. Midseason. Ea., 60c.; doz., \$6.00.

Rose and Pink Shades

FLORAL TREASURE—This variety has few, if any, superiors as a cut flower. It is an excellent bloomer, bearing fine, large blossoms on strong, stiff stems. Color of flower a bright light pink. Ea., 40c.; doz., \$4.50.

GOLDEN HARVEST (Jeanne d'Arc)—Exceptionally free flowering and very showy. The attractive blossoms are of a clear yellow color with blush guards, while the center is white with carmine tips. One of the earliest and best. Ea., 40c.; doz., \$4.50.

TUBEROSE

Double Dwarf Pearl

Plant dwarf, growth stocky, the flower spikes attaining a height of about 2 feet, and are compactly filled for two-thirds of their length with very large, perfectly double flowers, 1½ to 2 inches across, or nearly twice the size of the old sort. The flowers have the wax-like substance of a Camellia, are glistening white and deliciously fragrant. The bulbs planted in the garden in May, in warm, rich soil, in a sunny position, flower with great certainty in the fall. If early flowers are wanted, the bulbs may be started in pots in the house from February to April, removing the plants to open ground when it is warm enough in May. Price, extra large flowering bulbs, Ea., 8c.; doz., 85c.

CINNAMON VINE

A beautiful, hardy climber for anything on which the vines can twine; it grows from 15 to 30 feet high, and when established the vines attain a much greater length. The leaves are green, thick and glossy, always clean, healthy and free from insects. The white flowers, while insignificant, emit a delightful cinnamon-like perfume. Price, extra large, 2-year-old roots, Ea., 10c.; doz., \$1.00.

EDULIS SUPERBA—Large well-formed flower; brilliant rose-pink with silvery reflex. Very early and undoubtedly one of the most popular. Ea., 40c.; doz., \$4.50.

White Shades

DUCHESS DE NEMOURS—Outside petals white, center lemon-yellow. Ea., 50c.; doz., \$5.00.

FESTIVA MAXIMA—One of the grandest varieties in existence. The standard of perfection in Paeonies. It is a strong flower, very early, free flowering and very fragrant. The magnificent flowers are of a delicate pure white color, with some of the center petals flaked with carmine. The most popular white Paeony today. Ea., 40c.; doz., \$4.50.

QUEEN VICTORIA—A late bloomer, white, and extremely popular with florists. It produces white flowers with creamy centers, tipped with red. Ea., 40c.; doz., \$4.50.

CALADIUM

(Elephant's Ear)

A very effective plant, and suitable for a single plant on the lawn, masses in beds, or for margins of water, its leaves often attaining the length of 3 feet by 20 inches wide. First size, ea., 5c.; doz., 50c.; medium size, ea., 15c.; doz., \$1.50, postpaid; extra large bulbs, ea., 25c.; doz., \$2.50.

MADEIRA OR MEXICAN VINE

(Hardy)

The tubers if planted deep and protected during the winter, are hardy. The leaf is a very deep green, and grows very dense; the flower is very small, white in color. Strong roots, ea., 10c.; single roots mailed free; doz., 40c.

BLEEDING HEART

SPECTABILIS—An old-fashioned favorite; its long racemes of graceful heart-shaped pink flowers are always attractive; it is used largely for forcing, and is perfectly at home in any part of the hardy border, and especially valuable for planting in the shade. May; 2 feet. Ea., 30c.; doz., \$3.15.

LAWN REQUISITES

PENNSYLVANIA QUALITY LAWN MOWERS

PENNSYLVANIA QUALITY Lawn Mowers cost a great deal more to make and a little more to buy, but the service they give ultimately makes them cheaper—they last so long the cost is forgotten.

Some of the features which make the PENNSYLVANIA stand out among all others are the open cylinder and the open wheel, and the self-sharpening device, the PENNSYLVANIA being the first machine to make a successful ball-bearing mower.

The advantages of a train of gears over internal gears, makes the former run more easily and steadily by reason of their great length of wheel base.

There is the additional advantage of better distribution of wear and tear and increased power and spread.

Pennsylvania, Jr.

The PENNSYLVANIA, JR. has all the good points of the Standard Pennsylvania, with the addition of some features that make it the most perfect grass cutter in the world. Its self-sharpening features alone will make it worth its cost to the user, as it will save this expense until the blades are worn out—in average use a dozen years or more.

10-inch Wheels. Five-Blade Cylinder 6" in diameter	
15-inch.....	\$25.50
17-inch.....	28.50
19-inch.....	\$32.50
21-inch.....	36.50

8-inch Wheels. Five-Blade Cylinder 5½" in diameter	
12-inch.....	\$14.50
14-inch.....	17.50
16-inch.....	\$20.00
18-inch.....	23.00

The GREAT AMERICAN ball bearing is the best all-around mower of its type in the world. The perfect-fitting ball cups and cones insure an easy-running machine. Double geared, which gives fine results.

10-inch Wheels. Five-Blade Cylinder 6" in diameter	
15-inch.....	\$18.50
17-inch.....	21.50
19-inch.....	24.00
21-inch.....	26.50

15-inch.....	\$18.50
17-inch.....	21.50
19-inch.....	24.00
21-inch.....	26.50

The STANDARD PENNSYLVANIA is the pioneer of all lawn mowers, having an open cylinder, open wheels and a train of gears.

High Wheel, 10½" in diameter	
15-inch.....	\$25.50
17-inch.....	28.50
19-inch.....	32.50
21-inch.....	36.50

COLDWELL'S "IMPERIAL" MOWER

COLDWELL'S "IMPERIAL" Mower is of exceptionally good value; it has four blades in the revolving cutter. In offering it to the trade we have no hesitancy in saying that it is the best moderate-priced mower on the market. The drive wheels are eight inches in diameter and have a wide tread which

gives it good traction and prevents the mower from sinking in soft ground. The gears are fine cut and fully protected from the cut grass and dirt. The revolving cutter is six inches in diameter and is carried on ball bearings of the same size, material and design as is used on our more expensive grades of mowers. The bottom or stationary knife is a highly tempered steel blade, heavier than those used on other makes of mowers of this grade. The ratchet has a flat steel pawl placed in the revolving cutter gear and acting with it. It is strong and reliable. It is far superior to any other of its class in material, workmanship and design. It cannot fail to give satisfaction.

5 blades. High wheels. 10¼-inch.

14-inch cut.....	\$17.00
16-inch cut.....	19.00
18-inch cut.....	21.00
20-inch cut.....	23.00

PENNSYLVANIA LAWN TRIMMER

(Ball Bearing)

Made to meet the demand for a serviceable tool to take the place of grass shears and other devices for cutting the grass left at the edge of lawns after mowing.

Will cut to within three-eighths of an inch of wall or tree trunk, and mow any border wide enough to run one wheel on.

Price..... \$10.25

THE CADET

This is a good lawn mower at a medium low price, and gives the purchaser full value for his money. It has brass bushings and the same ratchets and adjustments that are used on many of the high-grade mowers. The gears are fine cut, and it is in every respect what is needed at the present time, viz., a mower that will do good service and at a cost but little higher than the poor trash that is put out so freely.

Diameter of Drive Wheels: Eight inches.

Number of Blades: Three.

THE CADET

12-inch cut.....	\$7.25
14-inch cut.....	8.00
16-inch cut.....	8.75

COLDWELL'S DUCHESS MOWER

Coldwell's Duchess Mower is a specially good mower. It is made on thoroughly practical lines and is so constructed that it cannot easily be disarranged. The drive wheels are 9 inches in diameter with the gears raised up from the ground, fully protected from the dirt and cut grass. The revolving cutter is 6 inches in diameter and has four crucible steel blades, highly tempered and ground true their entire length. It is carried on our patented adjustable ball bearings. The simplicity and convenience of the adjustment of these bearings is appreciated by every one familiar with them. The ratchet has a flat steel sliding pawl, placed in the revolving cutter gear. 14-inch cut, \$10.50; 16-inch cut, \$11.25; 18-inch cut, \$12.00

HOSE EQUIPMENT

Perfect. Made entirely of brass, with swivel motion—No band required.

For $\frac{3}{4}$ -inch hose, 15c. each; doz., \$1.50.

Cooper Hose Mender $\frac{3}{4}$ inch 10c. each; \$1.00 per doz.

SURE GRIP HOSE MENDER

$\frac{3}{4}$ inch, 6c. each; per doz., 50c. Parcel Post Wt., doz., 1 lb.

Hose Washers. 1 inch, 15c. per doz.; $\frac{1}{4}$ lb., 50c.; \$1.75 per lb.; $\frac{3}{4}$ inch, 10c. per doz.; $\frac{1}{4}$ lb., 35c.; \$1.00 per lb.

HOSE COUPLINGS

Pair Doz.

Plain Brass, $\frac{1}{2}$ in. \$0.30 \$3.00
Plain Brass, $\frac{3}{4}$ in. .30 3.00

HOSE NOZZLES

Boston. Regulated to give three different streams.

Price, ...75c.
Diamond.....each, 60c.

HYDRANT ATTACHMENTS

To be used for attaching Hose to smooth faucets.
No. 2. For small spigot, 60c. For large or standard spigot, 60c.
Parcel Post Weight, $\frac{1}{2}$ lb. each.

RUBBER HOSE

PER
FOOT

MINGLE's Seamless or Molded, $\frac{3}{4}$ -inch. \$0.18
Special Lehigh, 6-ply, $\frac{3}{4}$ -inch ..... .16
Special Lehigh, 5-ply, $\frac{3}{4}$ -inch ..... .14
Revero Spray Pump Hose ..... .15
25-foot lengths and upward, coupled free,
smaller sections couplings.....per pair .20

COLDWELL'S
LAWN TRIMMER

This machine meets the demand for a real first-class lawn edge or border trimmer. Made of best material throughout, ball bearings, single screw adjustment, bottom knife of finest tool steel; cuts a swath of 8 inches. Price, \$10.00.

TREE TANGLEFOOT

Tree Tanglefoot is a sticky compound similar to that used in making Tanglefoot Fly Paper and is especially adapted for protecting trees from the attack of climbing and creeping insects, particularly gypsy, brown-tail and tussock caterpillars, canker worms, climbing cut worms and ants. On matured fruit trees and all shade trees it is applied directly to trunks, but on young fruit trees we recommend application over strips of manila paper.

One pound makes 9 to 10 lineal feet of band.

One application remains

sticky three months and longer or 10 to 20 times as long as any other known substance. On account of this great superiority, it has practically displaced all other banding compounds in the United States and in many foreign countries. Tree Tanglefoot works alike in rain, sun, winds, etc. Does not soften, run or melt, yet is always elastic, expanding with growth of tree. No mixing required; simply open can and use. Applied with wooden paddle. Will not injure trees.

For tree surgery, Tree Tanglefoot is superior to anything on the market. It is the best application after pruning or trimming—it will waterproof the crotch of a tree, or a wound or cavity in a tree when nothing else will do it. For this purpose one application lasts several years, all the time wholly impervious to air and water.

Guaranteed to keep perfectly many years in original packages. Price, 1 lb., 50c.; 5-lb. can, \$2.40.

NO. 2 PLANET JR. EDGER

To keep grounds looking neat and attractive the grass bordering all walks must be frequently edged and the No. 2 Planet Junior Edger 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, \$1.50.

SIMPLEX
GRASS CATCHER

No. 1—12 to 16-inch mower, inclusive.....\$2.25
No. 2—16 to 20-inch mower, inclusive..... 2.50

PLANT STAKES (SQUARE)

For greenhouse or garden use. These are painted green and nicely tapered and finished.

	EACH	DOZ.	100
1½ ft. . .	\$0.03	\$0.25	\$1.85
2 ft. . . .	.04	.40	2.60
2½ ft. . .	.05	.55	4.00
3 ft. . . .	.08	.85	7.00
3½ ft. . .	.10	1.00	8.00
4 ft. . . .	.12	1.20	9.50
5 ft. . . .	.14	1.58	14.00
6 ft. . . .	.18	2.00	16.00

EXTRA HEAVY

The extra heavy sizes have black painted points to prevent moisture entering the fibre of the wood.

	EACH	DOZ.	100
4 ft. . . .	\$0.20	\$2.25	\$18.00
5 ft. . . .	.25	2.75	20.00
6 ft. . . .	.35	3.50	28.00

WIRTS' HOSE REEL

All tubular—capacity.

No. 2—7 in. wheel, 100 ft.	\$2.70
No. 20—24 in. wheel, 150 ft.	6.00
No. 10—21 in. wheel, 100 ft.	5.00

BINKS RAINFALL SPRINKLER

Rainfall.

A splendid sprinkler that operates on a ball bearing, requiring very little pressure.

Each.	\$1.85

TRELLISES

These Trellises are made entirely of wood, and therefore will not burn vines when exposed to the sun. Where metal is used the vines do not thrive owing to the fact that the heat absorbed from the sun causes the plant to be stunted, if not killed.

Our Trellises are suitable for all locations, they are painted dark green, and are very durable.

FAN TRELLIS

A very popular style for Roses

	EACH
18 in. fan, 8 in. wide at top.	\$0.40
24 in. fan, 10 in. wide at top.	.50
30 in. fan, 13 in. wide at top.	.95
3 ft. fan, 16 in. wide at top.	1.25
3½ ft. fan, 21 in. wide at top.	1.35
4 ft. fan, 27 in. wide at top.	1.50
5 ft. fan, 32 in. wide at top.	2.25
6 ft. fan, 38 in. wide at top.	2.50
7 ft. fan, 42 in. wide at top.	2.85
8 ft. fan, 46 in. wide at top.	3.25

LATTICE TRELLIS

We recommend the Lattice especially for use in connection with stucco houses.

The Lattice is built in two widths and is adaptable around windows and doors, as it can be cut into any desired length.

	18-in. wide	24-in. wide
6 feet.	\$2.50	\$3.00
7 feet.	3.00	3.75
8 feet.	3.25	4.25
9 feet.	3.50	4.50
10 feet.	4.00	5.00
12 feet.	4.50	6.00

POT LABELS

Plain, pointed wood for flowers and all plants.

	100	1000
4 inches.	\$0.30	\$2.00
4½ "	.35	2.25
5 "	.40	2.45
6 "	.50	3.00

Garden Size

	100	1000
8 inches.	\$1.40	\$ 8.50
10 "	1.90	11.50
12 "	2.25	13.65

RUBBER SPRINKLERS

For spraying small plants, ideal for house use.

Made in two styles.

Bent neck and straight neck.

SIZE	PRICE
6 oz. capacity	\$ .75
8 oz. capacity	1.00
10 oz. capacity	1.25

LAWN SPRINKLERS

Large Ring or Fountain.	\$1.00
Small " " "	.60
Half Circle " "	.25
Waterwitch Sprinkler	.60
Mayflower "	1.75
Enterprise "	5.00
Busy "	.50

FERN BOWL

A beautiful embossed bowl, especially designed for ferns and shallow potted plants. Color a beautiful light buff. 6 inches inside diam. by 3 inches deep.

Price \$1.10

VULCANIZED SAUCERS

MAYTREE flower-pot saucers are superior in every way to all other kinds of flower pot saucers — are practically non-destructible and should last forever.

THEY HAVE A SOFT FINISH

that will not wear off and will not mar or scratch the finest surface.

NOT AFFECTED BY PLANT WATER, are guaranteed to always remain absolutely moisture-proof. Larger sizes are ideal for bulb saucers.

Size.	Each.	Doz.
4 inch	\$0.12	\$1.30
5 inch	.14	1.50
6 inch	.16	1.70
7 inch	.19	2.05
8 inch	.23	2.45
9 inch	.27	2.90
10 inch	.46	4.95
11 inch	.52	5.60
12 inch	.58	6.25

NEPONSET

WATER PROOF PAPER FLOWER POTS

For transplanting and shipping potted plants, and for starting many kinds of hotbed plants.

	Doz.	100	1000
2½ in. Pots.....	\$0.12	\$0.50	\$4.45
2½ in. Pots.....	.15	.60	5.15
3 in. Pots.....	.18	.80	7.05
3½ in. Pots.....	.20	1.00	9.15
4 in. Pots.....	.25	1.30	11.40
5 in. Pots.....	.30	2.00	17.75
6 in. Pots.....	.45	2.70	21.75

EARTHENWARE SAUCERS

Size	Each	Doz.	100
4 inches.....	\$0.03	\$0.27	\$2.03
5 ".....	.04	.36	2.70
6 ".....	.06	.54	4.05
7 ".....	.07	.72	5.40
8 ".....	.10	.99	7.43
9 ".....	.14	1.35	10.13
10 ".....	.15	1.62	12.15
11 ".....	.19	1.98	14.85
12 ".....	.23	2.43	18.23
14 ".....	.37	4.05	30.38

EARTHEN BULB POTS

These are fine for planting with bulbs, for ferns and other compact plants.

Size	Each	Doz.	100
6 inches diam....	\$0.09	\$0.98	\$7.29
7 " ".....	.15	1.62	12.15
8 " ".....	.22	2.34	17.55
9 " ".....	.33	3.60	27.00
10 " ".....	.45	4.86	36.45
12 " ".....	.91	9.90	74.25
14 " ".....	1.48	16.20	121.50

EARTHEN FLOWER POTS

Size	Each	Doz.	100	1000
1 inch.....	\$0.02	\$0.18	\$1.20	\$11.50
2 ".....	.02	.18	1.05	9.60
2¼ ".....	.02	.18	1.15	10.85
2½ ".....	.02	.18	1.35	12.75
3 ".....	.03	.24	1.76	16.58
3½ ".....	.03	.29	2.16	20.40
4 ".....	.04	.36	2.70	25.50
4½ ".....	.06	.49	3.65	34.43
5 ".....	.07	.65	4.86	45.90
5½ ".....	.08	.81	6.08	57.38
6 ".....	.09	.98	7.29	68.85
6½ ".....	.13	1.30	9.72	91.80
7 ".....	.15	1.62	12.15	.....
8 ".....	.22	2.34	17.55	.....
9 ".....	.33	3.60	27.00	.....
10 ".....	.45	4.86	36.45	.....
11 ".....	.66	7.20	54.00	.....
12 ".....	.91	9.90	74.25	.....
14 ".....	1.48	16.20	121.50	.....

BULB BOWL

Handsome embossed bulb bowl of a beautiful moss green color, 10 inches in width, especially designed for bulbs.

Price \$1.35

PLANT TUBS

Made of White Cedar, painted green, electric welded heavy wire hoop without handles. We sell handles, separate, 10c. pair.

No.	Inside Top Diam.	Inside Bottom Diam.	Inside Depth	Each
1	6 in.	5 in.	6 in.	\$0.65
2	7 in.	5 in.	7 in.	.75
3	8 in.	6 in.	8 in.	.80
4	9 in.	7 in.	9 in.	.90
5	10 in.	7½ in.	9 in.	1.00
6	11 in.	8½ in.	10 in.	1.25
7	12 in.	9 in.	11 in.	1.50
8	13 in.	10 in.	12 in.	1.90
9	14 in.	11 in.	13 in.	2.20
10	15 in.	11½ in.	14 in.	2.35

CEDAR TREE TUBS

New York Pattern

Made of choicest seasoned White Cedar. Highly finished, iron hoops, iron feet, drop handles.

No.	Inside Top Diam.	Inside Bottom Diam.	Inside Depth	Each
1	12 in.	9¾ in.	10½ in.	\$2.75
2	13 in.	10¾ in.	12¾ in.	3.50
3	14½ in.	12 in.	14¾ in.	4.50
3½	16½ in.	14½ in.	14¾ in.	5.50
4	19½ in.	17¼ in.	16¾ in.	6.25

SPRINKLING POTS

Heavy Galvanized Iron.

4 qt. size.....	\$0.75
6 qt. size.....	.90
8 qt. size.....	1.15
12 qt. size.....	1.50
16 qt. size.....	1.90

Earthenware cannot be sent by Parcel Post.

NORCROSS CULTIVATORS

An excellent tool, adjustable teeth for spanning the row by removing centre tooth, or between rows using any number of teeth. We carry two sizes.
 5-prong, long handle.....\$1.00
 3-prong, "......75
 3-prong, short "......40

GARDEN HOES

All kinds, both medium and high grade.
 Jersey truck, 7½ in.....\$0.80
 No. G6X, 6 in......75
 No. G7X, 7 in......80

HALF MOON
Extra Quality.

H. M. O.—4 in.....\$0.80
 H. M. O.—5 in......85
 H. M. O.—7 in......90

SCUFFLE HOE

No. XGS, 8 in.....\$0.90

WARREN HOES

The Warren or Pointed, a quite popular style. No. W. 7.....\$1.10
 No. R......70
 Baby Warren Hoe. A good transplant-
 er, same shape as above; very short han-
 dle.
 Price.....\$0.50

ONION HOE.

Two prong, very useful in working nar-
 row rows. price, 45c.

SPADING FORKS.

Fine quality steel. Strapped shank. D handle.
 Four prong.....\$1.50
 Boys' or ladies'.....1.15
 Five prong, extra quality.....2.25

HAY FORKS.

2 tine.....\$1.10
 3 tine.....1.25

SCYTHE STONES

Darby Creek.....\$0.18
 English Round......25
 Carborundum......40

PULL EASY CULTIVATORS

These cultivators can be adjusted to any width.

P. E. J.,—4 teeth, with 4-foot handle, ad-
 justable, 2 to 6-inch Rows, 65c. each.

P. E.,—5 Teeth. Handle 4 foot long, ad-
 justable 6 to 12 inches. \$1.00 each.

P. E. C.,—9 teeth, 4½-foot handle. Will cul-
 tivate rows 6 to 18 inches wide. \$1.25 each.

EUREKA FORK.

For potting flowers, etc. Good qual-
 ity steel.

Price, 50c.

EUREKA WEEDER.

A good tool for scratching about plants.
 Price, 50c.

MINGLE'S SPECIAL WEEDER.

Five teeth, good quality. Price, 15c.

MANURE FORKS.

No. 04D—4 tine, strapped shank, D handle \$1.55
 No. 04DZ—4 tine, strapped shank, D handle 1.00
 No. 044½Z—4 tine, plain ferrule, bent handle 1.00

STEEL BOW RAKE.

The teeth have a slight curve as shown in cut.
 Some people prefer this style.

B 10—10 tooth, \$0.80 B 12—12 tooth, \$0.90
 B 11—11 tooth, 85 B 14—14 tooth, 1.00

TURF EDGER

For trimming paths.

No. 11.....\$0.85
 No. 040.....1.00

GRASS SHEARS.

Polished, fine steel.....\$0.75
 Good quality......50

STRAIGHT TOOTH GARDEN RAKE.

10 tooth, malleable.....\$0.40
 12 tooth, malleable......45
 12 tooth, extra quality steel......70
 14 tooth, extra quality steel......75

MANURE DRAGS.

For working manures, digging out pota-
 toes, etc.

No. 4 B. O. L., 4 tine.....\$1.00
 No. 4 B. O. H., 4 tine.....1.15
 No. 5 B. O. L., 5 tine.....1.25
 No. 5 Batchellor.....1.50

"QUEEN" LAWN RAKES

Heavily tinned steel teeth. The arched teeth
 for litter and the opposite side for fine-cut grass.
 Heavily braced, bolted socket.

24 teeth—Price, 85 cents

OLE OLSEN LAWN RAKE.

Rake head slightly curved from centre to each
 end which does not allow any material that has
 been caught by the teeth to slip around the edges.
 26 tooth Hickory wood. Price, \$1.00

GARDEN SET

No. 100 consists of heavy Shank Hoe, heavy five-tooth Malleable Iron Rake and heavy six-inch English Pattern Trowel. Finished in Red Enamel. Fine finished handles.

Price per set three pieces.....\$1.00

GARDEN SET

A popular combination of three tools, used by ladies, children and for special uses where small tools are required.

No. 3 P. F. per set.....\$1.60

GARDEN TROWELS

No. 100 Trowel

No. D. S. T. Steel Shank.....\$ .80
No. 100 Heavy Socket Long Handle..... .50
No. 10—6" One-piece Extra Heavy..... .45
No. 9—6" Socket Shank..... .25

TRANSPLANTING TROWELS

No. 020 Narrow Blade.....\$ .20
No. 20—6" Narrow Blade..... .15

TROWEED TROWEL

Trowel and Weeder Combined

One edge being cut similar to a saw, used for digging roots, etc., other side for use as a trowel.
Price.....\$ .50

GARDEN MATTOCK

True shapes (as in cut).....\$1.00
Long Cutter or Axe, pointed..... 2.00
Half Mattock or Grub, with handle..... 1.50
Heavy Stub or Accomac..... 1.60
All the above include handles.

Picks, double pointed, either cutter pointed or regular style with handle, \$1.75.

Transplanting Trowel.
Price, 60c.

Garden Dibble.
Price, 50c.

Transplanting Hoe.
Price, \$1.00

MAGIC WEEDERS

Style B.

Style A.

MAGIC WEEDERS should be in every garden outfit. They fulfill their name wonderfully. They are strong in construction and very popular.

Style A—5½" handle 15c
" B—18" " 25c
" D—6" " 45c
" F—42" " no blade..... 75c
" H—48" handle, with blade, \$1.25

BATEMAN HOE

A hoe for cutting corn stubble or digging potatoes. An old reliable tool.

No. 1, 5½" ..\$2.10
No. 2, 6½" .. 2.25
No. 3, 8" .. 2.50

SHOVELS

Short D Handle

Round point..\$1.50
Square point.. 1.50

Long Handle

Round point..\$2.25
Square point.. 2.25

SPADES

Short D Handle

Pfeifer.....\$1.85
Floral Spade.. .95
Nursery Spade 3.25

Fig. 43. Vine Cutter. Price, \$1.00.
For cutting sweet potato vines, etc. Saves the back.

GIBBS POST HOLE DIGGER

Digs a hole 3½ feet deep. A positively good tool.
Price \$3.00

Garden Seed Drills, Wheel Hoes and Cultivators

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow.

No. 4. Price Complete, \$18.75

No. 4-D. As a Seeder, only, \$14.75

Holds 2½ Quarts of Seed.

Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills), plows, opens furrows and covers them, hoes and cultivates quickly and easily all through the season.

No. 25 Planet Jr. Combined Hill and Drill Seeder, Double Wheel Hoe.

Price, \$22.25

Holds 2½ Quarts of Seed

Steel Frame

No. 25 is for gardeners, who have enough acreage for a double-wheel-hoe to be used, and yet prefer not to buy seeders and wheel hoes separately; also for onion growers and for the large family garden where both a single and double-wheel hoe can be used to advantage. Is a perfect seeder, and combined double and single-wheel hoe. Unbreakable steel frame. Capacity—2 acres a day.

No. 31 Combined Seeder and Wheel Hoe.

Price, complete, \$12.75

As a Seeder only (No. 31-D), \$10.00

As a Wheel Hoe only (No. 33), \$6.25

Holds one quart

The ideal tool for small gardens—combining a reliable seeder for all garden seeds from the smallest up to peas and beans, with a light running Wheel Hoe. Practical for men, women or growing boys. Sold at a price that will make it pay to use even if your garden is a very small one. Stop in and see them. It's worth your while.

No. 12 Planet Jr. Double and Single Wheel Hoe.

Price, \$11.75

New steel wheels

Steel frames

Price with hoe only (No. 13), \$10.25.

Planet Jr. Wheel Hoes have been greatly improved. No. 12 has new 14 in. steel wheels, steel frames, steel arch, steel leaf lifters. The Hoe's cultivator teeth and plows are specially hardened to give longer wear, scour better and run easier.

The greatest hand-cultivating tool in the world.

No. 17 Planet Jr. Single Wheel Hoe.

Price, \$8.25

Price with hoes only (No. 18), Price, \$6.00

New 15 in. steel wheel

The highest type of Single Wheel Hoe made. Light, but strong, and can be used by man, woman or boy. Will do all the cultivation in your garden in the easiest, quickest and best way.

Indestructible steel frame. New steel wheel, specially hardened attachments will do better work and last longer.

Gem Single Wheel Hoe.

Light, strongly built tool with smaller wheel, scuffle hoes for work between rows, pair of plows and five teeth.

Gem Single Wheel Hoe. Price, \$9.00.

8½ in.

4 in.

We are Headquarters for Planet Jr. Tools. Come get yours.

SUPERIOR GARDEN PLOW

The Superior Garden Plow has two bent wood handles. The frame and tools are constructed of steel, and are mechanically correct, making it one of the neatest and lightest-running plows on the market.

The handles can be raised or lowered to suit operator. This plow is equipped with shovel hoe, plow, two cultivator steels and weeder; also one wrench. Height of wheel, 24 in. Price, complete, \$3.75.

Fire-Fly Garden Plow.

Price, \$4.25

Especially useful to owners of small gardens, and to chicken raisers for plowing up scratching-yards. Its light weight makes it easy for man, woman or boy to use. Enables the owner of a family garden to do all the work in spare minutes.

Plain Dixie Jr., No. 37
Cultivator, \$7.50.

A light weight tool, built for use in light sandy soils. Opens to 20 inches and closes to 9 inches with a clamp expander.

Dixie Jr. 5-tooth
Cultivator.

With wheel, \$8.00.

WHEELBARROWS, GARDEN AND FARM.

These Barrows are made from well seasoned lumber, very strongly bolted together, extra braced, with high finish. If you want a barrow to give service—one that will stand not only use but abuse—then this is the one—"the Buch."

No. 1—Large Farm Barrow, 3 inch tread.....	\$10.00
No. 2—Small Farm Barrow, 2¾ inch tread.....	8.25
No. 3—Garden Size, 2¼ inch tread.....	7.50
No. 3—Garden Size, 1½ inch tread.....	6.00
No. 4—Small Garden Size, 1¼ inch tread.....	5.25

THE MARKET GARDENER'S "BOSS" PLOW.

This plow is fitted with three moldboards, one very small for plowing cut root crops, and two larger ones.

Price, \$8.75

Includes three moldboards and one extra share.

List of Parts.

Double moldboard and share.....	\$1.25	Standard, complete.....	\$3.00
No. 2½ Moldboard.....	1.10	Cabbage Moldboard.....	.55
No. 2 Moldboard.....	.85	Landside.....	.50
No. 1½ Moldboard.....	.75	Shares.....	.40
Beam with clevis.....	1.40	Beam without clevis.....	1.10
Handles complete.....	Per pair 1.75		

HOE AND RAKE COMBINED.

An excellent tool for the garden. Made of the very best steel.

Price,

4 prong, 90c.
6 prong, 1.00

CAHOON SEED SOWER

For sowing all kinds of seeds; has very perfect regulator. Sows from four to eight acres per hour. A superior machine. Price, .. \$6.50

CYCLONE SEED SOWER

Cyclone (New Improved Model). An accurate portable seeder, for all broadcast sowing or fertilizing. Fits comfortably over shoulder; provided with automatic adjustment for stopping flow of contents when required. A great time and labor saver. Each, \$2.25.

No. 35 PLANET JUNIOR SEEDER ATTACHMENT

This small seeder can be attached to any Planet Junior Single or Double Wheel Hoes or Garden Plows and will be found particularly suitable for the small kitchen garden. It will plant practically all seeds in a straight, continuous row, at a uniform depth, in a fraction of the time required by hand and infinitely better. The hopper holds one pint and it can be used for planting even a small packet of seed. Also has a bracket to which a handle can be attached and used independently of the wheel hoe. Everyone having a kitchen garden should have one of these useful seeders.

Price, \$6.25.

RICHMOND CEDAR BUTTER CHURNS

- No. 1—3-gallon..... \$3.75
- No. 2—4-gallon..... 4.50
- No. 3—7-gallon..... 5.25

BUTTER PRINTS

Made of Hard Maple Wood, three pieces to set, square. 1 lb. size, 65c.

FRUIT GRINDERS

Made of hard wood, first class in every particular. Grinds any kind of berries, apples or grapes. Price, \$7.25.

PERFECT FRUIT PICKER

Made substantially of galvanized wire. Can easily be attached to a pole of any length. Price, 40c.

CIDER OR WINE PRESSES

These presses are very substantially built of hardwood and well bolted together.

PRESSES

Combined Grinders and Presses

- No. 1.....\$13.25
- No. 2..... 16.50
- No. 2½..... 18.00
- No. 3..(as shown above)..... 22.50
- No. 4..... 28.00
- No. 2½, Hinged Tub..... 20.00
- No. 3, Hinged Tub..... 21.50
- No. 4, Hinged Tub..... 30.00

- Self-Feed.....\$20.40
- Junior No. 1..... 28.00
- Medium..(as shown above)..... 31.25
- Senior..... 43.50

GRAPE BAGS

For protecting growing grapes against the ravages of birds, insects, etc. Easily attached and lasts a season. Fruit will ripen just as readily in bags as it does in the open. Bags should be attached when grapes are about the size of a pea and should be left attached until the fruit is ready to harvest.

- 2-lb. size..... 40c. per 100
- 3-lb. size..... 50c. per 100
- 4-lb. size..... 60c. per 100

WHITE OAK KEGS

The above cut shows our handsome WHITE OAK (quarter sawed) kegs, for holding wines, fruit juices, extracts, etc. They are carefully made of selected WHITE OAK, bound with heavy steel hoops, and nicely varnished.

- Gallons..... 5 10 15 30 50
- Price, each .. \$1.45 \$2.65 \$3.00 \$4.00 \$5.75

RED CHIEF CORN SHELLER

This sheller is an excellent one for small poultry farms. Fastens to box or barrel. Shelled corn drops in box, cob thrown outside.

Price 3.00

HAND CORN PLANTER

The AMERICAN. The best hand dropper; possesses automatic metal cut off, easy to set. Price, \$3.15.

KRAUT CUTTER

Made of hard maple, heavy construction, adjustable knives, best knife steel. Sliding box; wood or metal bed.

SIZE	KNIVES	PRICE
9 x 25	2	\$2.25
9 x 25	3	2.50
11 x 33	3	3.50

SLAW OR CABBAGE CUTTER.

Made of hard maple. Heavy construction, adjustable, best knife steel. Two blades. Price, 45c.

ASPARAGUS KNIVES

"CONCAVE" Price, 45c.

Some growers think the concave knife takes hold better.

"FLAT" Price, 35c.

An asparagus knife is a necessity for large or small growers. Crop will be gathered in better shape and time saved.

"FISHTAIL" Price, 45c.

Ten-inch blade, drop forged, well ground, enameled shank. A handy tool, also, for cutting out weeds on the lawn.

ASPARAGUS BUNCHER

Even where one has a limited amount of asparagus to market, it pays to use a buncher. It is tied quickly and looks uniform.

Price, with knife guard..... \$3.50

HUSKING PINS

Combination leather and metal.

Price, each..... 25c.

ASPARAGUS TAPE

For tying Asparagus and Celery, fast color and will not fade, very strong and will not break.

1000-yard spools, colored red or blue.

Price, per spool..... \$3.30

DOUBLE SCYTHES

Double ribbed backs, reinforced steel heel extending along the heel end of the blade, making the scythe strong and rigid at this point and giving additional weight and making it hang better and easier of operation. Thoroughly hardened and tempered keen tough edge.

Rivet back—32	\$3.00
Rivet back—34	3.00
Brush or Briar	2.00
Weed	1.90
Grass—32	2.00
Grass—34	2.00
Grass—36	2.00

Our Swathes are made of the best quality selected timber, seasoned and nicely varnished. Malleable iron fittings; size and shape of proper proportion to make swing of the swath correct and easy.

Handles, etc.

Regular Scythe style	\$2.00
Swath Clips	.25
Handle rings	.12
Handle Loop	.25

TWINE

Asparagus Twine, 3 ply, per ball	\$0.15
Binder Twine, 5-lb bale, per bale	1.25
Cotton Twine, 3 ply, per ball	.15

FODDER TWINE (Tarred)

25 and 50-lb. bales, per lb.	\$0.12

JUTE WRAPPING TWINE

Per ball	\$0.15

CORN KNIFE

Price, 60c.

Oil hardened and temper drawn. Wood handle. You will find this a first-class tool and dependable.

REGULAR BEND

TREE PRUNERS

DISSTON TREE PRUNERS WITHOUT POLE OR ROPE

Disston's LITTLE GIANT Pruner.....	\$2.25
Disston's LITTLE GIANT Pruner with Saw Attachment.....	3.00
Telegraph Pruner.....	2.00
Disston's Orchard Hook and Saw...	3.50

Poles for Tree Pruners

12 ft. long.....	\$2.00
14 ft. long.....	2.25

WATERS TREE PRUNERS. Removable blade, which can be renewed when worn out:

Plain, without Pole.....	\$1.50
With Removable Cutting Blades and Pole complete:	
4 ft.....	2.25
6 ft.....	3.00
8 ft.....	3.25
10 ft.....	3.75
12 ft.....	4.00
Extra Knives..... each	.30

HAND PRUNERS

Our pruning shears are procured from the most reliable makers and all are fully guaranteed.

65 Pexto.....	\$1.50
R165 Pexto.....	2.00
R170 Pexto.....	2.25
No. 55, Fine Polished.....	1.00
No. 50, California Style, 9 in.....	.80
No. 0, Medium Grade.....	.50
No. R50, California Style, Ratchet Nut...	1.00

HEDGE SHEARS (ENGLISH MADE)

6½ in. (Laddie)	\$1.50
8 in.	1.90
9 in.	2.25
10 in.	2.50
12 in.	3.00

PRUNING SAWS

No. 40—18-inch Double Edge....	\$1.10
No. 7—18-inch Single Edge....	1.60
18-inch Paragon curved Double Edge.....	1.50
Disston California—14-inch Blade	1.50

Swivel Saw:

Very handy for getting among closely branched limbs, blade can be swiveled around in the frame to suit any desired position.

Handles can be unscrewed and a pole attached when desired.

Price.....	\$2.00
Extra Blades.....each	.40

TREE SCRAPERS

For removing loose bark from trees prior to spraying. Steel blade may be detached and sharpened.

No. 5, Short Handle.....	60c

AXES

Fine tempered steel

Kelly, with handle.....	\$2.50
Red Warrior, with handle.....	2.25
Plumb—Without handle.....	2.50

Handles

Made from the best white Hickory:	
Axe Handles.....	\$0.50
Hammer Handles.....	.20
Hatchet Handles.....	.20

GRAFTING WAX

The one easiest to apply and put in convenient packages.

¼ lb., 15c; ½ lb., 25c; 1 lb., 45c; 5 lbs., \$2.00.

GRAFTING TOOLS

Made of the best steel. For grafting trees, etc.	
All steel.....	85c
Grafting Mallet.....	80c

GRASS HOOKS

Little Giant.....	\$0.75
" " , Jr.....	.60
" " , Adj.....	.50
Eng. Rivet Back.....	.85
Mingle's Special.....	.35

"McKENNEY" TREE LOPPERS

The "McKENNEY" TREE LOPPERS were designed and built to meet the requirements of the fruit growers of America. They have installed in them all the features that go to make up a perfect pruning tool.

What we claim for the "McKENNEY" PRUNER:

1. The easiest cutting pruner in the world.

2. The only perfect cutting pruner in the world. One that does not injure the bark in any way, as both blades have cutting edges.

3. The only pruner that will cut seasoned limbs 1½ inches in diameter.

4. The lightest pruners on the market.

5. "McKENNEY" Pruners are made of steel throughout. Nothing about them to break.

The blades on the "McKENNEY" Pruners are dropped forged from the bar steel and therefore are as strong as they can possibly be made.

The handles are of steel. The hand-grip is designed so that the pruner may be carried on the belt.

Made in two sizes: No. 1 and No. 2. The No. 1 cuts limbs up to 1 inch in diameter.

The No. 2 cuts limbs up to 1½ inches in diameter.

WEIGHT	LENGTH	PRICE
No. 1—2 lbs.	23 inches	\$4.50
No. 2—5 lbs.	30 inches	6.00

MOLE TRAPS

One of the most successful traps; never misses.

Reddick.....	\$1.00

FERTILIZERS

Acid Phosphate (16 per cent). For all vegetable crops, grains, grass, etc. 5 lbs., 20c.; 10 lbs., 35c.; 25 lbs., 75c.; 50 lbs., \$1.20; 100 lbs., \$2.00; sack of 200 lbs., \$3.50.

Ashes, Hard Wood. Apply 1000 lbs. per acre. Indispensable for all crops requiring potash; excellent for mixing with potting soil. For top dressing lawns and grass fields it is applied to best advantage either in very early spring or late fall. 25 lbs., 75c.; 50 lbs., \$1.35; 100 lbs., \$2.25; 200-lb. bbl., \$4.25; 1000 lbs., \$19.00; ton, \$35.00.

Bacteria, Mulford Culture. For inoculating clovers and other legumes, such as beans, peas and such other plants that have blossoms similar in shape and form to the above named. The application of bacteria to the seed of these legumes when planting practically trebles the nitrogen gathering powers and for this reason we urge all planters to use it. Trial bottle, 35c.; ¼-acre size, 75c.; acre size, \$1.50; 5-acre size, \$5.00.

Bone Meal (Extra Fine). This fertilizer we recommend for lawns, rose bushes, grape vines, especially where a moderately slow fertilizer is needed, for the deep rooted shrubbery and where a perfectly safe fertilizer is wanted. 5 lbs., 30c.; 10 lbs., 55c.; 25 lbs., 95c.; 50 lbs., \$1.75; 100 lbs., \$3.25; 200 lbs., \$5.75.

Apply at rate of 1000 lbs. to an acre.

General Crop Grower (Trucker's Favorite). This is a combination brand of fertilizer containing 1 per cent. Ammonia,

8 per cent. Phos. Acid and 1 per cent. Potash. A good all around vegetable fertilizer. 5 lbs., 15c.; 10 lbs., 25c.; 25 lbs., 50c.; 50 lbs., 85c.; 100 lbs., \$1.65; 200-lb. sack, \$3.00.

Complete Animal Base. A high grade mixture for general crops. 200-lb. bag, \$4.00.

Humus is decayed vegetable matter enriched and mellowed by age. Similar to a heavy leaf mould, it is richer by far, because of untold years of ripening in Nature's storehouse.

Humus acts on soil much as yeast does in bread, and by its process of aeration makes a heavy soil light, and likewise adds body to a light soil. Humus is black in color and rich in the elements of plant food—namely, nitrogen, phosphoric acid and potash, while its natural lime content, about 10 per cent., serves to sweeten the soil.

As a top dressing for lawns and for plants, shrubs, trees and general gardening Humus is unequalled; not merely as a quick stimulant, but as a permanent soil builder. For growing ferns, various bulbs and plants it has no equal.

Humus will absorb several times its own weight in moisture and release it gradually; thus, when used on lawns, will carry the grass through periods of drought.

Our Humus analyzes as follows:

HUMUS

	Per Cent.
Humus.....	41.25
Ammonia.....	4.32
Phosphoric Acid.....	0.73
Potash.....	1.28
Calcium Oxide.....	6.34
Equivalent to Calcium Carbonate...	4.32
Silicates.....	4.11
Iron and Alumina.....	1.20
Moisture.....	25 to 50

Humus is clean and odorless, and contains no weed seeds. Use it freely. Garden with it generally. One bag of Humus is equal to a load of manure. A trial will convince. 5 lbs., 20c.; 10 lbs., 35c.; 25 lbs., 60c.; 50 lbs., \$1.00; 100 lbs., \$1.50; 500 lbs., \$7.00.

Hydrated Lime. The good qualities of this lime are generally under-estimated, rather than exaggerated. Used for correcting sour ground, to disinfect chicken runs and houses, for whitewashing. Apply one ton per acre. 4 lbs., 17c.; 50 lbs., \$1.00; 100 lbs., \$1.60. Larger lots—price on application.

Land Plaster. Very useful for top dressing. Is a good medium for retaining the fluids and ammoniates when mixed with manures. Mixed with Paris Green is used for dusting plants to destroy vermin. 5 lbs., 25c.; 25 lbs., 50c.; 50 lbs., 95c.; 100 lbs., \$1.60; 200 lbs., \$2.90.

Manure. At short notice we can usually supply first-class horse, cow and stock-yard manure in carload lots only. Prices quoted on request.

Plant Food "V-C." Proper fertilization plays a most important part in the production of the necessary food crops. This is also true of plants, flowers and lawns.

You may have often wondered why your plants and flowers do not thrive, or your lawn does not look as green or as full as your neighbor's lawn. Perhaps your vegetable garden does not measure up to your expectations. It is very probably due to lack of proper nourishment, for plants need food as well as do human beings.

A trial package of "V-C" Plant Food will give you a most pleasant surprise in the improvement of your plants, grass and vegetables. Small can, 25c.; large can, \$1.00; bags, small, 75c.; medium, \$1.25; large, \$2.50.

Potato Fertilizer. Apply 800 to 1000 lbs. per acre. The principal fertilizer for potatoes in this section, being especially compounded for this purpose. 25 lbs., \$1.25; 50 lbs., \$2.00; 100 lbs., \$3.75; 200 lbs., \$6.50.

Nitrate of Soda. A very powerful, but incomplete fertilizer; only recommended to hasten the crop previous to harvesting. Best form to apply is in solution, two or three ounces to one gallon water. Lb., 15c.; 5 lbs., 60c.; 10 lbs., \$1.00; 25 lbs., \$2.00; 50 lbs., \$3.75; 100 lbs., \$7.00.

Sheep Manure. Apply 1000 lbs. per acre. For garden, lawn or greenhouse use, nothing surpasses sheep manure; it is clean and easily handled, besides giving immediate results. Prices f. o. b. Philadelphia: 5 lbs., 35c.; 10 lbs., 60c.; 25 lbs., \$1.25; 50 lbs., \$2.00; 100 lbs., \$3.25; 500 lbs., \$14.00.

Stim-u-plant. Plant food in tablet form. The most modern, efficient and scientific method of fertilizing all kinds and conditions of growing plants in home garden, orchard, and on farm.

Stim-u-plant is a 26-grain tablet with a guaranteed chemical analysis of 11 per cent. Nitrogen, 12 per cent. Phosphoric Acid and 15 per cent. Potash. No other plant food contains anything like as high an analysis as this. Stim-u-plant Tablets are composed of water soluble materials of great feeding power and of known weight and percentage of plant food.

Stim-u-plant Tablets should be used directly in the soil at the base of the plants or dissolved in water and applied to the soil. Do not spray on the foliage. No matter how rich the soil may be, these wonderful little tablets will help the plants along. Pkg. of 30 tablets, 25c.; 100 tablets, 75c.; 1000 tablets, \$3.50.

Tobacco Stems. For fumigating, mulching and fertilizing. Bbl. sack \$1.25; in large bales at 2c. per lb.; ½ ton, \$11.00; ton, \$20.00.

Wheat Fertilizer. For grass and grain crops. Apply 800 lbs. per acre. In 200-lb. bags only. 200 lbs., \$4.50; 1000 lbs., \$21.00; ton, \$40.00.

ALL PRICES ON FERTILIZERS SUBJECT TO MARKET CHANGES

Spray Calendar and Formulas

We give below, in short concise form, the principal diseases and remedies for various trees, fruits, and shrubs. The information is necessarily limited, but we can send catalogue more complete on request.

Insects are both biting and sucking. The first eat leaves and plants and can generally be controlled by poisons such as Arsenicals. Sucking insects can only be destroyed through the use of contact sprays, which close the breathing pores.

BITING INSECTS—Best controlled with 2 lbs. Arsenate of Lead paste to 50 gallons water. Asparagus Beetles, Bean Leaf Beetles, Spring Canker Worms, Caterpillars, Codling Moth, Curculio, Flea Beetles, Cherry Fruit Fly, Currant Worms, Locusts, Grasshoppers, Tomato Worms.

SUCKING INSECTS—Fish Oil Soap sprayed 20 to 50 parts water is effective on Aphis, some Scale Insects, Cabbage Flea Beetles, Chinch Bugs, Bark Lice.

ANTS—Make holes by driving a stake down six inches deep, then pour in about a tablespoonful of Bisulphide of Carbon. Ants on rose bushes and chrysanthemums are not doing any harm to the plant. They are usually going after Aphis, which they milk. The Aphis should be destroyed.

APPLE—San Jose Scale, Oyster Shell Scale—Use Lime-Sulphur Solution one gallon to ten gallons of water in the Fall or Winter, preferably in the Fall; if badly infested apply twice. Apple Scab, Bud Moth, Curculio and Canker Worm—Spray with Lime-Sulphur one gallon to 40 gallons of water and add two to three pounds of Arsenate of Lead to each 50 gallons. Apply when the color shows in the bloom but before the bloom opens. For Codling Moth spray just after the bloom has fallen with Lime-Sulphur one gallon to 40 gallons of water, and add two pounds of Arsenate of Lead to each 50 gallons. The worms enter the apple at the blossom end and each cup must be filled with spray. Do the work thoroughly. Spray again in 40 to 50 days for the second brood of Codling Moths, which appear at this time. If Bitter Rot or Black Rot should show in the orchard, spray with Lime-Sulphur 1 to 40 pounds in 50 gallons of water.

BLACKBERRIES—Anthracnose and Rust. Cut out and burn any diseased canes. Spray with Lime-Sulphur 1 to 40 or with Fungi Bordo.

CHERRY—Forbes or Cherry Scale—Spray with Lime-Sulphur in the Fall and Winter. For Brown Rot spray with Lime-Sulphur 1 gallon to 40 gallons of water, and add two to three pounds of Arsenate of Lead to poison the Curculios. Spray again about ten days after the fruit has set. Slugs often eat the surface of the leaves early in June; spray the trees with Paris Green or Arsenate of Lead.

CHRYSANTHEMUM—Aphis—Use Tobacco Dust or spray with Tobacco Tea very dilute. For Blight use Bordeaux.

CURRENT—Leaf-blight—Apply Sulphate of Copper Solution when injury first appears. After fruit is harvested apply Bordeaux Mixture. Green Currant Worm—Use Arsenate of Lead. Borers—Cut out and burn infested stems early in the Spring.

GOOSEBERRY—Mildew—Before buds break, Bordeaux Mixture. For Worms, dust with Arsenate of Lead.

GRAPES—In the Spring gather and burn all dead wood and dried fruit of the previous season. Spray with Bordeaux Mixture as the buds are swelling. About ten days later spray with Bordeaux. Spray again after the fruit has set and every two weeks until fruit is nearly full grown.

MAPLE—Caterpillars—Collect and burn egg rings in Fall and Winter. If practical, spray Arsenate of Lead after first leaves appear. Borers—Insert wire in holes and kill, or inject Bisulphide of Carbon in the hole and close with putty or sticky clay.

HARDY SHRUBS—Where affected with Blight, use Bordeaux Mixture two or three times in the Spring. For Leaf-eating insects, Bordeaux Lead. Scale—Lime-Sulphur Solution in Fall or Winter.

SHADE TREES—For Scale Insects spray in Fall or Winter with Lime-Sulphur 1 gallon to 10 gallons of water. For Fungous diseases use Lime-Sulphur or Fungi Bordo; add Arsenate of Lead for leaf-eating caterpillars. For Borers use a wire and pole through burrows, or pour Bisulphide of Carbon in the hole and stop up with mud or putty to keep in the fumes.

ONION—Maggot—Destroy the young plants affected as soon as noticed, digging up maggots with the roots. Use Fish Oil Soap in dilution over plants.

PEACH, APRICOT, AND PLUM—For Peach-leaf Curl—Spray in the Spring before the buds open with Lime-Sulphur 1 gallon to 15 gallons of water. For Brown Rot and Peach Scab spray with 1 gallon of Lime-Sulphur to 75 gallons. Spray before bloom opens and again about ten days after it has fallen. Spray again in 30 days with the Lime-Sulphur 1 to 75.

PEAR—Blight—Cut out and burn all affected branches and twigs as soon as the Blight appears; if possible cut about six inches below blighted part. For Pear Scab and Codling Moth spray as recommended for the apple.

QUINCE—If twigs blight, cut out and burn all those affected. Spray with Lime-Sulphur and Arsenate of Lead as for apple after bloom has fallen.

ROSES—Leaf-Curl and Blight—Bordo Lead, apply twice. For Green-fly or Aphis—Arsenate of Lead before the buds form; afterwards Lemon Oil Insecticide or Tobacco Solution. For Slugs—Arsenate of Lead.

STRAWBERRIES—Leaf-blight, Mildew—When growth begins in Spring, Bordo Lead. When first fruits are set, repeat. After fruit is harvested, repeat every two weeks.

TOMATO—Leaf-blight—As soon as disease is discovered, Fungi Bordo; repeat every week or ten days. Rot—Train the vines, giving as much sunlight as possible. Sow seed at different times, so as to have two or three plantings. Pick infested fruit.

SAN JOSE SCALE—This pest is becoming so serious that it behooves every farmer, whether he be a fruit grower or not, to help destroy it. The insect unfortunately is little understood and hardly noticeable until the trees are practically killed. On young twigs and veins of the leaves of trees thickly infested, small spots of a reddish discoloration appear around the scales. On the trunk and branches there is a rough grayish appearance as if it had been coated with dark ashes. These insects multiply so rapidly that it has been estimated at Washington, D. C., that the progeny of a single female would number 3,216,080,400 by Fall if all were to survive. They are transferred from tree to tree by wind, crawling on the feet of birds and in other ways. At first they seemed to confine their efforts in temperate latitudes to stone fruits, but have spread to apple, pear, and other fruit trees, besides oak, maple, and various shade trees, shrubs, and small fruits. When first born the females move around freely from twelve to thirty-six hours, then thrust their beaks into the bark or fruit of the tree and do not move again. The scaly filaments form over it and they procreate about every thirty days in Summer, the last brood living over until Spring. It is imperative that all farmers take up the question of the San Jose Scale. They can be controlled by spraying Lime-Sulphur Solution in the Fall, Winter, and early Spring months while the tree is dormant, 1 gallon to 10 gallons water, and it is best to spray twice. In the Summer this strong solution cannot be used on account of the injury to foliage and fruit, but even weaker solution, 1 gallon to 30 or 40 gallons of water, seems to have beneficial effect.

SPRAYERS

Hand — Compressed Air — Bucket and Barrel

NO. 30 IDEAL SPRAYER

One of the most popular "one man" machines made. All working parts made of brass. Capacity, 15 gallons. Equipped with 10 foot, $\frac{3}{8}$ -inch spray hose, $\frac{1}{4}$ -inch. iron pipe extension, 8 feet long. Fog nozzle and leakless shutoff.

Price, \$25.00

BRASS AUTO SPRAYER

It operates by compressed air; safe and efficient; liquid capacity, four gallons; pressure capacity, 40 lbs. No sprayer is sold under broader guarantee for efficiency and durability. They will successfully spray bushes, shrubbery and trees, the latter with the use of extension pipes. The brass tank sprayer is the best as corrosive solutions can be used in it without injuring the same.

No. 1A Brass Tank with stop cock.....	\$9.00
No. 1B Brass Tank with auto spray.....	9.50
No. 1C Galvanized Tank with stop cock....	6.00
No. 1D Galvanized Tank with Auto Spray .	6.50

BRASS AUTO SPRAY

A continuous fine spray, just the thing for house and garden use. Price, \$1.50.

FAULTLESS TIN SPRAYER

Made of good quality tin; useful for spraying chicken houses, plants, etc.

One quart	\$0.50
One pint	.35

MYERS BUCKET PUMP

This is a good quality sprayer, made of heavy brass tubing, has brass ball valves, is double acting. Two sizes of nozzles, 3 ft. of good hose. Patent agitator.

For any kind of spraying or white-washing this pump excels.

Price, \$6.00

BROWN'S NO. 5 BRASS AUTO SPRAY PUMP

Not mounted on tank with length of hose and strainer. Price, \$5.00

Galvanized reservoir or knapsack.....\$3.00

Extension pipe, brass......50

One of the latest in knapsack line. Can be used without the reservoir if barrel or bucket is more convenient.

We sell all parts for Brown's Sprayers. Send for booklet giving prices.

AUTO-SPRAY NO. 6

Is equipped with malleable iron foot-rest, with a clearance of 16 inches, big, easy-grip iron handle. Brass suction strainer is made of brass casting and screen of large surface. The hose is 3 feet in length and is of extra quality.

Each pump is furnished with two nozzles, one for solid stream and the other for throwing a fine mist spray. The mist-spraying nozzle is fitted with a screen to prevent clogging.

Price, complete, \$5.00

SPRAY NOZZLES AND FITTINGS

Auto Spray (see cut).....	\$0.50
Auto-Pop (see cut).....	1.50
Non-Clog Jr.....	.75
Fembro or Power.....	.75
Imperial.....	.40
Graduating Vermorel.....	.75
Bordeaux.....	.90
Brass Male End Coupling.....	.30
Brass Female End Coupling.....	.30
Brass Elbow (see cut).....	.30

AUTO-POP

AUTO-SPRAY

BRASS-ELBOW

B-D SIFTER

This is an ideal sifter for applying Bug Death dry. It is of the very latest pattern, remarkably effective and distinctly economical. Easy to operate, and gives quick covering to all plants and vines requiring a top application. The price of this very useful implement is 75 cents.

DICKEY DUSTER

The handy little Bug Death sifter.
Price 40c.

ONE-GALLON SPRAYER

Most convenient size compressed-air type sprayer on the market. Tank, 6 1/4" dia. by 8 1/2" high. Two styles.

Price—1-gallon,
Brass..... \$5.60
Price, 1-gallon,
Galvanized 3.75

VERTICAL BARREL PUMP

This pump is sold with or without the barrel. Will fit any barrel. Is fastened to the side of the barrel where the most strength is. Has bronze ball valves and hemp packing with lead core, all easily gotten at. 100 pounds pressure maintained with two nozzles. Can be used with one or two leads of hose.

No. 194, price, ... \$17.00

SMITH JR. NO. 1 HAND SPRAY

Tin, painted red, a continuous fine spray.

Price, \$1.00

THE FEENEY POWDER DUSTER

An ideal duster for all kinds of insecticide and fungicide to gardens, flowers, shrubs, etc., also used for killing flies, roaches, bugs in homes or in the barns or stables.

Easy to use, easy to work, nothing to get out of order. Positively the best powder duster on the market.

Price, \$1.25

BUCKET SPRAYER

Brass pump, bronze ball valves, wick packing—all easy to get at. Pump easily detached if you want to use it in a half barrel. 100 lbs constant pressure.

No. 195, price, complete, ..\$15.00

SMITH DRY POWDER DUSTER

Made of heavy tin, nicely painted; hold in reservoir over 1 qt. or 4 lbs. Paris Green; has fan blower; will dust one or two rows fast as operator can walk.

Price, complete, all attachments \$10.00

BARREL SPRAYER

20 gallons

No. 197 is simply our bucket sprayer pump set in a barrel and mounted on a truck. Can be removed easily when wanted for use in a bucket. This outfit can be operated by one man. It is recommended for small estates, in public parks, around railroad stations, on chicken farms, etc. No. 197, price, \$26.50.

HUDSON CRESCENT SPRAYER

A strong, practical glass-jar sprayer. Long pump—double tube type. Any quart size Mason jar can be used. Finish, Blue Lacquer. Jar and Sprayer.

Price..... \$0.85

POWDER BELLOWS

For dusting any dry powder; use either straight or bent neck.

Price, \$1.75

INSECTICIDES AND FUNGICIDES

*Ant-I-Cide. The lawn saver. The ant is a very persistent pest. Use Ant-I-Cide which is in powder form in order to protect your lawn from destruction by the ant pest.

Directions on 1-lb. box. Price 30c.

Sent by mail at purchaser's expense. Mailing weight 2 pounds.

Arsenate of Lead (Dry Powder Form).

Being the more popular form of this destroyer, owing to its economical ways of being applied (can be used either as dusting powder or diluted in water).

Dusting directions, 1 to 2 pounds per acre.

Diluted in water, 1 pound to 50 gallons.

Price, $\frac{1}{2}$ -lb., 30c.; lb., 55c.; 5 lbs., \$2.65; 10 lbs., \$5.00.

Arsenate of Lead Paste. Has attained a wide reputation as a reliable and economical insecticide and is particularly destructive to leaf-eating insects.

It is in paste form and should be sprayed in the proportion of 1 ounce to 1 gallon of water. Lb. can, 40c.

Arsenate of Zinc (Powder). A quick-acting adhesive insecticide for Rose Bugs and Beetles on potatoes and other truck crops. $\frac{1}{2}$ lb., 30c.; lb., 55c.; 5 lbs., \$2.50.

"Black Leaf 40" is a concentrated solution of nicotine sulphate, is used as a safe and effective spray for plant lice; contains 40 per cent. nicotine by weight; can be combined and applied with other insecticides and fungicides. Oz. bottle, 35c.; $\frac{1}{2}$ -lb. can, \$1.25; 2 lbs., \$3.75.

Bordeaux (Dry Bordeaux Mixture). The perfect Dry Bordeaux Mixture Concentrate is a dry powder, no danger of freezing, no freight to pay for water; use 8 pounds to 50 gallons of water. Price, $\frac{1}{2}$ lb., 25c.; lb., 45c.; 5 lbs., \$2.00.

Barrel prices on application. Write for leaflet describing this preparation.

Pat. March 16 and Nov. 9, 1897.

It contains no Arsenic nor Arsenical poison of any name or nature. Does not harm birds, animals or foliage, no matter how freely it is applied. In addition to killing the bugs or germs and preventing blight, it nourishes the plant. Lb. cans, 20c.; 3-lb. pkgs., 50c.; 5-lb. pkgs., 70c.; 12 $\frac{1}{2}$ lbs., \$1.40.

Bordeaux Arsenate of Lead (Paste). Used for the same purposes as dry powder for spraying against mildew and blight. Price, lb., 30c.; 5 lbs., \$1.25.

Bordeaux Mixture (Paste). The supreme remedy against Fungus, Rust and Rot. Five ounces to gallon of water is standard strength. Lb., 30c.; 5 lbs., \$1.25.

Cut Worm Killer. The Cut Worm helps to make the cost of living higher. Use the means at hand to destroy this pest and get a good crop from your protected plants.

Directions on 1 pound sprinkler boxes. Price, 30c.

Sent by mail at purchaser's expense. Mailing weight, 2 pounds.

Hellebore. One of the best insecticides for all around garden use. Destroys almost all leaf and flower-eating insects. Can be applied dry or in powder form. Price, $\frac{1}{2}$ lb., 30c.; lb., 55c.

Lime-Sulphur Solution. A liquid preparation. Our brand stays in suspension perfectly; always ready for use. Directions: For destroying Scale, 1 gallon to 8 gallons of water; for destroying Fungus, 1 gallon to 35 gallons. Price, qt., 45c.; 2 qts., 75c.; gal., \$1.25; 5 gals., \$3.75; bbl. (50 gals.), \$15.00.

Lime Sulphur (Dry Powder). Reduces the cost of spraying by fighting three different classes of pests and diseases with the same weapon at the same time.

It is used for the control of San Jose Scale, Oyster Shellback Louse and other Scale Insects; Apple Scab, Peach Leaf Curl and other fungous diseases; Pear Psylla, Leaf Blister Mite and Aphis.

It is put up in air-tight cans, powder form, and will keep indefinitely. Lb. can, 35c.; 5-lb. can, \$1.25; 10-lb. can, \$2.25; 25-lb. can, \$4.00.

Paris Green. The old time Potato Bug destroyer. Use care in applying on account of its burning properties. Use 2 pounds to 50 gallons of water or 2 pounds to 100 pounds of Land Plaster. Can use in same proportions with Limoid instead of Land Plaster. Price, $\frac{1}{4}$ -lb. pkg., 20c.; $\frac{1}{2}$ -lb., 35c.; lb., 60c.

Pyrox. A paste used for all leaf-biting insects. Is really a Bordeaux and Arsenate of Lead mixture. Dilute 1 pound to 5 gallons of water. Price, lb., 40c.; 5 lbs., \$1.50; 10 lbs., \$2.50.

Rajah. A distinctive disinfectant and deodorizer for destroying flies, moths, mosquitoes, roaches, etc. Price, $\frac{1}{2}$ pt., 25c.; pt., 50c.

*Sulphur (Flowers). Price, lb., 10c.; 10 lbs., 80c.; 25 lbs., \$1.75.

*Slug Shot. One of the old and well known remedies for destroying slugs, currant worms, cabbage worms and all of the soft shelled insects which trouble vegetation. 5-lb. pkg., 50c.; 10-lb. pkg., 95c.

*Sulphur Candles. For fumigating. $\frac{1}{4}$ -lb. can, 10c.; $\frac{1}{2}$ -lb. can, 20c.; lb., 30c.

*Tobacco Dust. Used for dusting delicate plants, especially good for the soft shell pests which infest flowers. Also for all low growing or trailing varieties of vegetables. Price, lb. pkg., 10c.; 5-lb. pkg., 40c.; 10-lb. pkg., 60c. Larger quantities, price on application.

Tobacco Stems. Used for fumigating. Also soaked in water makes a spray. Much used by florists upon tender plants. 5-lb. pkg., 25c.; bbl. sack, \$1.15; bale, \$2.00.

*Tree Tanglefoot. An absolute safeguard against all creeping insects on trees. Apply with paddle, making a band around the tree 3 inches wide. Vermin can not get over it. Lb. can, 50c.; 5-lb. can, \$2.40. See page 61.

*Whale Oil Soap (Fish Oil Soap). An old reliable remedy for spraying against scale and other pests. Can be used in varying proportions dissolved in water. $\frac{1}{2}$ lb., 15c.; lb. pkg., 25c.; 5-lb. pkg., \$1.00.

Weed Killer (Atlas). A scientific chemical which kills weeds and grass permanently, quickly, easily, cheaply. Gets down to the deepest root. Kills the weeds for the whole season. Used by thousands of people all over the United States—owners of estates and homes, as well as leading cities and railroads.

One gallon of Atlas Weed Killer, diluted with 20 gallons of water and applied with an ordinary sprinkling can, will clean up 600 square feet—and keep it free from weeds for the whole season.

A 500-gallon tank wagon with two men will cover about 2 $\frac{1}{2}$ miles of road 20 feet wide in one day—at an average cost of \$1 per 1000 square feet—including cost of applying. Compare this with costly hand-weeding.

Atlas is the active agent, water merely the distributor; therefore, we recommend water at the ratio of 20 to 1 as ample to thoroughly saturate the soil. 40 or 50 to 1 will have the same effect, but makes unnecessary distribution labor.

Pkgs., 1 qt., 60c.; $\frac{1}{2}$ gal., \$1.00; 1 gal., \$1.75; 5 gals., \$7.00.

*Ant Driver. One of the best preparations made to drive all kinds of ants from houses. It is a non-poisonous powder for sprinkling along baseboards of rooms or any place you desire to be kept free from them. Price in sprinkler boxes, 30c.

Marked * can be sent by Parcel Post at purchaser's expense.

POULTRY AND PIGEON FEEDS

OUR RULE—"Absolute freedom from all dirt and foreign matter."

grade of this grain is no exception to our rule—"absolute freedom from all dirt and foreign matter." 5 lbs., 30c.; 10 lbs., 50c.; bushel (48 lbs.), \$2.50.

Bone (Granulated Poultry Size). Contains the necessary Phosphoric Acid and Lime so essential to laying hens. It has all the nutritive ingredients essential to good egg production. 5 lbs., 35c.; 10 lbs., 60c.; 25 lbs., \$1.35; 100 lbs., \$5.00.

Buckwheat. Very useful, and giving poultry a variety in the way of feed. 5 lbs., 25c.; 10 lbs., 40c.

Chick Feed. (Pratts Baby Chick Food.) A perfect food for young chicks, ducks and turkeys. So ground and bolted that it is mechanically pre-digested. Furnishes the same nutriment, in the same proportion, as the mother hen. Pkg. (2½ lbs.), 25c.; pkg. (5¾ lbs.), 50c.; 14 lbs., \$1.25.

Chick Scratch. Too much attention cannot be given the quality and preparation of the ingredients of which chick feed is made, for, if impure grain is used, the mass soon tends to become mouldy, and the chicks will suffer. We offer only the best. 5 lbs., 30c.; 10 lbs., 50c.; 25 lbs., \$1.05; 100 lbs., \$3.50.

Canada Peas. Most preferable for feeding pigeons, being perfectly round and very small. We are offering especially fine grade. Price upon application.

Charcoal (Granulated). Excellent for young and old chicks, should be kept constantly in reach of all chicks. Prevents sour crop. It is of uniform grade, carefully screened and free from dust. It aids digestion and promotes the health of fowls in every way. Fine, medium, coarse. Pkg., 15c.; sack (50 lbs.), \$2.00.

Corn (Cracked). Our Cracked Corn is made from sound, well matured and well cured grain. It is fresh and sweet. 5 lbs., 25c.; 10 lbs., 40c.

Corn (Whole Small Flint). Our flint corn is the best obtainable. It is clean, sweet and free from foreign matter. 5 lbs., 35c.; 10 lbs., 60c.; 100 lbs., \$5.50.

Flax Seed (Or Linseed Meal). Tends to produce a fine, glossy plumage. Should be fed occasionally in small quantities, with other soft feed. 5 lbs., 40c.; 10 lbs., 75c.; sack (100 lbs.), \$6.00.

Coarse Cut Alfalfa. An excellent and invigorating green food for fowls, very easily digested, and calculated to keep them in fine condition. Our preparation is specially recleaned from all foreign matter before being cut to edible size. 10 lbs., 45c.; sack (100 lbs.), \$3.00.

Alfalfa Meal. For feeding dry or mixing in mash; excellent for the little chicks. 10 lbs., 50c.; 100 lbs., \$3.00.

Barley. The great muscle and bone builder. Our

Grit (Mica Crystal). To aid digestion it is necessary to feed some gritty material. Mica Crystal supplies this want better than any other article known. We supply this in three grades, fine, for small chicks and birds; medium and coarse, for larger fowl. Fine, medium, coarse. 5 lbs., 15c.; sack (100 lbs.), \$1.50.

Gluten Meal. For feeding poultry and stock; is an excellent addition to all mash feeds and a good fattening agent. Price on application.

Growing Mash (Pratts). Prepared especially for properly matured young chicks, after they are ready to have the chick food, and so carry them along to the age when they are ready to feed on the whole grain. Chicks should be given developing food when from eight to ten weeks old. 5 lbs., 30c.; 10 lbs., 50c.; 25 lbs., \$1.00; 100 lbs., \$3.80.

Hemp. A healthful feed, noted for its fattening properties. 1 lb., 15c.; 5 lbs., 45c.; 10 lbs., 80c.

Kaffir Corn. Our Kaffir Corn is the white, and the best procurable for feeding purposes. We offer only fresh, recleaned seed, absolutely free from dust or other foreign matter. 10 lbs., 45c.; 25 lbs., \$1.10; 100 lbs., \$3.80.

Laying Mash (Pratts). A feed for chick development. Also an egg-producing feed. Hens fed upon it are laying when others are laying off. Poultry raisers everywhere, some of wide reputation, have enthusiastically given credit to it for phenomenal winnings in egg competitions and in the show rooms. And results are of greatest importance to the average poultryman. 5 lbs., 25c.; 10 lbs., 45c.; 25 lbs., 85c.; 100 lbs., \$3.25.

Meat Scraps (Or Poultry Meat). Manufactured for us by a reliable firm. Nothing but pure materials are used, and no deleterious preservatives. Our stock is strictly fresh at all times. It is a great egg producer. 5 lbs., 40c.; 10 lbs., 70c.; sack (100 lbs.), \$5.50.

Millet (Bird). Best imported seed. Large size, bright colored grain. Scattered in fine litter it "provides" more exercise than any other grain food, making the "wee wee babies" get right down to hard work to get their "daily bread." 1 lb., 10c.; 5 lbs., 40c.; 10 lbs., 70c.

Oats. Our stock of this food is extra heavy; fine for sprouting. 4 qts., 50c.; 8 qts., 90c.

Oyster Shell (Prepared). Manufactured from shells in a pure condition. The lime contained in the shells assists in the formation of the egg shell and contributes to the general health of the fowls. Fine, medium, coarse, 5 lbs., 15c.; sack (100 lbs.), \$1.50.

Prices of Poultry and Pigeon feeds fluctuate constantly, and will be quoted on application.

"XX" Red Cross Pigeon Health Grit is superior to the other Red Cross brands by reason of its having more concentrated Pure Bone Ash, and tonic properties, and costs more than any other Health Grit to prepare. The analysis of the droppings from the birds fed on the "XX" shows 62 per cent. less waste of protein than that from birds not fed with it, proving conclusively the great waste of food that goes in the droppings that should be used, adding flesh more quickly, giving more vigor and strength to the birds, and a great saving on feed. The price may seem high in proportion to that of ordinary Grits, but as the manufacturers make it in immense quantities, the price has been reduced to a minimum at per sack of 100 lbs. **Sack (100 lbs.), 90c.**

Pigeon Feed. To meet the requirements of the discriminating pigeon fancier, who may raise birds either on a large or on a small scale, we have prepared, and find ready sale for, the mixtures that will here follow:

No. 1. A mixture of grains most suitable for homers and all fancy birds.

If you want your birds to fly fast, feed No. 1. It is a speed maker; does not contain any corn. **5 lbs., 40c.; 10 lbs., 65c.; 25 lbs., \$1.60; 100 lbs., \$5.40.**

"Special." Is one specially mixed for those who want a feed with corn in the mixture; it is very similar in other respects to No. 1. Fancy birds greatly relish this food. **5 lbs., 40c.; 10 lbs., 65c.; 25 lbs., \$1.60; 100 lbs., \$5.40.**

BIRD, DOG AND FISH FOODS

Bird Rape. Some canaries prefer a large proportion of Rape Seed, others less. We supply it separately at the prices following: **Lb., 20c.; 5 lbs., 50c.; larger lots, prices on application.**

Bird Lettuce. A slight sprinkle of this is much relished by canaries and should be given only occasionally, as lettuce contains a slight trace of opium, which is, however, not harmful. **Oz., 5c.; ¼ lb., 10c.; lb., 25c.**

Bird Millet. This is especially well adapted for mixture with canary and rape for feeding canaries, as it gives variety. **Lb., 15c.; bushel (50 lbs.), price on application.**

Bird Tonic. A reliable medicine for loss of song, asthma or hard breathing, diarrhoea, moulting out of season, and those troubles arising from colds or exposure of cage birds. It is a liquid and is administered in the drinking water. Sick birds will not sing. If your bird has lost its song try this tonic. Full directions on bottle. **Price, 25c.**

Cuttle Bone. The bone of the cuttle fish, an indispensable adjunct to the canary bird. **Each, 10c.**

Canary (Plain). The canary seed we import is large, Spanish, heavy and free from dust or other impurities. Canary raisers appreciate the fact that it does not pay to feed dusty and fermented seeds. **Lb., 15c.; 5 lbs., 45c.; larger lots, prices on application.**

Canary (Mixed). A mixture of canary and bird rape, very beneficial to cage birds, to which may be added any of the seeds enumerated below, at the option of the customer. **Lb., 15c.; 5 lbs., 45c.; larger lots, prices on application.**

Wafer Fish Food. This is an imported white wafer cereal Fish Food. Each wafer is $2\frac{3}{4} \times 3\frac{3}{4}$ inches and is as thick as blotting paper. This is the old fashioned fish food sold by all aquarium fish dealers. Put up in neat cartons with directions. **Price, per carton, 15c.**

Natural Fish Food. This is a granular food made from cereal, fish and meat. It is in pinhead sized kernels. Fish relish it greatly and thrive upon it wonderfully. The quantity in each box is liberal and its keeping qualities are excellent. **Price, per box, 15c.**

"Squab Maker." This mixture contains the same grains as "Special," but in varied proportions. This mixture is quite popular with large pigeon ranchers. **10 lbs., 65c.; 50 lbs., \$3.20; 100 lbs., \$5.40.**

Scratch Feed. We are the local agents for the largest Western house manufacturing this kind of feed. It is a popular sort and has an immense sale, because of its excellent feeding qualities. **5 lbs., 20c.; 10 lbs., 35c.; 25 lbs., 60c.; 100 lbs., \$2.25.**

Rice (Broken). Used with other feed, lightens digestion; improves the birds. **Price on application.**

Rape (Dwarf Essex). Why not plant some of this seed early in the spring? It makes quick growth and is one of the best forage plants known for poultry. **Lb., 15c.; larger lots, prices on application.**

Salt Cat (For Pigeons). A mixture of aromatic herbs and tonic remedies. Sold in compressed brick form. **Brick, 10c.; 3 for 25c.**

Sunflower (Large and Small). For chickens. Clean seed and well filled grades. **5 lbs., 75c.; bushel (25 lbs.), price on application.**

Tobacco Stems. For making nests for pigeons or poultry. **5 lbs., 25c.; bbl. sack, \$1.25; bale, \$2.50.**

Vetches (For Pigeons). A most excellent food for pigeons. **10 lbs., \$1.00; 100 lbs., \$8.50.**

Wheat (Feeding). The quality of our feeding wheat will be found all than can be desired. **5 lbs., 35c.; 10 lbs., 60c.**

Hemp. Hemp seed has a tendency to fatten the birds, and should therefore be fed only in small quantities occasionally. **Lb. 15c.; 5 lbs., 45c.; larger lots, prices on application.**

Hulled Oats. **5 lbs., 50c.; 10 lbs., 90c.; 25 lbs., \$2.00.**

Maw Seed. Calculated to improve the song of canaries, etc. Also used as a condiment. **Per lb., 20c.**

Spratt's Patent Meat Brine Vegetable Dog Biscuits. The standard dog food. Used at the leading kennels and dog shows throughout the world. A staple and constant food for all breeds of dogs. **1b. 15c.; 3 lbs., 40c.; 25 lbs., \$2.90; 100 lbs., \$11.00.**

Spratt's Patent Puppy Biscuits. The standard puppy food. A perfect and whole food for puppies of all breeds. Puppies should be started on these biscuits when about a month old, and then should be continued until such time as their teeth become sound and strong, usually when they are about six months old. **Lb., 15c.; 3 lbs., 40c.; 25 lbs., \$3.25; 100 lbs., \$12.00.**

Song Restorer. No lover of the Canary should be without this health and song stimulator. It is a wonderfully invigorating tonic for Canary Birds, Gold Finches, Parrots and most seed-eating birds. It is for use in small quantities in connection with the daily food, and supplies elements necessary to healthy bird life. It helps restore to their natural notes, birds which have lost their song from exposure to cold or from excessive moulting. Excellent for breeding birds. Your pet must "feel right" to sing, and STERLINGWORTH SONG RESTORER helps him to "feel right." If your bird is not doing well or does not sing, the use of just one box will show pleasing results. More healthy, lively birds, more song and better plumage follow its use. **Price, 25c.**

Sunflower (Large, for Parrots). Extra large, well-filled seed, very acceptable to discriminating parrots. **Lb., 15c.; 5 lbs., 50c.; 10 lbs., 80c.; larger lots, prices on application.**

Sand (Red and Silver). Fine. **Pkt., 5c.; box, 50c.**

Pebbles. **Qt., 5c.; pk., 30c.; bushel, \$1.00.**

INTERNATIONAL SANITARY HOVER

The International Sanitary Hovers have stood every climatic test from Panama to Quebec. Practical poultrymen, state experiment stations and poultry judges indorse them. You can raise chicks anywhere with International Sanitary Hovers. No specially constructed houses are necessary. There is no better place than in your regular hen houses.

Sanitary Hovers are as practical for the small back-yard poultry raiser as for the large poultry farms. They are fire-proof and vermin-proof, warmest at the curtain, radiate heat downward on the backs of the chicks, and in this way prevent leg weakness—usable anywhere—ready for business, wherever placed. To set them up, you simply set them down. No crowding or smothering of chicks—no kneeling in mud to get at the lamp—no cutting of holes or building of platforms. You want the best brooding device—you will get it in the Sanitary Hovers. **Price, \$13.50.**

SPECIAL PARTS FOR THE INTERNATIONAL SANITARY HOVERS.

Canvas Curtain, double.....	\$0.85
Curtain Rings.....	.35
Draft Pipe.....	.75
Felt Curtains.....	.75
Felt Lamp Wicks.....	.10
Hover Bodies.....	8.00
Lamp with Burner and Chimney.....	1.50
Lamp Burner.....	.40
Lamp Chimney.....	.35
Lamp Pount.....	.65
Lamp Frame.....	3.50
Mica Disk for Peep Hole.....	.10
Set Screw for Burner.....	.05
Thermometers.....	.70

QUEEN INCUBATORS

HATCH CHICKS THAT LIVE AND GROW

Stop hatching weak chicks with cheap incubators. A QUEEN costs but little more, and the extra chicks that live and grow soon pay the difference.

Remember, it is not how many chicks you hatch that counts, but how many you raise. Chicks that hatch out weak and wobbly, and live but a few days, mean nothing to you but trouble and loss. They make one sick of the poultry business.

Most of the chicks you lose in the first few weeks die because they did not have, when hatched, enough strength or vitality for a good start. QUEEN Incubators are famous the country over for big hatches of strong, healthy chicks that live and grow.

STYLE K INCUBATORS

NO.	CAPACITY	PRICE
20.....	70 eggs.....	\$16.50
21.....	130 eggs.....	27.50
22.....	220 eggs.....	36.75

QUEEN INCUBATORS

NO.	CAPACITY	PRICE
1.....	85 eggs.....	\$27.50
2.....	135 eggs.....	37.50
3.....	180 eggs.....	44.50
4.....	275 eggs.....	57.50
5.....	400 eggs.....	68.00

THE FAMOUS MAGIC BROODER

MADE IN TWO SIZES

Built by a man who has made good. This brooder is like a good mother; it never tires; it works while the little ones sleep, and not only broods but raises the chicks. Capacity 100 to 500 chicks. All cast iron. Write for catalogue; mailed free on application.

Small size—capacity, 100 to 200	
Chicks. Price.....	\$22.00
Curtain and attachment, \$1.75 extra.	
Large size—capacity 100 to 500	
Chicks. Price.....	\$27.00
Curtain and attachment, \$2.00 extra.	

THE EUREKA COLONY BROODER STOVE

This Brooder Stove is one of the most economical ones on the market. Made in two sizes. Foreword: The capacity of Brooder Stoves can only be determined by amount of floor space given them, and not by size of stoves. For full description of this stove, call or write for descriptive catalog. Mailed free to all who apply.

No. 10 size—limit of floor space 8x8 feet.

Price, \$21.50

No. 20 size—limit of floor space 14x14 feet.

Price, \$26.50

PRE-EGG-SERVER— WATERGLASS

Waterglass is recommended by the U. S. Agricultural Department and by that of foreign countries as the best method of keeping eggs. The package shown in this cut contains sufficient material to keep about 15 dozen eggs in a five gallon crock.

With eggs as high as they have been for the past several years, no one is overlooking the opportunity of putting up a few dozen or more during the spring when the price is at its lowest point.

Price, 20c. pkg.

WAFER THERMOSTATS

Used in many Incubators and Brooders.

3 inch Single.....	\$0.50
3 inch Double.....	.75
4 inch Single.....	.75
4 inch Double.....	1.10

METAL EGG BOX

This is the ideal, indestructible box for forwarding household eggs by parcels post or express; can be used an indefinite number of times.

2-dozen capacity.....	\$1.00 each
3-dozen capacity.....	1.25 "
4-dozen capacity.....	1.50 "
6-dozen capacity.....	1.75 "

LOCAL OR PLAIN EGG BOXES

3 x 4 style

Strong cardboard; all right for local use.
Price—dozen, 15c.; fifty, 55c.; 100, \$1.00.

2 x 6 style

Made to suit a more exclusive trade, who want a fancy carrier. Extra quality.
Price—dozen, 20c.; fifty, 75c.; 100, \$1.45.

CAPONIZING SET

Do your own caponizing, made easy with these tools. To caponize is to make the finest meat grown under feathers.

Farmer's Set \$3.50

THERMOMETERS

We carry a full assortment of tested thermometers, a few of which are listed below.

No. 5981—Hot Bed, ... \$1.75
No. 5715—Dairy .65
No. 5740—S—Dairy Flange..... .70
No. 5378—Storm .75

Household

8" Tin Case....	\$0.85
10" " "	1.25
8" Copper Case	1.50
10" " "	1.75
8" Wood Back	.15
10" " "	.40

Hover.

Household.

APCO EGG CARRIER

The APCO Patented Egg Carrier, equipped with the patented APCO fillers, in which the eggs ride suspended in a corrugated hammock and enclosed in a shock-absorbing receptacle, is the best medium for the transportation of eggs ever devised.

This Carrier is built on a scientific shock-absorbing principle. The filler is manufactured of heavy material and is superbound and enclosed with three thicknesses of double-faced shock-absorbing corrugated paper, which forms a carton. This carton is protected and enclosed by a vulcanized fiber container. The material from which this container is made is manufactured under tremendous weight and pressure. This material has proven itself superior to either metal or wood for shipping containers.

By reversing the outside container the return address is brought to the top ready for reshipment.

The Carrier is held assembled by a leather strap and buckle, which also acts as a handle and as a guard to the address label. Price postpaid.

1 dozen size.....	\$0.75
2 " " ".....	1.00
3 " " ".....	1.25
4 " " ".....	1.35
6 " " ".....	1.75

PROTECTING CLOTH OR CURTAIN FRONTS

To be used in place of sash in poultry houses; prevents drafts, but allows ventilation.

Medium weight.....	30c. yd.
Heavy weight.....	40c. yd.

Brooder.

Incubator.

Incubator Thermometers

No. 1052—Incubator.....	\$0.60
No. 1096— " , with Stand.....	.65
No. 1117—Brooder.....	.70
No. 1123—Hover.....	.70

HUMPTY DUMPTY EGG CRATE

The handiest and strongest carrier on the market. It is collapsible and occupies little room when not in use.

CAPACITY	EACH	DOZ.
36 eggs, (3 doz.).....	\$0.45	\$5.00
72 eggs, (6 doz.).....	.55	5.80
108 eggs, (9 doz.).....	.65	6.60
144 eggs, (12 doz.).....	.75	7.40
180 eggs, (15 doz.).....	.85	8.20

EGG TESTERS

Hand Lamp Tester

Can be used on any ordinary lamp; made of tin and felt.

Postpaid, 30c.

PIGEON NESTING BOWLS

Earthen

The best kind—won't upset.

	PRICE	DOZ.
	EACH	
8 inches.....	\$0.15	\$1.40
9 inches.....	.20	2.00

NESTING EGGS

China or Opal

Per dozen.....	\$0.35
Per gross.....	3.75
Medicated, per dozen, 75c.; 7c. each.	

HOVER OR BROODER FELT

We carry an excellent quality of this material.
Price, \$1.00 yd.—2 yds. wide.

INCUBATOR HYGROMETER

Moisture and ventilation have heretofore been a matter of guesswork almost entirely, and even the experienced operators cannot always guess right, there being such a great difference in conditions, such as high and low altitude, cold and hot weather. All these conditions make moisture regulation quite difficult unless you have a reliable Hygrometer such as our TYCOS HYGROMETER. This instrument will work in any incubator and will give satisfaction. Price, \$1.85.

Why a Collins Oat Sprouter Will Earn You Money

It Will Make Hens Lay When Eggs Bring High Prices

Whether you keep a few birds in the back yard or run a big commercial plant, you want eggs during the Winter months. And, to get eggs at that time you must make conditions like those of Springtime, when the hens lay naturally. In the Spring, there is always plenty of fresh green grass. But you can furnish Winter green feed at small cost which is quite as palatable and even more nourishing. Sprouted oats will "make the hens sing" in zero weather.

IT WILL SAVE GRAIN AND THAT MEANS A LOT THESE DAYS

In a Collins Sprouter, the bursting oat grains draw on the water and air for nourishment and combine these elements into wholesome nourishing green feed that will make your grain go 200% farther than when fed in the ordinary way.

8 Pans 11x15—the Popular Size..	\$4.00	Weight 14 lbs.
5 Pans 11x15, Small Back Yard Flock.....	3.00	9 lbs.
8 Pans 11x32—for BIG Business..	8.00	28 lbs.

POULTRY NETTING

Best quality silver-finished wire. Galvanized after woven.

No. 20	No. 19
1 in. mesh 150 running ft. to the bale.	2 in. mesh 150 running ft. to the bale.
Per bale	Per bale
12 in. wide \$3.36	12 in. wide \$1.68
18 " " 4.80	18 " " 2.40
24 " " 6.00	24 " " 3.00
30 " " 7.32	30 " " 3.68
36 " " 8.37	36 " " 4.19
42 " " 9.75	42 " " 4.88
48 " " 11.15	48 " " 5.58
60 " " 13.00	60 " " 6.88
72 " " 15.60	72 " " 8.37

Staples for fastening netting.
3/4 inch..... 15c per lb.

POULTRY MARKERS

These will be found very useful for marking poultry, which is done in the web of the foot. A perfectly painless operation, and you can always identify your fowls. We carry in stock all approved makes.

A new improved Punch. Works easily, cuts clean, and does not pinch the foot. Nickel plated.

Ideal Poultry Punch..... Each, 50c.

A popular and practical Punch. Makes a clean perforation and does not bruise the foot.

Perfect Poultry Punch..... Each, 25c.

POULTRY BANDS

"VICTOR"

Aluminum Leg Bands. In colors with printed numbers.

Victor Bands combine beauty, safety, durability, comfort, convenience and high visibility.

Five bright colors—Red, White, Blue, Green and Yellow.

Made of aluminum with celluloid number plate. Smooth finish, cannot injure leg. Large size. Light weight. A combination which insures comfort. A safe band, easily put on and will stay on. Adjustable to any size leg. Suitable for any breed. Postpaid.

SETS NUMBERED	PRICE
1 to 12.....	\$0.50
1 to 25.....	1.00
1 to 50.....	2.00
1 to 100.....	4.00

"SPIR-OL"

Celluloid Leg Bands

The most popular Band for poultry; made in ten distinct shades and colors: Blue, Pink, Amber, Black, Red, White, Green, Dark Blue, Yellow, Purple.

Asiatic: Doz., 18c.; 100, \$1.00; 1000, \$8.00.

American, Mediterranean and Bantam: Doz., 15c.; 100, 80c.; 1000, \$6.50.

Pigeon and Baby Chick: Doz., 10c.; 100, 65c.; 1000, \$4.25.

Prices postpaid.

"ALUMINUM"

Adjustable Leg Bands

Adjusted to fit the leg of any size fowl. It locks with a double clamp, fits the leg perfectly, and, once on, stays until you remove it. They are sold in sets, and numbered consecutively. The numbers are always clear and distinct. Trappeneers and show bird breeders will readily recognize the value of this numbered band. Prices postpaid.

SETS NUMBERED	PRICE PER SET
1 to 12.....	\$0.15
1 to 25.....	.25
1 to 50.....	.45
1 to 100.....	.85

KILLING KNIVES

The use of a practical knife in killing poultry will be found to be a more humane and satisfactory method of slaughtering.

Mingle's Swift Sure, 35c.

Pilling French Killing Knife, 60c.

Progressive, 60c.

The quickest and most humane manner of killing poultry and squabs.

Banner Root Cutter

The Banner Root Cutters cut beets, turnips, carrots, onions, potatoes, cabbage, mangels and all other roots and vegetables; they cut fast, fine and are easy running; leaves the feed in fine ribbon-like strips that make choking impossible. The knives are adjustable and are made of the very best of steel. An iron grate in bottom of hoppers lets dirt and gravel escape before reaching the knives.

No. 7—Poultry Size, \$6.50.

BLACK HAWK GRIST MILL

Price, \$4.00.

Weight, 17 lbs.

Bolts to table or bench. A good machine; grinds fine or coarse any kind of cereal. All bearings are chilled.

MINGLE'S No. 1 GRINDING MILL

Price, \$5.00.

Weight 33 lbs.

Especially made to grind or granulate Dry Bones, Shells, Charcoal, Corn, etc. All grinding surfaces in these mills are extremely hard.

DROPPING BOARD SCRAPER

The only device that has ever been made for this work. It has a blade 13 inches wide, enabling the operator to perform a lot of work in a short time. It gets in the corners easily and has a sharp crimped edge on the upper side which is used to loosen up any hard substance.

Price..... \$1.25

DRINKING FOUNTAINS AND FEEDERS

IMPROVED DROP BOTTOM FOUNTAINS

SINGLE WALL. This fountain combines the good qualities of the three fountains—Economy, Flat Back and Drop Bottom. The pan, which forms the trough, is hinged at the back and fastened by a catch in the front. The flat back allows the fountain to be firmly placed against the wall and the drop bottom enables the fount to be thoroughly cleaned and kept in a sanitary condition.

2-Quart, \$1.00. 1-Gallon, \$1.30. 2-Gallon, \$1.60.

DOUBLE WALL. Same as the single wall except that it is double wall in the place of single wall. The two cylinders forming the body of the fountain are sealed making a dead-air space between them. This construction is similar to the thermos bottle and gives the very best protection from both heat and cold.

1-Gallon, \$2.50. 2-Gallon, \$3.00.

SQUARE DROP BOTTOM DRINKING FOUNTAINS

These drop-bottom drinking fountains are new, and made of No. 28-gauge galvanized steel. The bottom can be swung open with one hand, as it is secured by one spring in the front, while most fountains have a spring on each side, requiring both hands to open; even then they are opened with considerable trouble. The rod which extends through the hinge of the drop bottom is made of solid brass, preventing possibility of rust or of breaking off.

2 qt., \$0.90; 1 gal., \$1.30; 2 gal., \$1.60.

TWO-PIECE DRINKING FOUNTS

Furnishes a constant supply of fresh water which chicks cannot overturn and get into. Fount is well made of 28-gauge black iron, galvanized after fount is completed; this protects all edges from rusting. No parts to get out of order. The most simply constructed drinking fountain made.

Small, 35c.; Medium, 45c.; Large, 60c.

THE DUPLEX FOUNTAINS

The latest and most practical sanitary poultry fountain on the market. This is a double fount, easy to fill, and keeps the water clean and pure. Made in two sizes. Price, 1-gallon size, \$1.15; 2-gallon size, \$1.40.

THE PEERLESS HEATER

Description

The base is an oil well. Holds one pint kerosene. Will last one week (day times). An air space between oil well and heat chamber makes it impossible for gas to form. In this heat chamber is a small burner connected to oil well by brass pipe. Around the burner is a circular shield; this protects the light and concentrates the heat to a small space on fount; in that way it never overheats the water. Inside, next outside wall is a wire gauze that prevents anything from being scratched into the heater. It is so ventilated that the light receives just the right amount of oxygen to burn smooth without smoke. It is impossible to get the outside wall of heater warm. Price, \$1.85 each.

MASON JAR CHICK FOUNT

This appliance for chicks feeds water, grain, grit, etc., automatically. It is an absolutely sanitary fountain made to fit any half-gallon, quart or pint Mason jar. Jars not furnished.

Price, 15 cents each

PEERLESS DRINKING FOUNTAINS

A heavy galvanized fountain made in two parts. The water is always pure. It is protected from dirt and filth. Easily cleaned by removing the bottom. The fowls cannot injure their combs when drinking. Simple in construction, durable and practical, can be hung up on a hook out of the dirt.

Positively will not burst when frozen. Made in three sizes.

Price: 1-quart size, 35 cents; 5-quart size \$1.00; 10-quart size, \$1.30.

THE PEERLESS FOUNTAIN for winter use may be used in connection with the PEERLESS HEATER. The combination when in use should be set against the wall and attached to it by either backstrap or bail on fountain; then it cannot be tipped over by the fowl and is absolutely safe.

WATER AND FEED CUPS

Holds about one pint and hangs straight when applied to the coop. Can be attached to any exhibition coop.

Price, 18 cents each

KEYSTONE FOUNTAINS

Galvanized

Easy to fill; easy to clean; a popular fountain. These Fountains have been tried by many prominent poultry raisers, and increasing business on them is evidence that they are all that is claimed for them.

1 qt. size, 40c.; 2 qt., 75c.; 1 gal., \$1.00.

FER-SUL

Kills Germ Diseases, Lice, Mites, Nits, etc., is a Tonic. Available everywhere on the farm as a Disinfectant, Antiseptic and Deodorizer. For poultry houses, cow barns, pig sties, etc. Invaluable as a flank and udder wash. Recommended by the highest authorities in animal and poultry husbandry. Cures Roup, Canker, Chicken Pox, Gapes and White Diarrhoea. Price, 12-ounce bottle, 75 cents; quart bottle, \$1.25; one gallon, \$3.00.

NORWICH AUTOMATIC AIR-LOCK FOUNTAIN

The most perfect device ever placed on the market for automatically supplying pure, fresh water in the poultry house. It is absolutely impossible to contaminate or pollute the water supply, and requires cleaning only about once in three months. Guaranteed frost-proof to 10 degrees below zero, and has been operated at temperatures of 15 and 20 below without being affected. Fitted with detachable cup, removable oil chamber, heat generator, etc.

Made in one size only, 5-gallon capacity. Shipping weight, 15 lbs.

Complete, with burner base..... \$6.00
Without burner base..... 3.50
Burner base only..... 3.50

JUNIOR CHICK FEEDER

The JUNIOR CHICK FEEDER is practical and sanitary, will not waste feed. Chicks cannot foul it. Feeds Dry Mash or Hard Grain. Feeds Sour Milk or water. Easily cleaned.

Price..... 30 cents

TRAP NEST FRONT

We have added this useful device to meet a popular demand. Easily attached to any square box. Works like a charm. Price, 50c.

HANDY DRY MASH HOPPER

Years of experience with this type of Hopper, with changes from time to time to improve it, has enabled us to put on the market a Dry-Mash Hopper that fulfills every need. The wire grid is raised or lowered as required for coarse or fine mash. The curved bottom of the hopper always keeps the feed within easy reach of the birds. The flange at the edge prevents any possibility of waste, and the small wires extending from the flange to the wire grid prevents the birds from throwing the feed sideways out of the hopper. The most distinctive feature about this HANDY DRY-MASH HOPPER is the fact that it is an inch wider at the lower side than at the top, thus making it utterly impossible for the food to clog.

12-inch, 12-quart—Price..... \$1.75
18-inch, 18-quart—Price..... 2.25
24-inch, 24-quart—Price..... 2.50
36-inch, 36-quart—Price..... 3.50

1-2-3 POULTRY FEEDER

For dry mash, scraps, shells, grit, charcoal or any poultry feed. Price, \$1.45.

ROUND BABY CHICK FEEDER

Has sliding top, center of feeder is raised. All food slides to the holes, around edge of feeder. Made in two sizes only.

No. 12—12 hole..... 25c.
No. 11—8 hole..... 15c.

GRIT AND SHELL BOX

Having a perfectly straight front, the feed positively cannot clog. There is a lip in front to prevent fowls from wasting the feed. When used for one kind of feed only take out separator; for two kinds put separator in one end; when used for three kinds, say scraps, shells and grit, put separator in the middle and you have three separate feeders. Can be set on floor or hung on wall. Has handle, or bail, for carrying. A big value for the money. Price 90c.

HENS' NESTS

Heavy steel coppered wire. These nests are intended to be fastened with screws or screw hooks—if wanted removable. They afford no place for vermin and allow the air to circulate freely, advantages not obtained when wooden boxes are used. They are intended to be filled with straw. They are durable, sanitary, easily cleaned, convenient to handle and inexpensive. Each, 20c.; dozen, \$2.00.

MINGLE'S ROUND HOPPER

This hopper is very popular with pigeon breeders, and is equally good for young chicks; made of finest grade galvanized steel; possesses eight sub-divisions (only four shown in cut); a neat, practical waste-proof hopper; holds 12 lbs. feed; movable or sliding hood. Price. \$2.00.

STOCK AND POULTRY REMEDIES AND NECESSITIES

AMERICAN HORSE TONIC—We recommend AMERICAN HORSE TONIC as a general improver for horses. Hundreds of users tell us that horses look better, feel better, act livelier, are full of snap and ginger when they are given it. Besides this, we recommend it as a Worm Expeller, for Lost Appetite, Rough Hair, Coughs, Inflammation of Lungs and Bowels, Stoppage of Water, Recent Founders, Distemper, etc. **Small pkg., 35c.; large pkg., 70c.**

ANIMAL REGULATOR—More work out of your horses, more milk from your cows, fatter hogs—these are a few of the benefits which come from using PRATTS ANIMAL REGULATOR.

Always sold on a guarantee that it will satisfy you or money back.

25-lb. pails, \$3.40, are popular with our customers. **Pkgs., at 25c., 50c. and \$1.00.**

BAG BALM—We recommend Bag Balm for all diseases of udder and teats; Caked Bag, Sore Teats, Bunches, Chapping, Cuts, Inflammation, etc. It makes easy milkers of hard ones, keeps all the parts in a sanitary, healthful condition. **Per box, 65c.**

BABY CHICK FOOD—When baby chicks come, keep them healthy and growing and bring even the weak ones along by feeding PRATTS BABY CHICK FOOD.

A largely predigested baby food for baby chicks. Guaranteed to raise every livable chick. Costs a cent a chick for three weeks. Prevents Leg Weakness, White Diarrhoea, "Pasting Up" and other chick diseases. **Pkgs., 25c. and 50c.; 14-lb. bag, \$1.25.**

BRONCHITIS TABLETS—Bronchitis in poultry is fatal in a few days unless promptly checked with PRATTS BRONCHITIS TABLETS.

This is safe and quick and will usually save your birds. Improvement is almost immediate, the suffering being relieved in a short time. This remedy is put up in tablet form so that individual treatment can be given when desired. **Pkgs., 25c. and 50c.**

CONDITION TABLETS—Heavy laying hens frequently get into a "run-down" condition. For a quick "bracer" to put them back into form we recommend PRATTS CONDITION TABLETS.

Don't get the idea these tablets are for show birds only, just because they are extensively used by fanciers to keep their exhibition stock in the pink of condition. They are for utility birds as well. Will put flesh on the birds. Help prevent colds, roup and liver troubles. **Pkgs., 25c. and 50c.**

CARBOLA—Disinfecting germ-killing White Paint. Use it instead of whitewash. A white paint and a non-poisonous disinfectant combined in a powder form. Ready as soon as mixed with water. Applied with brush or spray pump. Kills lice, mites, fly eggs, etc., and is a preventive of contagious disease. Recommended for poultry houses, stables, cellars, hog pens, dairies, etc. Satisfaction guaranteed. **25-oz. (trial size package), 30c.; 10-lb. pkg., \$1.25.**

SPECIAL COMPOUND—A treatment for ailments sometimes mistakenly confused with "cholera" and a "guaranteed or money back" article is PRATTS SPECIAL COMPOUND.

It is administered in the drinking water and will be found of great value in aiding in the relief of indigestion, sour crop, dysentery, diarrhoea and bowel trouble. **Pkgs., 25c. and 50c.**

CONKEY'S ROUP REMEDY—An excellent remedy for Cold, or Roup, Diphtheria and all Catarrhal Diseases, as well as for Canker. It is a preparation having antiseptic emollient or healing properties and is non-irritant. Is also used as a preventive. **Pkg., 25c., 50c., and \$1.00.**

FER-SUL—Kills germ diseases, lice, mites, nits, etc., is a tonic. Available everywhere on the farm as a Disinfectant, Antiseptic and Deodorizer. For poultry houses, cow barns, pig sties, etc. Invaluable as a flank and udder wash. Recommended by the highest authorities in animal and poultry husbandry. Cures Roup, Canker, Chicken Pox, Gapes and White Diarrhoea. **Price, 12-oz. bottle, 75c.; qt. bottle, \$1.25; gallon, \$3.00.**

FLY SPRAY (Crednoid)—Is an Insecticide, Germicide. It is non-poisonous and may be used with safety and effectiveness on cattle, horses, hogs, dogs and other domestic animals.

It will protect cows from flies and mosquitoes and prevent the loss in yield of milk which always occurs during the fly season.

It will destroy their eggs.

It will not gum the hair or make it brittle.

It will not irritate the skin.

It can be used at milking time and will not taint the milk.

It will protect horses from flies if applied before a drive, or before turning out to pasture. **Gallon can, \$1.35.**

GRANGE GARGET CURE—We recommend GRANGE GARGET CURE for that peculiar disorder so peculiar to cows, the hardening of the udder or garget. Inexperienced people often mistake it for caked bag, bunches in bag, etc. Remember, it is a separate disease, with its own peculiarities, causes, etc. Twenty-three years' use by dairymen and farmers proves its economy and value. **Per can, 70c.**

GREEN MT. HOOF SOFTENER AND GROWER—We recommend GREEN MT. HOOF SOFTENER AND GROWER for Thrush, Pinched or Contracted Hoofs, Brittleness of the Hoof, and, in fact, for every disease that attacks the hoofs of horses. It not only cures, but its frequent use will keep the hoof in a healthy condition. **Per box, 65c.**

HEAD LICE OINTMENT—Kill the head lice or the head lice will kill your baby chicks. Even if by chance the chicks survive, they are sure to be left in a weakened condition, a prey to many other diseases.

PRATTS HEAD-LICE OINTMENT kills the head lice instantly. It soothes, heals, is safe to use on all parasitic diseases. **Tins, 35c.**

HORSE COMFORT—We recommend **HORSE COMFORT** for all Flesh Wounds, Wire Cuts, Galls and Sores of long standing, for Blood Poison, Proud Flesh, Scratches, Mud Fever, for Snag Wounds, Sore Shoulders, Grease Heel, Malignant Ulcers, Fistula, Poll Evil, Corns in Horses, etc. We claim that **HORSE COMFORT** has won the right to the name—"The World's Greatest Healer." **Small bottle, in pkg., 35c.**

KOW KURE, the Great Cow Medicine—We recommend **KOW KURE** for Scouring, Lost Appetite, Bunches or Red Water; especially for possible or threatened Abortion, for Barrenness, for Retained Afterbirth, for Milk Fever. Hundreds of users testify that it helps increase the flow of milk from 10 to 20 per cent. It is a remedy made only for cows. Costs a cent a day per cow. Postage extra, according to Parcel Post Regulations, which your Postmaster can give you. **Small size, per can, 1½ lbs., 70c.; large size, per can, 3¼ lbs., \$1.40.**

LICE KILLER (Powdered)—Get rid of lice on your poultry, in nests, dust-baths, incubators and elsewhere in a day's time by using **PRATTS LICE KILLER**.

Effective, non-poisonous, non-irritating. May be used wherever a powder is suitable. A splendid deodorizer.

It quickly and thoroughly kills all lice on little chicks, big chicks, setting hens and incubator chicks. It rids horses, cattle, hogs, dogs and cats of lice and destroys ticks on sheep. It destroys insects and bugs on vines, plants and flowers. A valuable deodorizer and disinfectant for all poultry houses, barns, stables and dwellings. Drives out moths from closets, furniture, carpets and clothing. **Pkgs., 1 lb., 25c.; 2½ lbs. 50c.**

LICE KILLER POWDER (Drs. Hess & Clark)—Non-poisonous and non-explosive. Being stronger, has greater disinfecting qualities than similar preparations. Quickly and thoroughly kills lice on ducks and chickens. Rids horses, cattle, hogs, dogs and cats of lice. Destroys ticks on sheep, insects and bugs infesting shrubbery, vines and plants. Drives out moths and bugs from furniture, closets, carpets and clothing. **Pkgs., 1 lb., 25c.; 2½ lbs., 50c.**

POULTRY REGULATOR—Healthy birds and lots of eggs, the two big things in poultry raising, are made certain by giving **PRATTS POULTRY REGULATOR**.

It builds up vitality, insures sound digestion, sharpens appetite and prevents disease, thus putting birds in condition for heavy egg laying or winning blue ribbons.

PRATTS is the original Poultry Regulator of America and is in use by the most successful poultry raisers everywhere.

When regularly used, hens lay throughout the year.

It will prevent chicken cholera, gapes, roup, rheumatism, expel worms, prevent leg weakness, and egg eating. It will greatly improve turkeys, geese, ducks, pigeons and guineas—insuring quick growth and keeping them free from disease. **1½-lb. pkg., 25c.; 4 lbs., 50c.; 12 lbs., \$1.40; 25-lb. bag, \$2.70; 100-lb. bag, \$10.00.**

PANACEA (Hess & Clark)—This is not a stimulant, but a digestive tonic, which produces eggs in nature's way. **PANACEA** fed in winter will wonderfully increase the egg production. It is fed with other foods, and enables the system to appropriate egg-making material from the feed fed. **Pkgs., 1½ lbs., 25c.; 5 lbs., 75c.; 12 lbs., \$1.50.**

POULTRY DISINFECTANT AND LIQUID LICE KILLER—If poultry owners would regularly spray the chicken houses, roosts, dropping boards and utensils with **PRATTS POULTRY DISINFECTANT**, most all their troubles would vanish. This great Disinfectant is a real wonder-worker in the poultry yard. Put up in **1 qt., 55c.; 2 qts., 95c.; 1 gal., \$1.60.**

MILKING TUBES—For sore and obstructed teats and hard milking cows. This tube should be in the hands of every cow owner. These tubes are adjustable and can be made any length by moving the adjustable slide; can also be used for a probe to pass an obstruction. The tubes are made of coin silver. **Each, 50c.; per set of four Tubes 1¾ inches, \$2.00.**

RED MITE SPECIAL—Get rid of red mites—those destructive pests that weaken a fowl by sucking its blood—thus making it an easy prey to disease by using **PRATTS RED MITE SPECIAL**.

Spray perches, dropping boards, sides of house and roof near perches, and powder the birds with **PRATTS POWDERED LICE KILLER**. This combination treatment will protect your flock from these profit-destroying pests. **Qt., 55c.; 2 qts., 90c.; gal., \$1.35.**

ROUP POWDER—Don't let **ROUP** cut your profits. The sure and easy "ounce of prevention" against this dangerously contagious disease is **PRATTS ROUP POWDER**.

Quickly absorbed by the blood, purifies the system, reduces fever, allays inflammation. The safe remedy for roup, colds, catarrh, and all bad weather diseases. **Tablets or powder. Pkgs., 25c. and 50c.**

SORE HEAD, CHICKEN POX PREPARATION—From gratifying experience poultrymen have learned that the disgusting disease known as Sore-Head or Chicken-Pox can be successfully treated with **PRATTS SORE-HEAD AND CHICKEN-POX PREPARATION**. It acts quickly, checking the spread of the contagion and healing the sores. We guarantee **Pratts Sore-Head (Chicken-Pox) Preparation**. **Price, 35c. and 70c.**

SCALY LEG OINTMENT—Scaly leg is an annoying disease, impairing vitality and speedily ruining the appearance of affected birds. **PRATTS SCALY-LEG OINTMENT** usually affords relief in a few days. It kills the parasites which cause the trouble and promotes a new, healthy growth of skin to take the place of the diseased parts. **Pkgs., 35c. and 70c.**

WHITE DIARRHEA TABLETS—To protect your chicks from white diarrhea, the most destructive of all chick diseases, it is only necessary to give **PRATTS WHITE DIARRHEA TABLETS** in the drinking water from the first drink. This remedy has saved many dollars' worth of chicks for poultry raisers. You can depend on it. **Pkgs., 25c. and 50c.**

EGGS FOR HATCHING

We can furnish eggs for hatching from either exhibition or finest utility strains.

Setting of 15 eggs, finest utility. . . . . \$ 1.95

In lots of 100 eggs, finest utility. 11.00

Exhibition stock a matter of correspondence.

Guarantee of fertility does not mean every egg must hatch; conditions beyond control prevent such results very often. We assure you, however, 60 per cent. in early settings (January, February and March); 70 per cent. in balance of season. All claims of infertility must be accompanied by affidavit.

BABY CHICKS

From pure bred stock of finest utility strains:

25 Chicks. \$7.50

50 Chicks. 13.50

100 Chicks. 25.00

DON'T GIVE BABY CHICKS COLD WATER.

DON'T OVERFEED CHICKS.

Either of the above will start bowel trouble. Feed liberally, so long as they keep active. Keep their backs warm.

Price Subject to Market Changes.

PRATTS LAYING MASH With Buttermilk

For pullets as they approach laying maturity and for laying hens. The egg-making food.

Ingredients: Dried buttermilk, ground clipped oats, corn meal, linseed oil meal, wheat middlings, meat scrap, corn feed meal, wheat bran, alfalfa, fish meal.

Analysis: Protein, 19%; fat, 4%; fibre, 9%.

In 10, 25, 50 and 100-lb. bags.

PRATTS BABY CHICK FOOD With Buttermilk

The original "baby food for baby chicks." Gives chicks a strong start—keeps them growing.

Ingredients: Powdered buttermilk, corn meal, wheat middlings, oat meal, cooked wheat, Epsom salts, bone meal, millet, rape.

Analysis: Protein, 11.50%; fat, 3.50%; crude fibre, 3.80%; carbohydrates, 69%; nitrogen free extract, 65.20%.

In packages and 14, 25, 50 and 100-lb. sacks.

PRATTS LARGE SIZE SCRATCH FEED

For adult birds. Should be used with Pratt's Laying Mash.

PRATTS INTERMEDIATE SIZE SCRATCH FEED

For growing youngsters. Should be used with Pratt's Growing Mash. Also for adult bantams.

PRATTS CHICK-SIZE SCRATCH FEED

For baby chicks. Should be used with Pratt's Buttermilk Baby Chick Food.

PRATTS GROWING MASH With Buttermilk

For growing youngsters. The bone, muscle and feather builder.

Ingredients: Dried buttermilk, feeding oat meal, corn meal, ground oats, wheat middlings, wheat bran (with ground screenings not exceeding mill run), meat scrap, bone meal, fish meal.

Analysis: Protein, 17.50%; fat, 4.50%; fibre, 9%.

In 10, 25, 50 and 100-lb. bags.

Poultry Business and Who Should Engage In It

Man has a natural desire to own the soil. Herding and agriculture are primary human occupations, and countless ages of practice in these pursuits have bred the habit into instinct.

For the country dweller the matter is simple. The question depends merely upon a choice of the various methods, any of which he may easily adopt. The urbanite finds the difficulty much more serious. Conditions are more complicated and the way not always obvious. What shall he do? How may he indulge the inheritance of desire handed down through ages?

There are two things to consider when deciding to go into poultry raising, whether it is to be for pleasure or for profit, as the conditions differ according to the branch followed.

Those who engage in it for pleasure are usually the head of the family, who wishes to be supplied with fresh eggs and poultry of his own production, thus assuring himself of the freshness of the products eaten; or one who delights in the appearance of fine fowls and grow them for pleasure of seeing pure bred birds in his yard and blue ribbon premiums as the result of his labors; or it may be some member of the family, perhaps a semi-invalid, to whom the light exercise and the being out in the open air which poultry keeping induces, will be beneficial; or some of the younger members of the family whose fancies run that way, or who have been interested to keep them out of mischief and to teach them industrious habits and the love of animal life which daily care of poultry requires.

Many young boys and girls on the farm or those in villages and towns may profitably engage in poultry raising. The extras, such as bicycles, fishing tackle, rifle or money for a vacation trip for the boys and extras for the girls, for which they do not feel like calling upon their parents, may be easily earned in spare moments, as well as a goodly addition to the bank account, which so many of our American boys and girls possess.

Those who engage in this industry for profit are men who have worked hard in shops, factories and offices, and having saved enough from their earnings, feel in a position to buy a small place in the suburbs of a large city or near a good sized busy town; or young men to whom the out-of-door life appeals and who feel that there is a better opportunity in this than in other lines, and engage in the raising of poultry for a living, combining it with small fruits like strawberries and raspberries, etc., and perhaps flowers or the furnishing of garden plants such as tomatoes, cabbage, cauliflower or celery to those in towns who have back yard gardens.

To women also this industry offers a good opening. The work is not hard, the chicks seem to respond unusually well to a woman's care, and taken in connection with floriculture it is very profitable. There are many women who are making a nice income from their poultry whether handled in connection with their household duties, as do many farmers' wives or as a business, taking practically all of their time, assigning to some other members of the family the work within doors.

With the present improvements in incubators and brooders and feed boxes, drinking founts, coops and houses, the labor of hatching and raising has been greatly lessened, and to those seeking out-of-door employment, poultry-raising appeals strongly.

To the investor who wishes to equip and run a commercial poultry plant on a large scale and on a practical basis we would say there are many such plants in successful operation in this country.

With a good practical poultryman as manager or superintendent, one who understands the management of help as well as the care and management of poultry, such a farm is a good proposition. The increasing price of eggs and poultry, the demand for a better class of goods and for which first-class hotels and restaurants and also private trade offers a premium over market prices, enables the large farms to place contracts for their entire output at a very satisfactory figure.

Every year adds to the ease in getting out and away from the large centres of population. Improved methods of transportation have given readier access to the land, and modern methods of poultry culture have provided the means to use it advantageously.

Within the last decade both the theory and practice of poultry keeping have undergone a complete change. This change and consequent improvement, while it has revolutionized the methods in use on many of the big poultry plants, have been largely helpful to the owner of a few hens.

Artificial incubation was in its infancy. Incubators were crude in design and poor in construction. Brooders were still more undesirable and results generally far from happy. The temperature of both incubators and brooders went up and down, and the chicks went down and out. Chaos frequently reigned.

Now, as then, wrong methods bring wrong results. There is no doubt, however, that success is now the rule rather than the exception. No one who will give reasonable attention to the primary essentials of poultry culture need fail.

What are the essentials? Briefly, proper house, good tools, good feeds and cleanliness. Of these four only the first and the latter two are necessary for success with small flocks.

Expensive buildings are not desirable.

Take our advice; get land; get hens, and enjoy life. The way is easy, and the result is good.

MEMORANDA

MEMORANDA

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