Historic, archived document

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

Seed and Nursery Book for 1929

PORTER-WALTON
Mountain Grown
SEEDS and TREES
ARE HARDIER

PORTER-WALTON COMPANY
SALT LAKE CITY, UTAH

An Apple
a Day
Keeps the
Doctor
Away.

RED
DELICIOUS
APPLE.

ST. REGIS EVERBEARING RASPBERRIES.

BARTLETT
PEAR.

FRESH OR CANNED UNEXCELLED

Front Cover Fruit Collection

1 Delicious Apple, 3-4 ft.	\$0.50	ALL FOR
1 Bartlett Pear, 3-4 ft.	.65	
1 Italian Prune, 3-4 ft.	.65	
1 J. H. Hale Peach, 3-4 ft.	.55	
10 St. Regis Raspberries	1.50	POSTPAID
		\$3.25

FRUITS FROM JULY
UNTIL SNOW FLIES

For Complete List
of Fruit Stocks
and Prices
see pages
3 to 6.

ITALIAN
PRUNES.

THE WONDERFUL
HEALTH FRUIT

J. H. HALE
PEACH.

MELTING, JUICY, DELICIOUS FLAVOR,

ORDER NO.

Received....., 192...

Amt. \$.....

By

Send To

Money Order, \$.....

Check - -

Stamps, - -

Cash, - -

Total -

WARRANTY AND RESPONSIBILITY FOR CROP

What is stated on Catalog regarding this is always a condition of the sale of anything in the Seed and Nursery line.

[illegible]

EXTRA ORDER SHEETS FREE—ASK FOR THEM

This is What Counts—24 Years in Business

YOUR SATISFACTION GUARANTEED

or Money Refunded

If such a rare circumstance should happen that your crop failed through the fault of the seed purchased from us, we will re-fill the order or refund the entire purchase price of the seeds in question. No seedsman in the world will do more, and most of them would do nothing after seed is accepted and planted. Of course, we cannot guarantee or assume any responsibility for the crop, as we cannot control the weather, soils, moisture, pests and other agents which make for success or failure.

It is not only our business, but our moral obligation as well, to furnish our customers with the right kind of fresh, vigorous, acclimated tested seed and nursery stock, the important beginning of all success in horticulture.

About Prices and Delivery

(The Prices in This Catalog Cancel All Previous.)

All quotations, unless otherwise noted, are based on prepaid charges by us to your express or post office. Safe delivery is positively guaranteed. *You are therefore, as close to us as your post office or railway station.* These prices are as reasonable as we can sell in the quantities specified and will be adhered to during the season or as long as the stocks last.

Trees and seeds in quantity, poultry, supplies, etc., quoted "Not Prepaid" are F.O.B. Salt Lake City, and purchasers pay expenses of freight, express or parcel post. If wanted by parcel post, always send postage with the order. See back of "order blanks" to ascertain the amount of postage.

The Order Blank attached to this catalog will be convenient for customers and facilitate our filling orders (extra ones mailed free on request).

ORDER EARLY

In January and February, if possible, before the Spring rush begins. March and April are our busy months and our full force works almost day and night under high speed. We allow 5% discount for the privilege of filling your order **BEFORE MARCH 1.** On all orders from this catalog reaching us during January and February this discount will apply, thereafter no deductions allowable.

5%

Seed Testing

Aside from the field tests to maturity carried on at our Centerville trial grounds, testing for germination is done in our green-houses in soil. This is the fairest method possible since only plants that actually grow and come above ground are counted.

Not only is everything tested as fast as it comes into the warehouse, but tests are made from month to month as stocks might be carried over. Thousands of these germination tests are made every year, all are carefully recorded and no stock is used that does not show a highly satisfactory germination test.

It is not enough that we have the intent to please and send for our customers—we have the system and organization that cut mistakes to a minimum and insure the best obtainable anywhere for our customers.

Your patronage is solicited with the assurance that every packet, yes every tiny seed or anything else you receive labeled PORTER-WALTON has behind it the integrity and stability of a responsible house, characterized by dependable quality, high efficiency and a desire to please.

Seed Farm, Nurseries and Trial Grounds
Centerville, Utah
Nursery Sales Yard
(Opposite City Store)
Richards St. at First South,
Salt Lake City, Utah.

Yours for a Wonderful Garden,
PORTER WALTON COMPANY,
Gen. Offices, Store and Mail Order Dep't.
Richards St. at First South Street
Salt Lake City, Utah

Our
GREENHOUSES
at CENTERVILLE UTAH
SEED TRIAL GROUNDS AND
NURSERIES WHERE SOIL
TESTS ARE MADE

Seed & Nursery
WAREHOUSES
522-36 SOUTH 3RD WEST
STORAGE CAPACITY 100 CAR LOADS
NO ORDER TOO LARGE FOR OUR SERVICE

SHOWING
CENTRAL
LOCATION OF
NEW

**CITY
STORE
&
OFFICES**

CONVENIENTLY
SITUATED FOR
BOTH OUT OF
TOWN AND
CITY VISITORS

**CITY
STORE & OFFICES**
42 WEST 1ST SOUTH

Fruits

Page

Apples	5
Apricots	5
Blackberries	7
Cherries	6
Crab-Apples	5
Currants	7
Gooseberries	7
Grape-Vines	7
Loganberries	7
Nut Trees	5
Nectarines	5
Peaches	6
Pears	5
Plums	6
Quinces	5
Raspberries	7
Strawberries	7

Ornamental Trees

Ailanthus	9
Arbor Vite	11
Ash	9
Birch	9
Box Elder	9
Boxwoods	11
Catalpa	9
Crab Apple Dbl. Fl.	9
Cornus	9
Cherries Fl.	9
Elm	9
Euonymus	11
Golden Chain	9
Hawthorne Dbl. Fl.	10
Horse Chestnut	10
Juniper	11
Linden	9
Locust	10
Maple	10
Mulberry	10
Peach Flowering	10
Pines	11
Poplar	10
Plum, Flowering	10
Redbud	10
Olive	10
Spruce	11
Sycamore	10
Tulip Tree	10
Walnut	5, 10
Willow	10

Shrubs

Almond, Flowering	14
Althaea	14, 16
Amygdalus	14
Barberry	14, 16
Berberis	14, 16
Buddleia	14
Butterfly Shrub	14
Bridal Wreath	15
Calycanthus	14
Caranga	14
Currant	14
Cornus	14
Cotoneaster	11, 14
Cranberry	16
Deutzia	14
Dogwood	14
Elder, Golden	15
Euonymus	11, 15
Euxochorda	14
Forsythia	14
Golden Chain	14
Hedge Plants	16
Honeysuckle	16
Hydrangea	15
Hypericum	15
Kerria	15
Ligustrum	15
Lilac	16
Mock Orange	15
Oregon Grape	11
Pearl Bush	14
Philadelphus	15
Privet	15, 16
Quince, Japanese	14
Rose of Sharon	14
Roses	18-22
Sambucus	15
Snowball	15
Snowberry	15
Spiraea	15
Strawberry Shrub	15
Sumac	16
Syringa	16
Tamarix	16
Viburnum	16
Weigela	16

Hardy Climbers

Page

Ampelopsis	13
Aristolochia	13
Bignonia	13
Bittersweet	13
Celastrus	13
Clematic	13
Dutchman's Pipe	13
Euonymus	13
Honeysuckle	13
Ivy, Boston	14
Ivy, English	13
Matrimony Vine	13
Polygonum	13
Roses, CL.	22
Scarlet Trumpet	13
Vine	13
Silver Lace Vine	13
Virgin's Bower	13
Virginia Creeper	13
Wistaria	13

Bulbs

Summer Fl.

Bleeding Heart	79
Caladium	73
Callas	73
Cannas	73
Cinnamon Vine	73
Convallaria	73
Dahlias	75, 76
Dielytra	79
Ferns	79
Gladiolus	74
Iris	77
Lilies, Hardy	73
Lily-of-the-Valley	73
Madeira Vine	73
Montbretias	73
Peonies	77
Phlox	77
Tuberose	73

Flower Seeds and Plants

Acronclinium	87
African Daisy	87
Ageratum	79
Agrostemma	87
Alum Root	87
Alyssum	79, 87
Amaranthus	87
Anchusa	79
Anemone	79
Antirrhinum	87
Anthemis	79
Aquilegia	79
Arabis	79
Arctotis	87
Asters	88
Asterums	88
Baby's Breath	80
Bachelor's Button	90
Balloon Vine	88
Balsam	88
Bean, Scarlet Run.	91
Bellflower	81
Bellis	79
Black-eyed Susan	82
Blanket Flower	80, 91
Blazing Star	81
Bluebells	82
Browallia	87
Calendula	89
Calliopsis	89
Campanula	79
Campion, Rose	81
Canary-bird Flower	89
Candytuft	80
Canterbury Bells	79
Cardinal Climber	89
Carnation	79, 80
Castor-oil Plant	96
Catchfly	97
Celosia	89, 77
Centaurea	79, 90
Cerastium	79
Chrysanthemum	79, 89
Clarkia	89
Cobaea	89
Cockscomb	89
Cone Flower	98
Coleus	89
Columbine	79
Convolvulus	92
Coreopsis	79
Cornflower	90
Cosmos	89
Cucumber Vine, Wild	99
Cyclamen	90

INDEX

Page

Cypress, Summer	79
Cypress Vine	90
Dahlia	75, 76, 91
Daisy	79, 81
Delphiniums	79
Dianthus	79, 90
Didiscus	92
Digitalis	79
Dimorphotheca	90
Doronicum	79
Dragonhead, False	81
Dusty Miller	79
Echinocystis	99
Eryngium	90
Eschscholtzia	91
Erysimum	80
Eupatorium	80
Euphorbia	80, 91
Everlastings	62, 68, 87
Feverfew	80
Flax	81
Forget-me-not	81, 93
Four o'Clock	93
Funkia	80
Foxglove	80
Gaillardia	80, 85
Geranium	73, 80
Globe Amaranth	91
Godetia	91
Golden Feather	94
Golden Glow	82
Gomphrena	91
Gourds	91
Grasses, Ornamental	80, 91
Gypsophila	80, 91
Helenium	80
Helianthus	80, 89
Helichrysum	91
Heliotrope	91
Hesperis	80
Heuchera	80
Hibiscus	89
Hollyhock	80, 91
Holly, Sea	80
Honesty	92
Hunnemannia	91
Iberis	80
Incarvillea	80
Ipomea	92
Ivy, Kenilworth	81
Jacob's Ladder	94
Joseph's Coat	87
Kochia	91
Lady's Slipper	88
Lantana	91
Lantern Plant	81
Larkspur	79, 91
Lathyrus	81
Lavatera	92
Lavender	81
Leopard's Bane	79
Lavender Lace Fl.	92
Lavandula	81
Liatris	81
Linaria	81
Linum	81
Lobelia	81
Love-in-a-Mist	92
Love-in-a-Puff	88
Love-Lies-Bleeding	87
Lunaria	92
Lupinus	81, 91
Lychnis	81
Mallow	80
Marguerite	79
Matricaria	92
Marigold	61, 92
Mignonette	93
Mirabilis	92
Moonflower	92
Morning-Glory	92
Mourning Bride	97
Myosotis	81
Nasturtium	93
Nicotiana	92
Agella	92
Papaver	81, 95
Pansies	91
Passion Flower	91
Pennisetum	92
Perennials	78, 82
Pentstemon	81
Petunias	95
Phlox	81, 77, 94
Physalis	81
Physotegia	81
Pink	79

Page

Platycodon	81
Polemonium	94
Polyanthus	81
Poppy	91, 96
Portulaca	94
Primrose	81, 94
Frimula	81, 94
Pyrethrum	81, 94
Rhodanthe	96
Rhizoma	96
Romney's	96
Rudbeckia	82, 96
Sage	96
Salpiglossis	97
Salvia	81, 96
Scabiosa	81, 97
Scarlet Runner	97
Schizanthus	97
Sedum	81
Silene	97
Snaptagon	87
Sneezewort	80
Statice	82, 97
Stocks	82
Stokesia	82
Straw Flowers	91
Sunflower	80, 99
Sweet Peas	98
Sweet Pea, Everlast-	81
ing	80
Sweet Rocket	90
Sweet Sultan	82
Sweet William	82
Torch Lily	82
Tritoma	82
Verbena	99
Veronica	82
Vinca	82
Viola	82, 94
Wallflower	82, 99
Wild Cucumber	99
Wild Flower G.	99
Windflower	79
Woolflower, Chinese	89
Yucca	82
Zinnia	99

Vegetable Seeds

Artichoke	48
Asparagus	48, 51
Beans	54
Beets	55
Beet, Spinach	52
Brussels Sprouts	51
Cabbage	47, 57
Carrots	56
Cauliflower	58
Celeriac	73
Celery	73
Chicory	51
Chives	51
Collards	51
Corn Salad	51
Corn, Sugar	60
Cress	56
Cucumber	61
Eggplant	59
Endive	59
Garlic	66
Gumbo	66
Hieris	72
Horse-radish	60
Kale	59
Kohlrabi	59
Leek	63
Lettuce	62
Marrow, Vegetable	71
Mushroom Spawn	63
Musk-melon	63
Mustard	66
Okra	66
Onion	65, 66
Parsley	67
Parsnip	67
Peanuts	67
Peas	69
Pepper	67
Pepper Grass	56
Potatoes, Seed	68
Pumpkins	68
Radish	66
Rhubarb	69
Rutabaga	71
Salsify	69
Spinach	70
Squash	71
Swiss Chard	52
Tomato	72, 48

Page

Turnip	71
Vegetable Oyster	69
Watermelon	48, 64

Farm Seeds

Alfalfa	45
Alsike	45
Barley	45
Beet, Sugar	55
Carrots	56
Clover	45
Corn, Field	44
Corn, Kaffir	44
Feterita	44
Grass Seed	43, 44
Grass, Sudan	43
Lucerne	45
Mangel-Wurzel	55
Oats	44
Millet	44
Peas, Field	45
Rape	45
Rutabaga	71
Rye	44
Sorghum	45
Sunflower	45
Vetch	45
Wheat	44

Lawn Seed

Creeping Bent	42
Kentucky Blue	42
P-W's Mixtures	42
White Clover	42
Red Fescue	42
Red Top	42

Poultry Supplies and

Miscellaneous

Birds, Canary	32
Bird Cages	32
Brooders	35
Burners	38
Caponizing Sets	38
Calf Meal	40
Chick Feeds	39, 41
Cultivators	23, 24
Dog Supplies	33
Drink Founts	37
Egg Scales	34
Egg Boxes	34
Fertilizers	37
Feeders	37, 38
Flower Boxes, Self-	23
watering	23
Forks	23
Fumigators and	26
Vaporizers	26
Garden Tools	23
Glass Cloth	24
Glass Hooks	23
Grafting Wax	25
Grafting Sees	25
Hoes	23
Hanging Baskets	25
Insecticides, Fungi-	28, 29
cides	23
Knives	25
Labels	25
Lawn Mower	24
Moisture Gauge	38
Moss	25
Nest Eggs	34
Nozzles, Hose	25
Plant Covers	25
Plant Pots	25
Plant Stakes	25
Plant Support	25
Flows	24
Poles, Spray	27
Poultry Foods	34
Pruner	23
Rakes	23
Seeders	24
Shears	23
Shovels	23
Spades	23
Sprayers	26, 27
Sprinklers	23
Thermometers	34
Trimmers	23
Trowels	23
Weeders	23
Weed-Puller	23

A mid-season snapshot showing one of our fields of one-year-old Peach Trees at our Centerville Nursery. Like all the rest of our Fruit Stock, the above were budded from the choicest bearing trees, critically selected and carefully labeled by our expert nurserymen. The painstaking care in selecting scions is one of the reasons why Fruit Stocks wearing our label are so dependable.

FRUIT TREES

At our Centerville Nurseries we have a particularly fine lot of strong, healthy fruit trees. This stock has been selected and critically grown to meet the requirements of orchardists planting for eastern or local markets. We believe, also, those of our patrons who are planting a small orchard for home use will find sufficient variety to amply fill every want in the fruit line.

Average weight of Fruit Trees packed for shipment as an aid to determine carriage charges: The general run of fruit trees, either in bales or cases, average about as follows: 6 to 8 ft., 2 lbs. each; 4 to 6 ft., 1½ lbs. each; 3 to 4 ft., 1 lb. each; 2 to 3 ft. one-half of a lb. each. Grapevines, one-third of a lb. each.

FULL DIRECTIONS FOR CARE AND PLANTING FREE WITH EACH ORDER

It is very easy to transplant trees successfully if these directions are followed:

With "Our Quality Trees" the most inexperienced men can set out orchards with the highest degree of success. Experience has taught us that 90 per cent of the trees that die, do so because the persons who planted them did not have directions for transplanting to follow, or did not follow the ones they had. Were it possible for us to plant and care for the stock we send out we would willingly insure the growth of every tree and plant. These directions are invaluable to you, for if they are followed your trees, plants, etc., can be set out with the surety of a reasonable degree of success.

Certificate of Inspection, showing freedom of our stock from San Jose and other injurious insects and diseases, will be attached to all shipments.

GUARANTEE OF GENUINNESS

Our Fruit Trees are all budded or grafted from bearing trees, and every care and precaution is exercised to have them true to name. With all our caution, mistakes are liable to be made; but we hold ourselves in readiness, on proper proof, to replace all trees and other stock that may prove untrue to label, free of charge, or refund the amount paid. It is mutually understood and agreed to between the purchaser and ourselves, however, that our guarantee of genuineness shall, in no case make us liable for any greater sum than that originally paid by us for the trees, etc., which may prove untrue.

GUARANTEE OF SAFE ARRIVAL IN GROWING CONDITION

Our trees and shrubs are most carefully inspected for vitality before orders are dispatched and carefully packed to endure the journey so they should reach you in "A-1" shape for planting. We are not responsible for damage to goods in transit, therefore you must examine at the express or freight office and have any damage noted upon your express or freight receipt. We are always glad to replace goods injured in transit, providing receipt showing damage is returned to us so that we may enter claim and reimburse ourselves.

After stocks have been received and planted, failure to grow is entirely at the risk of the purchaser as we have no control over the planting, soil, culture, or the enemies of plant life and therefore can assume no liability whatsoever regarding the continued growth and can make no replacements in case of failure.

"TEN COMMANDMENTS"

Here are the "Ten Commandments of Tree Planting" as given by an eminent horticultural authority:

1. Do not allow roots to be exposed to the sun, drying winds or frost.
2. Prune with a sharp, clean cut any broken or injured roots.
3. Have the holes large enough to admit all the roots without cramping.
4. Plant in line loam, enriched with thoroughly decomposed manure.
5. Do not allow any green unfertilized manure to come in contact with roots.
6. Spread out roots in their natural position and work fine loam among them, making it firm and compact.
7. Do not plant too deep. Let roots be set two or three inches lower than before.
8. Remove all broken branches and cut back at least one-half of the previous year's growth of wood.
9. If the season lacks the usual rainfall water thoroughly twice a week.
10. Cultivate. Keep soil in dust mulch—cultivate.

APPLES

"The King of Fruits"—"An Apple a Day Keeps the Doctor Away"

No other fruit succeeds over so wide a range of territory and under such diversified climatic conditions, and no other fruit brings so sure a return to the grower in proportion to time and money expended upon its production. It has few rivals among cultivated fruits. Its mild and pleasant acid is a panacea for many of the ills that the human race is heir to. No fruit can be more pleasant to the palate or more beautiful to the eye than the rich, ripe apple when plucked from the tree, or more luscious and healthful when cooked.

The grades and prices are as follows:

Height Feet	Caliber Inches	Each	10 to 20 Ea.	20 to 40 Ea.	40 to 100 Ea.
5 ft. up	12/16 up	85c	70c	50c	45c
4 ft. up	9/16-11/16	65c	55c	45c	35c
3 1/2 ft. up	7/16- 9/16	50c	45c	35c	30c
2 1/2 ft. up	5/16- 7/16	35c	25c	22c	20c

See page 8 to determine the number of trees required for an acre.

Summer Varieties

Red Astrachan—Fruit large, beautiful deep crimson yellow. Ripens July and August.

Early Harvest — Medium size, nearly round, pale yellow, July and August.

Thurston Sweet — Highly prized for home or market, deliciously sweet. Mid-summer.

Red June—Medium size, oblong, red, flesh white and juicy, sub-acid. Ripens in July.

Yellow Transparent—One of the earliest, pale yellow when ripe; good quality. Succeeds well in cold climates. Ripens in July.

Autumn Varieties

Gravenstein—Yellow red striped, very large. Ripens in September.

Maiden's Blush — Medium size, pale yellow with beautiful red cheek.

Twenty Oz. Pippin—Large yellow and striped. Good cooking apple.

Wealthy — Dark red, sub-acid. Trees bear very young.

Wolf River—Light yellow, with stripes and splashes of bright red; good cooker.

Winter Varieties

Arkansas Black—Rich, dark red; flesh orange yellow.

Baldwin — Large, bright, red, crisp, juicy, rich.

Bellevue, Yellow—Large, oblong, yellow. Ripens October to January.

Delicious—Large, handsome winter apple, delightful flavor, ripens late fall.

Gano—Good size, deep red, attractive; good keeper and shipper.

Golden Russet — Good medium sized early winter apple. Russet brown turning golden yellow when ripe. Excellent flavor.

Grimes Golden Pippin—Rich, golden-yellow; flesh tender, juicy and rich. November to December.

Jonathan—Probably the best apple in regard to flavor and quality ever grown in America. Deep red.

Mammoth Black Twig — Very large, dark red, slightly streaked.

McIntosh Red — Large, all red; good keeper.

Jonathan

Crab Apples

Same Prices as Apples

These miniature apples are highly esteemed for making jelly; extremely prolific bearers. Every Home Orchard should have at least one or more trees.

Hyslop—Fruit deep crimson, covered with blue bloom. September.

Siberian—Beautiful red. September.

Transcendent — Fresh yellow, fine grained, juicy, ripening in August and September.

Delicious Apple

Apricots

For canning, evaporating and drying purposes, as well as for use in the fresh state, the fruit can hardly be excelled.

Height	Caliber	Each	10 to 20 Ea.	20 to 40 Ea.	40 to 100 Ea.
5 ft. up	12/16 up	\$1.00	75c	65c	60c
4 ft. up	9/16-11/16	65c	60c	55c	50c
3 ft. up	7/16-9/16	55c	50c	45c	40c
2 ft. up	5/16-7/16	50c	40c	35c	30c

Chinese—Large, round, deep yellow. Late June.

Moorepark—Very large, yellowish-green; best variety for no colder sections than Salt Lake. Late June.

Superb—The most productive hardy apricot; medium size, light salmon color.

NECTARINES

The Nectarine has a smooth skin like the plum. It is like the peach in other ways and requires the same culture. Its pungent, sprightly flavor is reminiscent of both, but with an added deliciousness all its own. Set trees 16 to 18 feet apart.

Boston—Bright yellow, red cheek; flesh yellow, free-stone, fine flavor.

Standard Size—Each, \$1.00; \$9.00 per 10.

Mail Size—Each, 55c; \$7.50 per 10.

Quince

Orange Quince—Large; roundish, with short neck; beautiful bright golden yellow; an old favorite for making jelly. Standard size, \$1.25 each; \$10.00 per 10.

Nut Trees

Soft Shell Almonds—1. X. L., each \$1.00; \$9.00 per 10.
American Black Walnuts—6-8 ft., \$2.00 each; \$15.00 per 10.

Utah English Walnuts—Hardy in any section or situation where apricots and peaches can be grown.

4-6 feet—Each \$1.50; \$12.00 per 10, charges prepaid.

6-8 feet—Each \$2.50; \$20.00 per 10, prepaid.

8-10 feet—Each \$3.00; \$25.00 per 10, prepaid.

Every Orchardist is vitally interested in keeping his trees free from Insects, Pests and Diseases. We carry a most complete line of Insecticides, Fungicides, and Spray Pumps and Dusters for every purpose. See pages 26-27 inclusive.

A transformation into a wonderland of beauty through the use of trees, shrubs and lawn.

CONSULT US

Many problems confront the prospective, especially those who are newcomers to the Inter-Mountain States. We have been in the business of growing for many years; experimenting, comparing, and observing the behavior, growth and results of all varieties of both fruits and ornamental plants. Besides our own individual experience we have the reports of our many customers, whose varied environments and locations comprise all the conditions likely to be met with throughout; and give a basis for a comprehensive survey of the likes and dislikes, the strong points and weaknesses of each particular plant, or variety of fruit. All this accumulated experience is at your service—FREE.

The Selling Price of Beauty

Statistics show that for every \$100 spent in proper beautification of the home grounds the owner can add \$1,000 to his sale price. Very likely you know of instances which confirm this statement, extraordinary as it may seem. In any case it is a fact which is not generally known in some sections. However, a marked change is taking place. People who a few years ago said they did not want "brush" around their homes have increased the comfort, attractiveness and value of their properties by proper use of plant materials.

Now the word "proper," as applied above, is all important because improper choice and arrangement of trees, shrubs, etc., produce results which are far from

the object desired. Examples of such results are all too frequent because the designer was not familiar with the fundamental principles of landscaping nor with the habits of growth and characteristics of plant materials.

The best results are obtainable when a complete plan is carefully worked out in advance.

Such a plan requires study, knowledge, experience, and good taste. You may enjoy the services of our capable, experienced Landscape Architect, without cost excepting when personal inspection of your property is necessary. Tell us about any landscape problem, private or public grounds, large or small, and let us help you solve it satisfactorily.

Beautify Your Grounds the Porter-Walton Way

Upon receipt of sketch and information as outlined below, we will prepare a plan for you, incorporating original ideas, giving you a practical and artistic effect throughout the year.

In this plan each group will be keyed and the location of each tree or shrub will be indicated so that the plan will be an accurate guide for planting. We ask you to enclose \$2.00 at the time of making your sketch. This \$2.00 will be deducted on an order of \$20.00 or more.

Thus you really receive this service free of charge. *This offer is subject to change without notice. Send ALL information requested below. We like to have plans to work on before the planting season begins.

NOTE—For owners of larger places—Schools, Parks, etc.—We are prepared to make plans by mail, but suggest a personal survey by our Landscape Architect. Our terms are reasonable for such services and will be stated in correspondence.

Send Just a Simple Sketch With This Information

Your sketch need not be drawn to scale, but give all dimensions of buildings and lot. Show location of buildings on lot.

Give points of compass.

Show location of all trees and shrubbery now on place.

Show location of all walks, drives, etc.

Give all grades, show terraces, etc.

Show any objectionable views to be screened.

Attach kodak views taken from north, south, east and west sides of lot.

Show where windows in first floor are placed.

Is house one, two or three stories?

Color of house—brick, frame or stone.

Height of foundation and windows.

Do you like a lot of shrubbery?

Do you want any hedges? Where preferred?

Do you want us to locate trees, drives and walks?

Do you prefer any particular kind of trees?

Do you want a rose bed?

Do you want a formal flower garden?

Do you want any fruit trees?

Do you want any Evergreens?

Do you want a vegetable garden? Where preferred?

What is the character of soil?

Let us Caution—Do not be discouraged and give up the plan in case the cost of a complete planting seems to be beyond what you can afford to invest immediately. Plant the portion you can reach this year and when really necessary, leave the remainder for following years. Planting to a well thought out plan will reward you handsomely in increased values as well as being a source of pride, joy, and satisfaction during the entire lifetime of the materials used.

ORNAMENTAL TREES

A city street is not attractive unless softened by the foliage and branches of trees. They shelter the home from excessive heat and dust, add charm to the finest buildings and hide the untidy and unsightly places. There is nothing that adorns a city more than fine shade trees. There is an untiring loveliness as they continually change with the seasons. At the first breath of spring, the swelling buds open into dainty flowers, often inconspicuous, but none the less beautiful. Then follows the delicate tints of expanding leaves that deepen into the richness of mid-summer green. The chill of autumn brings new beauty into the myriad of gorgeous hues that come almost overnight.

Prices are for different sized trees, all f. o. b. our Nurseries or Salt Lake City, and in all cases good value will be given, according to price charged. Ten per cent discount on orders of five trees or more of one variety and size. Special prices made on lots of 100 up.

Ailanthus (Tree of Heaven)

Glandulosa—A rapid growing, lofty tree, long, elegant foliage. Exempt from disease and insects. Useful tropical effects, withstands dust and smoke better than most any other tree. 6-8 feet, \$2.00 each; 8-10 feet, \$2.50 each.

Ash

American White (*Fraxinus Americana*)—A rapid growing native tree of fine symmetrical outline. A valuable street or park tree. Timber is largely used. Price, 6-8 ft., \$1.00 each; 8-10 ft., \$1.75 each; 10-12 ft., \$2.50 each.

Blue Ash (*Fraxinus Quadrangulata*)—Very shapely symmetrical tree for Park or Avenue. Bark smooth of deep bluish green, leaves larger than other varieties of Ash, deep green changing in autumn to reddish purple. 6-8 ft., \$2.00; 8-10 ft., \$2.50.

Green Ash (*Fraxinus Lanceolata*)—Shapely round top with dark green foliage. Price, 6-8 ft., \$1.50 each; 8-10 ft., \$1.75 each.

European Mountain Ash (*Sorbus Aucuparia*) (*Rowan Tree*)—Handsome small tree of erect growth. Leaves pinnate, leaflets serrate. Flowers white, in flat clusters, four or five inches broad, followed by rather large, red berries. Very handsome at any season. 6-8 ft., \$2.25 each; 8-10 ft., \$3.00 each; 10-12 ft., \$4.00 each.

Box Elder

Ash-Leaved Maple (*Acer Negundo*)—A fine, rapid-growing avenue tree, withstands both cold and drought, thrives where other trees fail. 6-8 ft., \$1.00 each; 8-10 ft., \$1.50 each; 10-12 ft., \$2.00 each.

Birch (Betula)

Cut-Leaved Weeping Birch (*Betula alba pendula laciniata*)—Very beautiful form of European White Birch. The main trunk, with snow-white bark, grows straight as an arrow. Branches spread but slightly, while the fine slender shoots hang vertically. The foliage is fine and deeply cut. Many consider this the most beautiful deciduous tree in cultivation. 6 to 7 ft., \$3.25 each; 7 to 8 ft., \$4.00 each.

European White Birch (*Betula Alba*)—Of which Colclidge says "Most beautiful of forest trees, the lady of the woods." Tall, upright, distinctive white bark. 6-8 feet, \$2.25 each; 8-10 ft., \$2.75 each.

Catalpa

Bungel (*Umbrella Tree*)—These beautiful globe-shaped tops being grafted high on clean straight stems form one of the most valuable trees for landscape designing especially for formal effects. One year head, \$2.00; two year old heads, \$2.50.

Speciosa (*Western Catalpa*)—Rapid grower producing large panicles of fragrant flowers, delicately marked with violet and yellow. 6-8 ft., \$1.50 each; 8-10 ft., \$2.00 each; 10-12 ft., \$2.50 each.

CATALPA (SPECIOSA)

ELMS LINDEN

SILVER MAPLE

Crab

Bechtels Double Flowering—Most beautiful of all the flowering Crabs; hardy, of medium size covered in early spring with large, beautiful double, fragrant flowers, resembling small roses of a delicate pink. Ideal for a small yard. 2-3 ft., \$1.25; 3-4 ft., \$1.75; 4-6 feet, \$2.25 each.

Flowering Cherries

Double Cherry (*Prunus Florepleno*)—A charming small tree with branches completely covered with a mass of large double flowers in May (both Pink and White). 4 to 5 feet \$2.00 each.

Japanese Weeping Flowering Cherry—Famous flowering cherries of Japan. Beautiful specimens, blooming in profuse panicles. 5 ft., Standards \$5.00 each.

Cornus

(Dogwood)

White Flowering Dogwood (*Cornus Florida*)—Flowers white, 3 to 3½ inches in diameter, produced in spring before leaves appear; very abundant, showy and durable. Foliage grayish green, glossy and handsome; in the autumn turning to deep red. Spreading, irregular form, growing 20 to 25 feet high. 3-4 ft., \$2.00 each.

Elm (Ulmus)

American Elm (*Ulmus Americana*)—Tall and stately with a graceful, wide-spreading form vase-like, densely covered with a rich, bright green foliage. 6-8 ft., \$2.00 each; 8-10 ft., \$3.00.

English Elm (*Ulmus Campestris*)—A native of Europe; a noble rapid-growing tree, forming a dense head; a desirable tree for streets, avenues, etc. 6-8 ft., \$2.00 each; 8-10 ft., \$3.00 each.

Moline Elm—This is a new attractive type which is propagated entirely by budding in order that the beauty of the original form may be retained. It was first discovered and propagated by Klehm's Nurseries, from a tree found growing near Moline, Ill. The young tree is very rapid and erect in growth, in shape somewhat like a Lombardy Poplar, with leaves often 6 inches across. The older trees become more spreading with more nearly horizontal branches. 6-8 ft., \$2.50 each; 8-10 ft., \$3.50 each.

New Chinese or Siberian Elm (*Ulmus Pumila*)—This new introduction is a clean fast grower, free from disease and pests. Thoroughly hardy and vigorous under most trying soil and climatic conditions. Its resistance to drought, alkali, and extreme temperature makes it very valuable for our Western conditions. 3-4 ft., \$1.50 each; 4-6 ft., \$2.00; 6-8 ft., \$2.50.

Camperdown Elm (*U. scabra pendula*)—Always top grafted. Limbs grow outward and downward, giving the tree a remarkably picturesque aspect. 2 year Heads, \$4.50 each.

Golden Chain (Laburnum Vulgare)

A rather small quick-growing tree with soft, deep green clover-shaped leaves retaining their color until late in fall. Flowers fragrant, bright yellow, in long, drooping racemes, suggestive of yellow Wistaria borne on a tree. 4 to 6 ft., \$1.75.

Linden

American (*Tilia Americana*)—A stately tree, growing 60 to 80 feet tall, forming a fine, broad round head with large, shining cordate leaves. Valuable for its beautiful white wood. Its flowers appear in yellow drooping clusters intensely fragrant. 6-8 ft., \$3.00 each; 8-10 ft., \$4.00.

European (*Lime Tree*)—Pyramidal shape, foliage similar to American Linden, white flowers in June. 6-8 ft., \$3.25; 8-10 ft., \$4.25 each.

Peach (Double Flowering)

(*Amigdatus Persica*)—Of all the spring flowering trees the Double Flowered Peaches are the most brilliant and beautiful. The entire tree and every branch is simply a mass of blossoms, appearing before the leaves, making an immense bouquet of gorgeous color. Fast growing and very hardy, they should be more planted, but placed in the background as the tree is not especially desirable when the flowers fall, to make plenty of new growth for next season's bloom. **Double White, Double Pink, Double Red.** 3 ft., \$1.50; 4 ft., \$2.00

Hawthorne**(Flowering Thorns)**

Handsome dwarf trees with shiny leaves of attractive shape and color; blooming in profusion late in spring with compact clusters of small, rose-like flowers. These are followed by large red fruits and autumnal colorings.

English Double Flowering White (*Crataegus Oxyacantha* fl. pl.)—The double white form of the fragrant English Hawthorne; flowers in May and June. Color changes to pink before blossoms fall. 4-6 ft., \$2.00 each.

Paul's Double Scarlet (*Crataegus Monogyna Pauli*)—Flowers deep crimson scarlet; very double, followed by large red berries borne freely. This is one of the most attractive small trees for solitary specimens or groups, as showy in fruit as when in bloom. 4-6 ft., \$2.00 each; 6-8 ft., \$3.50.

Horse Chestnut

White Flowering (*Aesculus hippocastanum*)—The handsome European species; has magnificent spikes of white flowers borne in great profusion and sweetly scented. 5-6 ft., \$2.00 each; 6-8 ft., \$3.50 each; 8-10 ft., \$4.50 each.

Locust

Common or Black Locust (*Robinia pseudacacia*)—A native American tree of extremely rapid growth, valuable for timber as well as quite ornamental. The flowers are in long, pendulous racemes, white and very fragrant, appearing in June. 4-6 ft., 50c each; 6-8 ft., 60c each; 8-10 ft., \$1.00 each; 10-12 ft., \$2.00.

Pink-Flowering Locust (*Robinia pseudacacia decaisneana*)—Remarkable for its vigorous growth and fine, pink-colored flowers, which it produces in great abundance. Entirely distinct from *Rose Acacia*. 6-8 ft., \$2.50 each; 8-10 ft., \$3.50.

Honey Locust (*Gleditsia triacanthos*)—A large, vigorous tree, with wide-spreading branches, feathery, fern-like leaves, and a stout armament of thorns. Makes a fine defensive hedge. 4-6 ft., 75c each; 6-8 ft., \$1.00 each; 8-10 ft., \$1.50 each.

Globe Locust—Unusually attractive; forms round beaded tree—without trimming. 2 year heads, \$3.50.

Maples (Acer)

Silver (*Dasycarpum*)—A large tree with wide-spreading branches and drooping branchlets. Very fast grower, makes dense shade and thrives in any soil. 6-8 ft., \$1.00 each; 8-10 ft., \$1.50 each; 10-12 ft., \$2.50 each.

Norway (*A. Platanoides*)—A large handsome tree, of spreading rounded form, with shiny, deep green foliage. Usually very symmetrical. One of the most desirable species for the street, park or lawn. 6-8 ft., \$2.00; 8-10 ft., \$3.50; 10-12 ft., \$4.00 each.

Schwedleri—A red and purple, contrasts brightly with the delicate green of other trees. In mid-summer they are purplish green, in autumn golden yellow. 6-8 ft., each, \$3.50; 8-10 ft., \$4.50 each.

Sugar—Straight, spreading, symmetrical. Rich autumn tints of clear-yellow and scarlet. 6-8 ft., \$3.00 each; 8-10 ft., \$4.00 each.

Sycamore (*A. Pseudo platanus*)—Rapid, upright growth; smooth, ash-gray bark; leaves large, five-lobed, deep green above and glaucous beneath. 6-8 ft., \$2.50 each; 8-10 ft., \$3.00 each; 10-12 ft., \$4.00 each.

Bolleana Poplar

Babylonian Weeping Willow

Mulberry

Mulberry, Russian (*Morus tatarica*)—Rapid growth; round headed, profuse foliage; used to attract birds. 6-8 feet, \$1.50 each; 8-10 ft., \$2.50 each.

Mulberry Tea Weeping (*Morus alba pendula*)—The long, slender, drooping branches of this tree give it a very unusual and much admired appearance. Prized for lawn planting. 2 year heads, \$3.50.

Olive

Russian (*Elaeagnus angustifolia*)—Its foliage is of a remarkable silvery hue, showing up in striking contrast to that of the green of other shrubs or trees. It is admirable for tall backgrounds where unusual color tones are desired. It also is useful for hedges, either trimmed or untrimmed. 5-6 ft., \$1.00 each; 6-8 ft., \$1.50 each.

Plane Oriental

European Sycamore; Oriental Plane (*P. orientalis*)—This splendid tree is almost perfection for street and avenue use. Without training it forms a fine, spreading, well-rounded lead. Almost entirely free from disease or

pests. Leaves are large, dark green and deeply lobed. Bark flakes off from trunk and older limbs. Everything considered, we believe this is one of the very best street trees. 8-10 ft., \$3.50 each; 6-8 ft., \$2.50 each; 4-6 ft., \$1.50 each.

Poplar (Populus)

Bolleana (*P. Bolleana*)—A tall columnar rapid growing, hardy tree. Leaves triangular, the borders serrate, glossy green above and silvery beneath. 4-6 ft., 50c each; 6-8 ft., 75c each; 8-10 ft., \$1.00 each; 10-12 ft., \$1.50 each.

Carolina (*P. deltoides Carolinensis*)—Of rapid growth. Very desirable when quick shade is wanted. 4-6 ft., 35c each; 8-10 ft., 75c each; 10-12 ft., \$1.25 each.

Lombardy (*P. nigra Italica*)—Widely known and esteemed for its decided individuality. Grows to a great height; narrow and columnar. Forms a strong contrast with most other trees, hence of great value in landscape work 10-12 ft., \$1.75 each; 8-10 ft., \$1.25 each; 6-8 ft., 90c.

Flowering Plum

Purple-Leaved (*Prunus Pissardi*)—Handsome form, with rich purple leaves. Covered in early spring with beautiful white flowers, later with wine-red fruits. 3-4 ft., \$1.50; 4-5 ft., \$2.00.

Triloba (Double Flowered Plum)—A charming shrub of vigorous growth. Very early in spring, before its leaves appear, the whole tree is decked in a fleecy cloud of very double light pink blossoms. Its effect on a still leafless landscape is very bright. 3 to 4 ft., \$1.50 each; 4 to 5 ft., \$2.00 each.

Redbud

American Judas (*Cercis Canadensis*)—Striking ornamental trees loaded with a mass of pea-shaped pink blossoms in early spring, before the leaves appear. 3-4 ft., \$1.75; 4-5 ft., \$2.00 each.

Sycamore

See **Plane Oriental**—Do not stock American (*Platanus Occidentalis*).

Tulip Tree

Liriodendron (*tulipifera*)—Tall, pyramidal habit; bluish green, glossy, fiddle-shaped leaves; flowers tulip-like, greenish yellow. 3-4 ft., \$1.50; 4-6 ft., \$2.00 each.

Walnut

Black (*Juglans Nigra*)—The trees become very large, shapely and make excellent lawn trees. They are of relatively quick growth. As nut producers, they are very prolific. 4-6 ft., \$1.50; 6-8 ft., \$2.00 each; 8-10 ft., \$3.50.

Willow

American Black (*Salix nigra*)—Hardy under most trying situations, thrives best where soils are moist and water plentiful. 6-8 ft., 65c; 8-10 ft., 85c; 10-12 ft., \$1.25 each.

Golden (*Salix vitellina aurea*)—Its brilliant colored twigs makes this variety very valuable in landscape. Good for windbreaks. 6-8 ft., 75c; 8-10 ft., \$1.00; 10-12 ft., \$1.50 each.

Pussy Willow (*Salix discolor*)—A large shrub or small tree, very popular for all ornamental purposes because of the attractive catkins formed on the branches in early Spring. 4-6 ft., 75c; 6-8 ft., \$1.25 each.

Babylonian Weeping Willow (*Salix babilonica*)—A tree of stately appearance with long, pendant branches swaying their silvery foliage in every breeze; quick to take hold when transplanted; will give a finish to a lawn not obtained in any other tree. This, too, makes a good screen, and whether planted on moist or dry grounds, thrives with unusual vigor. 8 to 10 ft., \$1.75; 6 to 8 ft., \$1.25.

Evergreen Shrubs and Trees

Both Public and Home gardens should have some of these beautiful specimens to give that bit of color needed to set off the rest of the planting.

Planting season for spring from March 1 to May 15, for fall from about September 15 to November 15, depending on season and locality. We can secure selected specimens in many varieties on which we would be glad to quote prices on receipt of list, stating kinds, sizes and numbers wanted.

All Evergreen Trees will be carefully dug with ball of earth about the roots and tightly sewed up burlap and will stand transportation with little risk of loss. In planting it is not necessary to remove the burlap. Place tree in properly prepared hole, cut burlap in several places, firm earth tightly about ball of roots, water, and mulch.

Box (Buxus—Boxwood)

Ideal for use in tubs at entrances, balconies, terraces and elsewhere around the home. They are for summer decoration and must be moved inside, except in mild climates.

During the Spring months we carry a well selected stock of specimen plants, both in bush form as well as trimmed globe and pyramidal in assorted sizes. White for prices.

Juniper (Juniperus)

Irish—Erect, slender and formal in habit; foliage sage green, very compact; making a splendid column, sometimes 15 to 20 feet high; much used in cemeteries. 18-24 in., \$2.25; 2-3 ft., \$4.00; 3-4 ft., \$6.00 each.

Red Cedar (J. Virginiana)—This is the well known native tree, so much appreciated where the softness in appearance is required in the landscape effect. 1½ to 2 ft., \$2.50; 2-3 ft., \$5.00; 3-4 ft., \$7.00.

Silver Blue Cedar (J. Virginia Glaucula)—The entire young growths of this beautiful variety, are silvery-white which changes as they develop to an attractive bluish green. 2 ft., \$1.00; 3 ft., \$6.00; 4 ft., \$8.00; 5 ft., \$10.00.

Pfitzer Juniper (J. Chinensis Pfitzeriana)—One of the handsomest of the semi-dwarf creeping junipers. Of billowy form and elegant appearance. 1½-2 ft. spread, \$5.00; 2-3 ft. spread, \$7.00.

Waukegan—A highly developed selection from **Sabina Prostrata**; ground-covering, closely compact. The beautiful silvery blue color assumes a rich purple hue with the first autumn frosts. 1½-2 ft., \$6.00; 2-3 feet spread, \$7.50.

Cotoneaster

Simonsi—White. June. Semi evergreen, quite erect. Leaves are dark green and usually adhere late in the season. Showy bright red fruit borne on the slender, erect branches all along the stems. H 6-7, S 5-6. Each, \$1.50.

Acutifolia—Showy stately shrub. With lustrous green foliage, white flowers in June followed by black berries. H 6-7, S 5-6. Each, \$1.25.

Horizontal—Low, flat, spreading, bright glossy green, very attractive. Covered in April with masses of tiny pink flowers and in the fall with minute, brilliant scarlet berries. The foliage also turns scarlet and it is practically deciduous in winter. 18-24 in., \$2.00.

Euonymus

No collection of plants nor landscape effect is quite complete without beautiful plants. Admirably useful and attractive when used in groups, edgings, hedges, corner plantings and in rockeries.

Japanese (E. Japonicus)—Fine, upright shrub of moderate size and rather compact growth. Foliage and bark are clear, dark green.

Silver Variegated (E. Japonicus albo variegatus)—Of strong, erect growth. Branches very light green. Leaves almost white around edges, changing to yellow as season advances.

Silver Blue Cedar

Golden Variegated Euonymus (E. japonicus aureo variegatus)—Branches green; leaves yellow in center, dark green around edges. Color about equally divided. Occasional leaves either all yellow or green.

Prices: Any of the above varieties, balled, 12 to 15 in., \$1.50; 15 to 18 in., \$2.50; 18 to 24 in., \$3.00; 2 to 3 ft., \$3.50; 3 to 4 ft., \$5.00.

Pine (Pinus)

Mugho (Dwarf Pine)—Leaves short, stiff and formal, thickly distributed in tufts over the branches in a crowded way somewhat similar to Austrian, with an equal depth and richness of color; globular form. 12-15 in., \$5.50; 15-18 in., \$7.50.

Pyracantha (Firethorn)

Burning Bush, P. coccinea (Lalandii)—Deservedly popular on account of its clean, upright growth, bearing to great profusion of small flowers in flat corymbs, followed by a mass of orange-red berries in early fall (which remain on the plant until spring) firm green foliage. It is closely allied to the Cotoneasters, but is easily distinguished because of its crenulate leaves and thorny branches. Attains height of 10 feet, but can be trimmed to any lower height desired. 1½-2 ft., \$2.50 each; 2-3 ft., \$3.00 each. 3-4 ft., \$3.50 each.

Mahonia

Aquifolia (Oregon Grape or Holly-leaved Ashberry)—A beautiful evergreen shrub with smooth shining holly leaves; bright yellow flower clusters

in May, and blue berries. The leaf color varies capriciously throughout the year, assuming all shades of green, with flecks of red and bronze. As* sociates well with dwarf and medium shrubbery, of special value in shady locations. 12-18 inches, \$2.00 each; 18-24 inches, \$2.75; 2-3 ft., \$3.50 each.

Spruce

Colorado Blue Spruce (Picea Pungens Glaucula)—A most beautiful variety discovered and disseminated from the Rocky Mountains; it is the rarest blue of any evergreen; very distinct in foliage and growth; fine, compact habit. In great demand as a lawn tree where fine specimens are established proving it the best of all evergreen trees for the lawn. 1½-2 ft., \$5.00 each; 2-3 ft., \$7.50; 3-3½ ft., \$9.50 each.

Colorado Spruce (Picea Pungens)—Similar to above except foliage is light green color 1-2 ft., \$3.50; 2-3 ft., \$5.00; 3-4 ft., \$7.50.

Engelmanni—Makes fine symmetrical specimens. Under side of leaves light blue. 2-3 ft., \$5.50; 3-4 ft., \$8.00.

Norway Spruce (P. excelsa)—A compact, symmetrical tree; the branches assuming a graceful, drooping habit with age. Cones very large. Foliage light green in this climate. Extremely hardy and of rapid growth. The original Christmas tree of northern Europe. 1½-2 ft., \$3.00 each; 2-3 ft., \$4.50; 3-4 ft., \$6.00 each.

Thuja—Arbor-Vitae

Thuja American (American Arbor-Vitae)—Broad at base but retains a pyramidal shape, soft green foliage in Spring and Summer which changes to brown or bronze in Winter. Rapid grower, useful for massing or hedges. 18 in., \$2.50; 2 ft., \$3.50; 3 ft., \$4.50; 4 ft., \$7.50.

Thuja Globosa (Globe Arbor-Vitae)—Forms a dense, low globe; handsome shade of green. Diameter 12-18 in., \$3.00; 18-24 in., \$5.00.

Thuja Pyramidalis Occidentalis (Pyramidal Arbor-Vitae)—Most compact and erect of the entire species, in form almost a counterpart of the Irish Juniper. Foliage a deep green, retaining color. 15-18 in., \$1.25 each; 18-24 in., \$2.50; 2-3 ft., \$5.00; 3-4 ft., \$7.50.

Thuja Orientalis (Oriental Arbor-Vitae)—Comparatively low, broadly pyramidal tree. Color yellowish green, dulling to bronze green in Winter. 15-18 in., \$1.25; 18-24 in., \$2.25; 2-3 ft., \$4.50; 3-4 ft., \$7.00.

Thuja Orientalis Aurea Anra (Berkman's Dwarf Evergolden Arbor Vitae)—The most wanted arborvitae. Very dwarf golden tipped oval shape. Always shapely and beautiful. 12 in., \$2.50; 15 in., \$4.00; 16-18 in., \$5.50; 18-24 in., \$7.50 each.

Aside from the varieties and sizes listed in this catalog, we carry many other Evergreens. Write or where possible please call at our City Sales Yard and make our selections.

Useful Information On Shrubs, Vines and Trees

*Bloom Period and Common Name	Color	Character	Height	Habit
APRIL—				
Flowering Almond	White, Pink	Double	3 to 5 ft.	Spreading
Golden Bell	Yellow	Single	5 to 8 ft.	Spreading
Japan Quince	Red	Single	4 to 5 ft.	Dense
Japanese Barberry		Foliage	2 to 3 ft.	Dense
Spiraea, Thunbergii	White	Double	3 to 6 ft.	Bushy
Exochorda (Pearl Bush)	White	Racemes	6 to 8 ft.	Branching
Prunifolia Spiraea	White	Double	4 to 6 ft.	Bushy
MAY—				
Mock Orange (Syringa)	White	Single	5 to 10 ft.	Upright
Snowball	Yellow, White	Spherical	3 to 8 ft.	Branching
Lilac, White and Purple	White and Purple	Single	4 to 8 ft.	Upright
Spiraea Van Houttei (Bridal Wreath)	White	Double	4 to 6 ft.	Bushy
Flowering Currant	Red or Yellow	Small	3 to 6 ft.	Upright
Siberian Pea Tree	Yellow	Single	8 to 12 ft.	Branching
Flowering Plum	Pink	Double	4 to 7 ft.	Arching
Calycanthus (Sweet Shrub)	Reddish Brown	Single	5 to 6 ft.	Branching
Cornus (Dogwoods)	Creamy White	Clusters	5 to 8 ft.	Branching
Globe Flower (Kerria Japonica)	Yellow	Single	4 to 5 ft.	Branching
JUNE—				
Weigelia	Red, White, Pink	Single	3 to 6 ft.	Branching
Lilac	White, Purple, Red	Large	4 to 8 ft.	Shrubby
Golden Elder	Yellow, Orange	Flat	4 to 8 ft.	Branching
Bush Honeysuckle	Pink, White, Red	Clusters	3 to 5 ft.	Branching
Deutzia	White, Pink	Clusters	2 to 3 ft.	Branching
Ninebark (Guelder Rose—or Spiraea Opulifolia Aurea)	White	Clusters	8 to 10 ft.	Spreading
JULY—				
Butterfly Bush (Buddleia)	Purplish Lilac	Single	4 to 8 ft.	Arching
Weigelia	Red, White, Pink	Single	3 to 6 ft.	Spreading
Snowberry	Pink Flower	White berries	2 to 5 ft.	Spreading
Coralberry	Pink Flower	Red berries	2 to 5 ft.	Spreading
Tamarix-Amurensis	Pink	Fringe	6 to 8 ft.	Spreading
Gold Flower (Hypericum)	Golden Yellow	Clusters	2 to 3 ft.	Bushy
Spiraea, Anthony Waterer	Rose Red	Flat clusters	2 to 3 ft.	Bushy
Spiraea Froebelii	Deep Rose	Flat clusters	2 to 3 ft.	Bushy
AUGUST—				
Tamarix Amurensis	Pink	Fringe	6 to 8 ft.	Spreading
Althea (Rose of Sharon)	White, Red, Purple	Single	4 to 6 ft.	Spreading
Hydrangea	White	Large panicle	4 to 8 ft.	Spreading
SEPTEMBER—				
High Bush Cranberry		Red berries	8 to 10 ft.	Dense
Privet		Foliage and berries	5 to 10 ft.	Spreading

*The bloom period is simply approximated for the Mountain States and the month named when flowers first appear. Many varieties continue in bloom for periods in the months following.

Shrubs Having Attractive Berries

Barberry	Pyracantha
Coral Berry	Japan Quince
Elders	Snowberries
Bush Honeysuckles	Cranberry High Bush
Cotoneaster	Rhodotypos
Mahonia	

Shrubs for Wet Places

Barberry	Hypericum
Deutzias	Privet
Dogwoods	Snowberry
Coral Berry	Spiraea Opulifolia Aurea
Weigelia	Mahonia Aquifolia

Shrubs for Shady Places

Dogwoods	Elders	Tamarix
----------	--------	---------

Shrubs for Hedges

Altheas	Japan Quince
Buddleia	Lilacs
Bush Honeysuckle	Privet
Hydrangea Grandiflora	Spiraea Van Houttei
Japan Barberry	Rosa Rugosa

Classification of Ornamental Trees

Trees Suitable for Street and Avenue Planting

Allanthurus	Mountain Ash
Ash—Green, Blue	Maple—Norway, Silver,
Box Elder	Sugar, Sycamore,
Catalpa—Speciosa	Schwedlerii.
Elm—Moline, English,	Oriental Plane
Chinese	Poplar—Carolina, Bolleana
Linden—American, European	Sycamore—American
Horse Chestnut	

Trees with Colored Foliage

Maple Schwedlerii—(Purplish foliage.)
Prunes Pissardi—(Leaves purple.)
Poplar Bolleana—Silvery underneath leaves.

Flowering Trees

Allanthurus	Flowering Cherries
Horse Chestnut	Linden
Flowering Crabs	Catalpa Speciosa
Flowering Plums	Laburnum
Locust	Flowering Peach
Trees for Lawn or Yard	
Crab Double Flowering	Weeping Ash
Catalpa Bungei	Mountain Ash
Cut-Leaved Birch	Mulberry—Teas Weeping
Camperdown Weeping Elm	Willow Weeping
Evergreen (See list)	Flowering Cherries
	Flowering Peach

Evergreen Trees

Arbor Vitae	Pines	Cotoneaster
Box Woods	Spruces	Mahonia
Junipers	Euonymus	Pyracantha

Hardy Climbers for Special Situations

Climbers for Shady Places— Celastrus Bittersweet, Ap- ios, Tuberosa, Honey- suckle, English Ivy, Eu- onymous, Japanese.	Climbers, for Hot Sunny Situations and Southern Aspect— Bignonia Rad- icans, Clematis, Panchulata, Honeysuckle, Roses, Kud- zu.	Climbers for North Aspects — Ampelopsis Veitchii (Boston Ivy), English Ivy, Euonymus.	Climbers for Eastern or Western Aspects— Amp- elosis Engelmanni, Cinna- mon Vine, Matrimony Vine, Climbing Roses, Clematis, Wisteria.
--	---	--	--

Hardy Ornamental Vines and Creepers

Your home, outbuildings, fences and trunks of old trees can be made very attractive by the use of hardy vines. Such permanent improvements add greatly to the value of your property, and the value increases from year to year. We furnish strong two-year-old field plants at prices given below.

Ampelopsids

Engelmanii (New Virginia Creeper)—A new variety of American Ivy which has long been desired. It has shorter joints and very much smaller and thicker foliage. It also is better equipped with tendrils, by which it will climb walls of stone or brick as closely as the Boston Ivy. Will grow in almost any soil and withstand drought and heat well. Each 60c; ten for \$3.50.

Quinquifolia (Virginia Creeper; American Ivy)—A strong, rapid grower; foliage large, dark green, in autumn, bronze and crimson. Valuable for covering back porches, outbuildings, arbors, etc. Perfectly hardy everywhere, and will grow in any soil and situation. Each, 60c; ten for \$4.50.

Veitchii (Boston or Japan Ivy)—One of the finest climbers for covering walls, as it clings firmly to the smoothest surface, covering it evenly with overlapping leaves, which form a perfect mass of foliage. The color is fresh deep green in summer, changing to bright shades of crimson and yellow in autumn. Each, 75c; ten, \$6.50.

Aristolochia Sipho

Dutchman's Pipe Vine—A vigorous and rapid-growing climber, bearing brownish colored flowers which resemble a pipe in shape. This plant is, however, more admired for its light green leaves, which retain their color from early spring until the fall. 75c each; \$6.50 per ten.

Bignonia Radicans

Scarlet Trumpet Vine—For covering unsightly places, stumps, rockwork or planting in crevices in ledges, the Bignonias will be found very useful. The flowers are large, attractive and showy, and borne profusely when the plant attains a fair size. 75c each; \$6.50 per ten.

Celastrus Scandens

Bittersweet, or Waxwork—One of our native climbing plants of rapid growth, succeeding in almost any situation, sun or shade, with attractive light green foliage and yellow flowers during June, followed in the autumn by bright orange fruit which usually remains on the plant throughout the winter. 75c each; \$6.50 per ten.

Euonymus

Radicans—This trailing form of Euonymus is particularly desirable for its dense deep green evergreen foliage. It is extremely hardy and useful for covering low foundation walls or may be clipped the same as boxwood for an edging plant. Each, 75c; ten for \$7.00.

Radicans vegeta (Evergreen Bittersweet)—A strong-growing variety with larger leaves than the preceding, producing bright orange-red berries which remain on the plant the greater part of the winter. As a hardy evergreen plant for wall covering, this variety is unequaled. Each, 75c; ten for \$7.00.

Hedera (Helix)

English Ivy—The well-known variety with small leaves which has proved perfectly hardy. Largely used covering walls, loose rocks, fences, or trellises. 75c each; \$6.50 per ten.

Clematis Jackmanii

Clematis

The Clematis are exceptionally fine strong 2-year-old plants. We have reduced the number of varieties to such sorts as, from experience, we know to succeed best in our climate. Many failures are the result of too shallow planting. The crown of the roots should be set at least 3 inches below the surface of the soil.

Paniculata (Japanese Virgin's Bower)—This handsome hardy climber is one of the choicest and most satisfactory climbing flowering plants we know. The plant is of strong, rapid growth, with small, dense, cheerful green foliage, giving it a grace and elegance possessed by no other hardy climber. The flowers appear in the greatest profusion during August, and continue until late in the fall, are white in color and most deliciously fragrant. Each, 75c; ten \$6.50.

Jackmanii—The best known and most valued variety of this popular family. A perfect mass of bloom when in full flower. Color, dark, rich, royal purple. Each \$1; ten, \$8.50.

Henryi—Pure white; large and remarkably handsome. Strong, field-grown plants. Each, \$1.00; ten for \$8.50.

Madam Baron Villa—Splendid violet red, well-formed flowers, fine variety. Each, \$1.00; ten for \$8.50.

Wistaria

Sinensis (Chinese Wistaria)—A most beautiful climber of rapid growth. When well established it makes a growth of 15 to 20 feet in a season. Flowers pale blue. \$1.00 each; \$8.50 per ten.

Sinensis, White—A white-flowering form of the above. \$1.00 each; \$8.50 per ten.

Boston Ivy

Honeysuckle

Halliana (Hall's Japan Honeysuckle)—A strong, vigorous, almost evergreen sort; white flowers changing to yellow; very fragrant; flowering from July to December; holds its leaves nearly all winter. Extra-selected plants. Each, 75c; ten for \$6.50.

Scarlet Trumpet Honeysuckle—This and its varieties are the handsomest in cultivation. It is a strong, rapid grower and produces scarlet, inodorous flowers. Each, 75c; ten, \$6.50.

Henryi—A recent introduction from China, where it has been found at an altitude of 6,000 feet; with almost ever-green foliage and distinct flowers of a peculiar bronzy-red color, produced in graceful panicles early summer. Each, 75c; ten for \$6.50.

Lycium (Chinense)

Matrimony Vine—Excellent for trellises or hanks. The small purple flowers in Summer are followed by scarlet berries which cling long through the winter. Makes a vigorous growth; if desired, it may be trained as a shrub. 75c each; \$6.50 per ten.

Polygonum Auberti (Silver Lace Vine)

One of the most desirable flowering climbers. The plant is of strong, vigorous growth, attaining the height of 25 feet or more, and producing through the summer and fall great foamy sprays of white flowers. Strong plants. \$1.00 each; \$9.50 per ten.

Clematis Paniculata

Althea (Hib Syriacus)

Golden Bell s (Forsythia Fortunei)

Hydrangea (Paniculata Grandiflora)

HARDY ORNAMENTAL AND FLOWERING SHRUBS

There is nothing which so quickly, and for so little cost, add so much to the beauty, cheerfulness and home-like appearance of a place as an assortment of hardy shrubs. They are permanent improvements which increase in size, value and beauty, year after year. Our price is for strong, healthy, field grown shrubs, two to four feet high, depending on the variety, some making higher growth than others.

For your convenience we have indicated in each description the height, spread, and blooming period. For example, "H 3-4, S 3-4, June," may be interpreted "height 3 to 4 feet, spread 3 to 4 feet, flowers in June." It is understood that the sizes given are only approximate, and will vary considerably according to soils and climate.

Shrubs marked (*) can be grown in partial shade, but they will also thrive in full exposure to the sun.

Flowering Almond

Amygdalus — A most beautiful shrub, is one of the loveliest. The flowers are borne on its slender branches during May, and are very fragrant. H 3-5, S 4. **Double pink.** Each, \$1.00. **Double white.** Each, \$1.00.

*Althea (Rose of Sharon)

The Altheas are among the most valuable of our tall, hardy shrubs on account of their late season of blooming, which is from August to October, a period when few shrubs are in flower. They are extensively used as hedge plants, for which they are admirably adapted. We offer in four distinct colors. **Red, Pink, White, and Purple.** H 10-12, S 6-8.

Amorpha

False Indigo (A. fruticosa) — Grows in large spreading bush form, with bright green leaves in pinnate arrangement; flowers deep violet blue, in June H 8-10; S 8-10.

Aralia

Pentaphylla — Long, slender gracefully arching branches and bright green, compound foliage. Makes a small tree in time, especially attractive on rocky slopes. Greenish white flowers in long umbels. H 12-15, S 8-10.

*BERBERIS (Barberry)

Japanese Barberry (B. Thunbergii) — Beautiful shrub for hedges, border, screens or general purposes. Very compact and needs no attention with the shears. Foliage a rich green, changing in the autumn to brilliant scarlet and gold. Following the white flowers are scarlet oval berries which are borne into the winter. Two-year, 18-inch shrubs, 55c each; ten for \$5.00; \$40.00 per 100. H 3-4, S 3-4.

***Box Barberry (Thunbergii Minor)** — A very dwarf form of the Japanese Barberry. An admirable plant for low hedges, borders, edgings and foreground planting.

The shrubs offered in this list are strong two and three-year-old Field Grown, 2 to 4 feet, depending on variety. Unless otherwise specified, price 85c each; \$7.50 per 100. Extra size shrubs can be supplied at an additional charge of 15c each to the prices quoted herein.

New Red Leaved Barberry

(*B. Thunbergii Atropurpurea*) — In habit of growth and in fruiting it is identical with the popular Japanese Barberry, but its foliage as soon as it develops in early spring assumes a rich bronzy-red color, this coloring becomes more intense and richer during the hot summer months. Late in the autumn it takes on the varied brilliant high colors of the ordinary Japanese Barberry followed by the same brilliant scarlet berries which remain on the plant the entire winter. Each, \$1.00; 10, \$9.50.

Buddleia Variabilis Veitchiana

Butterfly Shrub, Summer Lilac
One of the most desirable summer flowering shrubs, beginning to bloom in July, it continues until cut by severe frost. The flowers are of a pleasant shade of violet mauve, and are borne in dense cylindrical spikes from 12 to 15 inches in length by 3 inches in diameter; it succeeds everywhere and flowers freely the first season planted. H 5-6, S 4-5.

Caragana

Siberian Pea Tree (C. Siberica) — Compound leaves bright green; numerous small clusters of yellow flowers. H 8-10, S 8, May and June.

*Dogwood (Cornus)

Red Siberian (C. Sibirica) — Produces cream colored flowers in June light blue fruits, and bright red twigs and branches. H 6-8, S 6.

Golden Twig (C. Stolonifera, Lutea) — Yellow stemmed. Clusters of white flowers, stems and branches are yellow

Calycanthus

(Sweet Shrub) (*C. floridus*) — An old-fashioned shrub known to everyone. Its flowers are deep reddish-brown, sweet-scented; deep green, glossy foliage, free from disease. H 5-6, S 4-5.

Cydonia

Japan Quince (Japonica) — A single shrub on the lawn is very attractive; brilliant crimson flowers, among the first in the spring. H 4-5, S 5.

Currant (Ribes)

Aureum (Missouri Golden Currant) — Grows to a height of from 4 to 7 feet. Flowers fragrant and useful for cut-flowers. Cultivated for its many pretty, spicy, sweet-scented, bright yellow flowers in May, and its clean, attractive foliage and bright autumnal tints. H 4-5, S 5.

Deutzia

Hardihood, fine habit, luxuriant foliage and profusion of attractive flowers render this among the most beautiful and most popular of flowering shrubs. Flowers in June and through July and August.

Crenata (Rosea Plena) — Double light pink; very desirable tall shrub. H 6-8, S 6.

Pride of Rochester — Fine, tall growing double white flowering variety. H 6-8, S 5, June.

Exochorda

Pearl Bush — Vigorous grower; dazzling white flowers in numerous terminal racemes. A narrow, upright shrub which prefers a moist, fertile soil. H 6-8, S 4, May.

Euonymus

Americana (Strawberry Tree) — American Burning Bush. Very showy in autumn when loaded with scarlet seed pods, from which orange-colored berries hang on slender threads. H 8-10, S 6.

Forsythia (Golden Bell)

Fortunei — Strong, erect habit; bright golden-yellow flowers in early spring. H 6-8, S 6 April.

Suspensa (Weeping Golden Bell) — Tall willowy growth, branches gracefully arching, covered with golden-yellow bells. H 6 April.

Deutzia Gracilis

Fringe Tree

Purple (Smoke Tree). *Rhus Cotinus*.—A conspicuous spreading shrub or small tree with large clusterly round leaves; overhung in midsummer by mist-like clouds of tiny flowers. These billowing panicles are a light lavender when fresh, very persistent, and give the impression of smoke at a distance. H 8-10, S 8. Each, \$1.50.

White. *Chionanthus Virginica*.—A very showy shrub, growing to large size; with large leathery, shiny leaves, and lace-like white flowers borne in slender drooping panicles. H 8-10, S 8. Each \$1.50.

Honeysuckle Bush (Lonicera)

The upright Honeysuckle have bright and pretty fragrant flowers, followed by showy berries that last through the fall. Make very desirable and attractive shrubs.

Tartarian (*Lonicera Tatarica*).—Most popular of the bush varieties. Foliage dark glossy green, blooms in June. H 8-10, S 6-8. **Red, Pink, White.**

Fragrantissima, Winter Honeysuckle—Small, deliciously fragrant, white flowers tinged with yellow in the early Spring before the leaves appear. Holds its green foliage until midwinter. H 6, S 4-5, April.

Morrowi.—A handsome Japanese variety with white flowers during May, but especially valuable for its bright and red fruit during the summer and autumn months. H 6-8, S 5-6.

***Hydrangea**

Aborescens Grandiflora (Hills of Snow or Snowball Hydrangea).—Snow white blossoms of largest size; flowering from early June until late July. H 3, S 3. Each, \$1.00; ten, \$8.50.

Paniculata Grandiflora.—Unsurpassed for lawn, hedge or cemetery planting; hardy in all localities, needs no protection in winter; blooms the first and every season in July and August and continues in bloom for two or three months; pure white to pink, and finally to a beautiful rich coppery red. H 5-6, S 5. Each, \$1.00; ten for \$8.50.

***Hypericum**

Prolificum.—Shrubby St. John's Wort. Bright yellow flowers are borne in branching terminal clusters. Narrow, lustrous dark green leaves cover the numerous compact branches. H 2-3, S 2-3 July.

***Ligustrum (Privet)**

Amurensis.—Extremely hardy; upright grower. Foliage glossy green, holds color until late. Each 50c; ten for \$4.25.

Vulgaris (English).—Leaves small dark green. White flowers in June, followed by black, shiny berries. Each, 50c; ten for \$4.25.

The shrubs offered in this list are strong two and three-year-old Field Grown, 2 to 4 feet in height depending on variety. Unless otherwise specified. Prices, 85c each; \$7.50 per ten; \$65.00 per 100. Extra size shrubs can be supplied at an additional charge of 15c each to the prices quoted herein.

Kerria (Corchorus)

One of the most graceful and beautiful of the lower-growing shrubs for the front of a shrubbery border, or in a mixed planting of low shrubs around porches.

Japonica (Flore Plena).—Attractive golden yellow double flowers are borne continuously from June to October. H 4-5, S 3. Each, \$1.00.

Philadelphus (Mock Orange)

This old-fashioned sweet-scented shrub has long been a close rival of the lilac in popularity.

Coronarius (Garland Mock Orange).—This is a popular tall variety, refined and beautiful; large white flowers. H 6-8, S 4-6.

Grandiflorus (Large-flowered Syringa).—A very vigorous upright grower, attaining at times a height of 20 feet. Slender branches with an abundance of pure white, slightly fragrant flowers in June. H 8-10, S 8.

Virginialis (Mock Orange).—One of the most beautiful new varieties. A vigorous, tall grower, with very large, double-crested flowers, with round petals. Pure white, sweetly scented clusters of blossoms.

Kerria Japonica

Rhodotypos

Kerrioides (White Kerria).—A distinct plant and very attractive, with bright green leaves, and pure white flowers in late Spring. Later come black berries that hang on all Winter. Coming a little later than most of the early Spring flowers, makes it especially valuable. H 4-5, S 3-4.

Rhus (Sumac)

Copallina (Black or Shining Sumac).—A shrub or small tree, at times growing to a height of 20 feet, with shiny dark green leaves which turn a rich crimson in the fall. H 4-6, S 5.

Typhina (Saghorn Sumac).—One of the most brilliant plants in Autumn, when the green foliage turns to red, and the showy red fruit is borne high above surrounding shrubs. H 10-12, S 6.

Typhina laciniata (Shredded Sumac).—The branches are densely covered with velvety hairy-like growth resembling the developing Elks Horn. Flowers in white panicles. Deeply serrated leaves whose deep crimson color and persistent crimson fruit makes it attractive for background. July H 10-12, S 6-8.

Robinia

Hispidia (Rose acacia).—This beautiful shrub is much appreciated because of the abundance of its large, pink, pea-like flowers. H 4-5, S 5. Each, \$1.00.

Spireas

Of easy culture and rapid growth, and amply repay the grower in an abundance of beautiful flowers. Will grow in almost any moderately moist soil. As single specimens or in groups on the lawn they are unsurpassed.

Anthony Waterer.—Dwarf, bushy, of spreading type, with large corymbs brilliantly colored rosy crimson. Very free flowering at its best in late summer. This is practically the best showy red flowered shrub sufficiently dwarf to be used in foundation plantings or the low front row of shrub groups. H 2-3, S 3.

Arguta.—One of the finest of early Spring blooming shrubs; of light, open habit of growth, with small, deep green foliage; of minute, purest white flowers. Early May. H 3, S 3.

Billards Spirea (*S. Billardi*).—Upright grower, with pink flowers in spikes or plumes 5-6 inches long in midsummer. H 6, S 6.

Callosa alba. (White Japanese Spirea).—Similar to Anthony Waterer in habit and growth, but flowers are white.

Froebeli (Froebel Spirea).—The bluish green leaves are purple when young. Deep rosy blooms are borne in abundance in the middle of Summer, and over a long period. H 2-4, S 4.

Douglasi (Douglas Spirea).—Deep pink spikes of flowers in July and August, a delightful contrast against the white downy leaves. H 5-6, S 5.

Opulifolia Aurea (Virginia Guelder Rose).—Medium growth, golden-tinted foliage, large white flowers in June.

Prunifolia (Double Bridal Wreath).—One of the best; a beautiful shrub medium size, double white flowers in May. H 6-8, S 6.

Thunbergii.—A graceful bush, beautiful at all seasons, with innumerable small white flowers. The tiny leaves turn to a brilliant orange-scarlet in the autumn.

Van Houtte (Bridal Wreath).—This is the most satisfactory shrub in cultivation. It is the best variety of Spireas. The bush is round and graceful with long, thin, arching branches. The white flowers are in clusters, and are so numerous that when in full bloom the bush resembles a snowdrift. H 6-8, S 6. May and June.

Philadelphus Coronaris

Lilac (Syringa)

Weigella Rosea

Snowball

HARDY SHRUBS—Continued**Rosa Rugosa (Rugosa Roses)**

They are very hardy and are chiefly valuable for their foliage and highly colored "hips" which follow the bloom. Show to good advantage in groups and hedges.

Rubra—4 to 5 feet high, foliage large, beautifully crinkled, color dark green. Flowers single, rosy crimson, orange-scarlet fruits.

Alba—Foliage and habits, like "Rubra," flowers pure white, followed by orange-colored fruits.

New Century—Double-flowering pink-rose. Excellent in shrub planting.

***Symphoricarpus**

Small shrubs much used in shaded places and in open masses. Grow in almost any soil; very ornamental when covered with berries.

Racemosus (Snowberry) (B) — A graceful shrub, with slender branches. Flowers white or pinkish, in loose racemes, in summer. H 4-5, S 4.

Vulgaris (Coral-Berry or Indian Currant) (B)—A grand shrub, producing a wealth of red or purplish berries which remain on the branches all winter. Leaves ovate, bright green. H 4, S 3-4.

Sambucus

Canadensis Aurea (Golden Leaved Elder)—The best of all the colored leaved shrubs. A plant of this bush in a bed, or a border on the lawn is a conspicuous feature, the foliage being as yellow as gold. H 6-8, S 5.

Syringa, or Lilac

Vulgaris (Common)—A tall growing shrub (8 to 15 feet) having large clusters of fragrant purple flowers in the Spring.

Vulgaris Alba (Common White Lilac)—Similar in growth to purple variety.

Persica (Persian Lilac) — Habit more open and branches more slender and drooping than the Common Lilac. Flowers light purple. Grows 6 to 10 feet. 2 to 3 feet, each, 85c; 3 to 4 feet, each, \$1.00.

P.-W.'s New French—Magnificent clusters of single, rosy-purple flowers. 2 to 3 feet, each, \$1.50. (See page 17 for cut).

S. Villosa (Japan Lilac)—Large branching panicles of flowers, a pink lilac tint. Late-flowering. Bushes are stockier, shorter, of slower growth and more tree-like than other types. In assortment: 2 to 3 feet—\$1.00 each; \$9.50 for ten.

French Tree Lilacs—We have the tree form of these wonderful shrubs in white, saffron rose and violet blue. Size 2-3 ft., \$1.75 each.

Tamarix

Amurensis—Strong, slender, tall-growing shrub of irregular habit, with feathery foliage and small, delicate flowers, borne profusely on gracefully-bending branches. The pink flowers are very attractive during May. H 8-10, S 6.

Gallica (French Tamarix)—The flowers are pinkish; blooms from July to August. H 8-10, S 6.

Weigelas

Eva Rathke—Considered the finest Weigela in cultivation, blooming continuously throughout the summer and autumn. The flowers are a rich rubycarmine. 4-5, S 5. Each, \$1.00.

Candidi—White flowering, flowering throughout the summer. H 6-8, S 8.

Rosea—A beautiful shrub with rose colored flowers. H 5-6, S 5.

Viburnum

Nannyberry (V. Lentago)—Beautiful wrinkled, Lantana-like leaves; white flowers in May and June. Fruits color unequally from bluish crimson to black. H 12-15, S 10-12.

Plicatum (Japan Snowball)—One of the choice hardy shrubs, with healthy dark green foliage. The perfect balls of pure white flowers are borne in great profusion in May. \$1.00 each. H 6-8, S 8.

***Opulus** (High-Bush Cranberry)—The white flowers in June are followed in autumn by bright scarlet berries, which are very attractive until late in winter. H 10-12, S 10. Each, \$1.00.

Opulus Sterilis (Common Snowball)—This bush, so widely known and loved, is one of the most popular of spring blooming shrubs. Its flower clusters are ball like, pure white and produce no fruit or seeds. H 8-10, S 10. Each, \$1.00.

Price—Any of above, except where otherwise noted, each 85c; ten for \$7.50; \$65.00 per 100. For strong two and three-year-old shrubs. Extra size shrubs can be supplied at an additional charge of 15c each to the prices quoted herein.

Hedges, Screens and Windbreaks

On varieties not detailed we can furnish special sizes, and shall be glad to quote quantity prices. Under this heading we include the Poplar, Willows, Locusts, Western Catalpa, Thorns, Russian Mulberry, Russian Olive, Spiraea, Spruces and Arbor Vitae. Correspondence solicited.

The deciduous shrubs most popular for hedges we list below.

Althea (Rose and Sharon) (A) Mixed Colors—Special size 18-24 in., \$2.50 per ten; \$20.00 per 100.

Hardy Privet (Ligustrum)—To get best results, plants should be set 1 foot apart in double rows in zigzag

fashion, so that the plants are diagonally opposite each other. This practically places them 6 inches apart which is desirable to get quick, dense growth. May be planted from March to May, or from October to frost. 18-24 inch, ten for \$1.00; 50 for \$4.50; \$8.00 per 100; 2-3 feet, ten for \$1.25; 50 for \$5.50; \$10.00 per 100.

Berberis Thunbergii (Japan Barberry)—Special size, 1 to 1½ ft., packed in bundles of 10 or 25 at \$4.00 for 10; \$7.50 for 25; \$25.00 for 100.

Rosa Rugosa, Rubra—Special 1-year size, \$4.50 per 10; \$40.00 per 100.

Rosa Rugosa, Alba—\$4.50 per 10; \$40.00 per 100.

P.-W.'s SPECIAL PORCH PLANTING COLLECTION

ONLY

\$750

(Regular Price \$10.50)

The same high grade shrubs are used in this collection offer as in our general list. There are enough to make a beautiful planting around the porch or home entrance. See front cover illustration to get an idea of the beauty when fully developed.

THIS COLLECTION CONTAINS

2 Spiraea Van Houttei	6 Barberry	1 Coral Berry
2 Spiraea Anthony W.	1 Deutzia	1 Japan Quince
1 Bush Honeysuckle	1 Forsythia	1 Weigella Pink

Our ridiculously low price on this collection of shrubs, all charges prepaid, is

Philadelphus Grandiflorus—Large Flowering Mock Orange. See page 15.

Forsythia—Golden Bell. See page 14 for description.

Bush Honeysuckle, Pink. See page 15 for description.

Big Seven Shrub Collection

This offer includes one each of the seven charming shrubs illustrated on this page. All charges prepaid to your express or post office for **\$5.50**

(Regular Value, \$6.60).

Landscaping Advice

This service is cheerfully rendered to all our customers desiring it.

A competent Landscape Architect, with wide practical experience, is in charge and the same careful attention will be given the smallest home grounds as is accorded to the largest estate.

A postal card signifying your interest will put you in immediate touch with this valuable service.

Golden Elder. See page 15 for description.

P-W's New French Lilac.

See page 16 for description and price. It has a wonderful combination of exquisite purple colorings and sweet fragrance.

Spirea Anthony Waterer. See page 15.

Weigela Rosea. See page 16.

Herman Neuhoff
Each, \$1.00

Maud
Cumming
Each, \$1.50

See page 19 for
descriptions of all
Roses on this page.

Florence
L. Izzard
Each, \$1.25

P-W's Novelty
Quintette Rose
Offer

One each of the new fine
Roses on this page, \$5.50
prepaid, for
(Regular Value, \$6.50).

New Golden Pernet. Each, \$1.50

Mrs. F. R. Pierson
Each, \$1.25

Fig. 1—Proper Depth to Plant

Fig. 2—Properly hilled up "after planting"

Fig. 3—Winter protection in cold regions.

P.-W.'s GLORIOUS ROSES

SOME THINGS TO OBSERVE FOR SUCCESS WITH ROSES

Unpacking—Should plants, when received, have a withered appearance, caused by an unusual delay in transit (which seldom occurs), soak them in water for an hour or more so as to restore their vitality.

How to Plant—The rose delights in an open, airy situation; all types are partial to clay loam, but will succeed in any ordinary soil if enriched with well rotted barnyard manure. Dig up the soil thoroughly to a depth of twelve to fifteen inches. Dig a hole sufficiently large to accommodate the root, and pour a half pail of water into the hole; in filling, shake the plant lightly so that the soil may fall evenly all around the roots; this avoids cavities. Firm the soil well around the plant in order that it may be solid. Be sure that the buds or grafts, that is where the lower branches begin, are at least 2 inches below the surface of the soil. Bush Roses can be set 1½ feet apart, climbing varieties from 4 to 6 feet apart, and standard Roses 3 or more feet apart.

To prevent the top branches from shriveling up before the root system has been developed, the earth should be filled up as shown in Fig. 2 above. The branches still exposed should be cut down to the mound surface. Be sure to keep the ground moist after planting. In about three weeks time the mound of earth may be gradually leveled down to the normal surface as shown in Fig. 1. Cultivate freely throughout the summer and apply a light top dressing of bone-meal, "Vigoro," or Whizz Fertilizer (see page 31) at least once a month throughout the growing season.

Pruning—This operation is best performed during the dormant season. Most roses do better if moderately pruned. We usually remove from one-third to two-thirds of the past year's growth, and all weak and decayed wood should be entirely cut out. As a rule the more vigorous the variety the more it should be pruned. Besides spring pruning, many of the Hybrid Perpetuals required to be pruned as soon as their first blossom is over, in order to grow new wood for later blooming. It is always the new growth which gives flowers. Most people are apt to prune too sparingly, which retards rather than enhances the free-blooming of their plants.

Spraying in Roses—See pages 28-29 on Insecticides.

Time for Planting—In this intermediate region, the best time for planting is in the spring, immediately after the frosts are out of the ground, and as soon as the ground can be worked nicely.

Winter Protection—We have found that the most satisfactory protection is to draw up a mound of soil from 8 to ten inches high around the base of the plants, then covering the entire beds after the ground begins to freeze with any loose material, such as strawy manure, leaves, etc. (See above cut, Fig. 3).

P.-W.'s QUINTETTE NOVELTY ROSE COLLECTION.

(See Color Plate on Preceding Page)

Here you have five glorious new rose creations, representing the very last word in "up to the minute" varieties. Color plates and words are wholly inadequate, they must be seen in real life, for one to begin to realize or appreciate their exquisite beauty and delightful fragrance.

Those who wish a more extensive collection can select with perfect confidence any variety in our collection of Everblooming Roses listed on pages 20, 21 and 22. There is not one individual sort which we cannot endorse as possessing superior merit, all having been critically selected.

Florence L. Izzard. H.T. Foliage mildew-proof and glossy. Awarded the Gold Medal of the National Rose Society. This magnificent Rose is a rich golden-yellow, a strong, healthy and vigorous grower, immense bloomer, bearing flowers and buds early and late. The flowers are very deep, rich and full, excellent substance, very sweet. Surely one of the very best and most beautiful yellow Roses for general planting ever introduced. Remarkably hardy, both as to heat and cold, standing the winters here uninjured in open ground without protection, and blooming nicely all through the hottest part of the summer. Each, \$1.25. (See page 18).

Herman Neuhoﬀ. H.T. Flower velvety dark red shaded with black, large, well formed, produced on long and stiff stems; strongly and deliciously perfumed. We have no red Rose that is better for general purposes, or that gives as many perfect-shaped flowers on nice, long stems. The color is exceedingly attractive. The plant is of vigorous growth, and very free-flowering; a constant bloomer. Fine for summer bedding or pot culture. Each \$1.00. (See page 18).

P.-W.'s POLYANTHA OR BABY ROSES

A class of dwarf habit all through summer and fall for bedding or as edgings for borders they are very beautiful. They are useful either for pot culture or bedding purposes or for hedge effects.

Baby Dorothy.—A pure pink with all quality of the Crimson Baby Rambler.

Erna Teschendorf.—A deep crimson flushed with carmine.

Mrs. F. R. Pierson. H.T. Color fine example of example of scarlet crimson. Sport of Premier. Bud large, pointed; flower to medium, double, full, high centered; bright carmine; borne singly on strong stems of medium length; very fragrant. Foliage abundant, large, leathery green, disease-resistant. Vigorous; profuse bloomer. (See page 18). Each, \$1.25.

New Golden Pernet. A most vigorous grower of erect branching habit, beautiful brilliant green foliage, long pointed buds of exquisite shape, carried on long, stiff stems. Very large, full flowers with elongated deep petals; a beautifully formed bloom. The color is rich, a yellow cadmium toning to sunflower yellow. A splendid yard and garden type, blooming profusely and continuously throughout the season. (See page 18). Each, \$1.50.

Maud Cummings. (Per) A delightful combination of colors, peach shaded coral-pink, veined orange, with base of petals deep orange, large and full, retaining the color well. Growth strong and bushy, with deep bronzy-green foliage, very fine and free from mildew. For bedding and massing this Rose is unsurpassed for its effective coloring. (See page 18). Each, \$1.50.

Madame Cecil Brunner.—Color salmon-rose, the most beautiful and lovely of the miniature roses; very fragrant. **Lafayette.**—Bright red; large, semi-double flowers; as "Paul's Scarlet," good keeper. Very free flowering.

Price on any of above—Each, 75c; Ten for \$6.75. All charges prepaid

P.-W.'s Ever Blooming Rose Collection

The varieties selected in this list bloom freely and without interruption from the first year; stand severe winters with only ordinary protection. We have taken exceptional pains in selecting out of the hundreds now in cultivation just those varieties which we judge to be truly worth while. Whether old stand-bys or brand new novelties the same rule has been followed to choose only those that stand out as having exceptional merit.

This list is the pick of both old and new.—The leading Everblooming Garden Roses to Date. Hybrid Tea are marked (H. T.), Hybrid Perpetual (H. P.) and Tea Roses (T.) Unless otherwise noted, price of any on this page: 75c each, \$6.75 per ten, charges prepaid, strong, healthy 2-year-old dormant roots. For convenience in selecting colors we have arranged the varieties in color groups.

Salmon, Coral, Copper and Apricot Shades

Annie Laurie (H. T.)—Sport of Ophelia. But large, long pointed;; flowers large, very double; flesh pink, edges deeper, golden yellow base; long strong stems. Foliage abundant, rich glossy green, disease resistant. Few thorn. Continuous bloomer.

Betty (H. T.)—Color copery-rose shaded golden-yellow; deliciously perfumed.

Doris Traylor (H. T.)—Buds of splendid form, long and pointed, opening to moderately full flowers, sweetly scented. Color imperial pink flushed crimson and orange, the coloring is intensified by the golden base of the petals which gives the flowers a golden suffusion which is difficult to convey. They later change to deep amber yellow which does not fade. Growth vigorous and very free flowering. \$1.50 each.

Empire Queen (H. T.)—This splendid rose of recent introduction should find a place in every garden. It is of thrifty, sturdy, growth producing in great profusion attractive long slender buds of a clear, rich cerise color, gradually expanding into well shaped flowers possessing at times an orange flush delightfully fragrant. \$1.25 each.

Irish Fire Flame (H.T.)—Closed bud fiery orange-red, shading to lighter at base, when full open bright salmon; five petaled and single; one of the daintiest and sweetest things imaginable. Each, \$1.00.

Los Angeles (H. T.)—One of the best Roses ever introduced; flowers luminous flame-pink toned with coral and shaded with translucent gold at the base of the petals, on long stems; very fragrant. Buds are long and pointed. Growth vigorous and produces a continuous succession of bloom. Price, each, \$1.00.

Madam Butterfly (H. T.)—Sport of Ophelia, showing better growth, more and larger flowers, in a brighter pink, suffused apricot and gold. Very fragrant and a fine keeper after cutting. Price, each, \$1.00.

Miss Lolita Armour—Bud medium size, globular; flowers very large, cupped, double, borne several together on long stems; very fragrant and good keeper after cutting. Color chrom yellow at base, shading to burnt orange and copper; reverse of petals chrome-yellow at base, shading to bright salmon with copper suffusion; passes to shrimp-pink and copper with age. Foliage abundant, leathery, bronze-green. Growth vigorous, abundant bloomer. Ea., \$1.

Ophelia (H.T.)—Color salmon-flesh shaded with rose, large and perfect shape.

Padre (H.T.)—One of the finest bedding Roses of recent introduction. This is brilliant coppery-red flushed with yellow at the base, a color combination that appeals to everyone. It is of vigorous habit of growth and will produce more flowers than any other variety of the Hybrid-Tea class. The beautiful long buds are borne on long stiff stems. Splendid for cutting as well as for garden decoration. Each, \$1.00.

Miss Lolita Armour

President Wilson (H.T.)—A most delightful shade of shrimp pink shading to coral red at base of petals. Flowers are large and freely produced upon long erect stems. Each, \$1.00.

Mme. Edouard Herriot (H.T.)—The Daily Mail Rose. In color its buds are coral-red, shaped with yellow at the base of the open flowers of medium size, semi-double, are of a superb coral-red, shaded with yellow and bright rosy-scarlet passing to shrimp-pink. Each, \$1.00.

Willowmere (H.T.)—This splendid Rose is of a coral-red suffused with carmine in the bud state, and opens to a large, full, handsome flower of a rich shrimp-pink shaded yellow in the center and flushed carmine-like towards the edges of the petals. Each, \$1.00.

William F. Dreer (H.T.)—The flowers, are similar in shape to Los Angeles, and are at their best in the half-expanded flower. These, in expanding, are of a soft, silvery shell-pink, the base of the petals of a rich golden-yellow which, at certain stages of development gives a golden suffusion to the entire flower, being particularly brilliant early and late in the season. Each, \$1.00.

Pink and Rose Shades

America (H.T.)—The Big Pink Beauty. Produces long stems, topped by large shapely flowers of peach pink; opens freely practically thornless and very fragrant. A wonderful keeper after cutting. Price, each, \$1.00.

Columbia (H.T.)—Peach-blow pink deepening as it opens to glowing pink; large, open flowers measuring six inches across. Long stiff stems, nearly thornless, free from mildew, vigorous. Price, each, \$1.00.

George Ahrends (H.P.)—Clear brilliant pink, good bud and perfect form flower. Known as Pink Frau Karl Druschki.

Killarney (H.T.)—Brilliant sparkling pink with large, pointed buds, broad, waxlike petals and enormous semi-full flowers of exceeding beauty. One of the very finest foreers.

Prices of above, except where otherwise noted, 75c each; \$6.75 per ten. All prices prepaid.

Souv. de H. A. Verschuren

P.-W.'s EVER BLOOMING ROSES (Continued)

Pink and Rose Shades—(Continued)

La France (H.T.)—Beautiful silvery-pink; large, full and fine form.

Madame Caroline Testout (H.T.)—Grand bright pink, flowering freely all summer; known as the "Portland Rose."

Mme. Seg. Weber (H.T.)—Vigorous grower; free-flowering, large, perfectly formed, fragrant flowers of salmon-pink.

Mrs. Charles Russell (H.T.)—The bud is fully as large as American Beauty but longer and pointed; color bright rose-pink, deeper towards the center.

Mrs. John Laing (H.P.)—Very delicate pink.

Paul Neyron (H.P.)—Immense bright shiny pink; clear and beautiful. Blooms all summer.

Pink Maman Cochet * (T.)—The buds are large, full and firm, elegantly pointed, showing depth and richness as they expand; clear rich pink, changing to silvery-rose.

Queen of Fragrance (H.T.)—Flowers large, double, of graceful shape and freely produced throughout the season. Color shell-pink, tipped with silver. Powerful and delicious fragrance. Each, \$1.00.

Radiance (H.T.)—In color a brilliant carmine-pink, with salmon-pink and yellow shadings at the base of the petals, truly a rose for every garden. Endures hot weather splendidly.

Rose Marie (H.T.)—One of the best bedding roses grown, remarkably free-flowering, producing large, long ideal buds, which develop into full flowers of beautiful form of a most pleasing clear rose-pink.

Winnie Davis (H.T.)—Brilliant apricot-pink with reflex lighter tints, making very handsome, semidouble graceful Rose. Buds long, fine form.

Crimson, Red and Scarlet Shades

Crusader (H. T.)—Very free flowering, strong grower. Color a rich velvety crimson.

Edward Mawley (H. T.)—A beautiful rich crimson touched with maroon, with a delightful velvet gloss.

Etoile De France (H. T.)—Strong, upright growth; beautiful bronze-green foliage. Blooms constantly, producing large, massive deep, cup-form flowers on long stems; clear red and velvety crimson color.

Gruss an Teplitz (Virginia R. Cox) (H. T.)—The best bedding and hedge rose for the Rocky Mountain states. In bloom continuously from early spring until snow. The color is fiery-crimson, shaded with a dark velvety sheen, a combination found in no other rose; perfectly hardy in all sections. Large size, each 75c; per dozen, \$7.50; per 100, \$50.00. Second size, each, 55c; per dozen, \$5.50; per 100, \$40.00.

Hadley (H. T.)—A splendid velvety crimson, with large well formed buds, most delicate fragrance.

Hoosier Beauty (H. T.)—Beautiful well-shaped long buds; color intense, rich, dazzling crimson-scarlet; deliciously fragrant. Price, \$1.00 each.

Mrs. A. R. Waddell (H. T.)—A rosy-scarlet, opening rosy-salmon, with reverse of petals rosy-scarlet. A sturdy, erect and vigorous grower.

Papa Gontier (T.)—Much sought after for cut flowers on account of its magnificent buds; color, rich cherry red; no collee in is complete without it.

Prince Camille De Rohan (H. P.)—Deep velvety crimson color, passing to intense maroon and shaded black.

Gruss An Teplitz—Blooms from June to Snow

P.-W.'s Red American Beauty (H. P.)—Same habits of growth and bloom as the popular forcing American Beauty.

Red Radiance (H. T.)—An ideal bedding Rose that continues to produce its large flowers throughout the season, even during the most unfavorable hot summer weather, when many varieties fail; in color a bright, clear cerise-red.

Red Letter Day (H. T.)—An exceedingly beautiful Rose of infinite grace and charm. Its velvety, brilliant, growing scarlet-crimson buds and fully opened cactus-like flowers never fade, as the reflex of the petals is satiny crimson-scarlet. Awarded S. G. Medal, N. R. S.

Souvenir de Georges Pernet (H. T.) Strong, vigorous flowers oriental red, shading to cochineal carmine at the margin of the petals. Price, each, \$1.00.

Sensation (H. T.)—As large and more prolific than Premier. Well supplied with heavy, luxuriant foliage. Bud is long pointed and the open flower of extreme size and good color to the last. Good keeper. Color magnificent shade of red. Price, each, \$1.00.

Sunstar (H. T.) Deep yellow edged, veined and splashed crimson and vermillion, all colors that attract and vary in tone and intensity as the blooms develop, of medium size, highly scented. Awarded a gold medal by the National Rose Society of England. Each, \$1.00.

Ulrich Brunner (H. P.)—Cherry red. Brilliant.

Orange and Yellow Shades

Golden Emblem (H. T.) A most beautiful clear yellow, occasionally flaked with crimson on the outer petals, wonderfully well shaped; buds and flowers on long stems with rich, glossy green foliage. Each, \$1.25.

Souvenir de Claudius Pernet (H. T.) Vigorous grower, erect branching habit, beautiful brilliant green foliage; buds long pointed on long stiff stems. Flowers large, full, beautifully formed. Good striking sunflower-yellow, deeper in center. Does not fade in the warm-est weather. Each, \$1.00.

Souvenir de H. T. Verschuren (T. H.) This new variety is a strong vigorous grower. Buds are long, of ideal shape for cutting, opening into full double flowers of good form. Center is apricot-yellow at edges, intensely sweet pea scent, not found in many other roses. Price, each, \$1.00.

Duchess of Wellington (H.T.)—Intense saffron yellow stained with crimson, changing to deep coppery saffron yellow. Each, \$1.00.

Souv. de Claudius Pernet

ORANGE AND YELLOW SHADE—(Cont.)

Lady Hillington (T.)—Apricot yellow shaded to orange on the outer edge of the petal, becoming deeper and more intense toward the center of the bloom. After the bloom is cut, the color invariably becomes darker. A strong hearty grower.

Mrs. Calvin Coolidge (H. T.)—Sport of Ophelia. Bud medium size, long-pointed; flower medium size, semi-double, very lasting; rich yellow, deepening as it opens; borne several together on a long stem. Foliage abundant, leathery, glossy dark green. Few thorns. Vigorous; continuous bloomer. Price, each, \$1.00.

Ophelia Golden (H. T.)—A seedling of Ophelia possessing many of its characteristics. Rich golden, yellow

at center, paling slightly at outer petals. Price, \$1.00.

Soleil d'Or.—Changing from orange-yellow to reddish gold and nasturtium-red. Strong upright growth. Price, \$1.00 each.

Mrs. Aaron Ward (H. T.)—Coppery-orange in the open bud but golden orange when partly developed, pinkish-fawn of lovely shade when fully open. Price, \$1.00 each.

Old Gold (H. T.)—Vivid reddish-orange, with coppery-red and apricot shadings; strong, mildew proof and free. Medium size, semi-double. Each \$1.00.

Sunburst (H. T.)—Long, pointed buds; color, orange-copper or golden-orange and golden-yellow; edge of petals lighter. Price, \$1.00 each.

WHITE & BLUSH WHITE

American Beauty White (Frau Karl Druschki) (H. P.)—Best snow-white rose. Immense in size and hardy everywhere.

Kaiserine Augusta Victoria (H.T.)—In color it is a soft pearly-white, tinted with just enough lemon in the center to relieve the white; remarkably fragrant. \$1.00 each.

Prices of above, except where otherwise noted, 75c each; \$6.75 per ten.

All prices prepaid.

White Maman Cochet (T.)—Free bloomer, bearing magnificent buds and flowers standing at the very head of roses as the best white for open ground culture.

White Killarney, Double (H.T.)—A pure white sport of the famous and popular Killarney Rose much more double than its parent.

P.-W's Hardy Climbing Roses

Climbing Kaiserine Augusta Victoria 2nd year from planting

American Pillar—A single-flowering variety of great beauty, which appeals to everyone. Flowers are enormous in size, three to four inches across, of a lovely shade of pink, with a clear white eye and cluster of yellow stamens.

Climbing Cecil Brunner—Very robust and one of the strongest climbers in the rose family. Hardy and suitable for all sections.

Climbing American Beauty—Same color, size and fragrance as American Beauty, with the addition of the climbing habit.

Climbing Mme. Caroline Testout—A solid cerise-pink and does not fade. Highly fragrant.

Climbing Kaiserine Augusta Victoria—This is easily the grandest climbing white rose extant.

Climbing Baby Rambler, or Miss G. Messman—This is a true ever-blooming Crimson Rambler; a climbing form of the Baby Rambler.

Dorothy Perkins—Old-fashioned cluster roses. We supply three colors, Pink, Red and White.

Ever Blooming Rambler, or Flower of Fairfield—This is a much-heralded ever-blooming Crimson Rambler; deep crimson in immense clusters.

Paul's Scarlet Climber—No other Rose, in any class, can compare with this for brilliancy of color which is maintained until the petals fall. It is of strong climbing habit and perfectly hardy. This is one of the most popular red climbing Roses.

Silver Moon—Different from all other roses, with beautiful semi-double flowers four and a half inches and over in diameter; pure white in color, petals of great substance, beautifully cupped. The large bunch of yellow stamens in the centre adds to its attractiveness.

White American Beauty

Christine Wright—Strong climbing habit. The flowers double, from 3½ to 4 inches, beautiful in the bud and in the fully expanded flower; color bright wild-rose pink.

Dr. W. Van Fleet—The long pointed buds are of a rich flesh-pink on stems 12 to 18 inches long; splendid for cutting. A strong, vigorous grower.

Emily Gray—In this we have a real yellow climbing Rose as hardy as Dr. Van Fleet. The buds are long and pointed, of splendid shape; in color a beautiful light orange-yellow, changing to pale orange as they expand they are borne of stiff stems of sufficient length for cutting. The dark green, glossy, holly-like foliage adds a charm to the flowers and makes the plant, even when out of bloom, a most ornamental subject. \$1.00 each.

Mary Wallace—This is a pillar Rose making a fine, strong, self-supporting plant 6 to 8 feet high, with large glossy foliage, blooming with great freedom in spring and bearing considerable number of fine buds in summer and fall. Flowers very large, generally exceeding 4 inches across; well-formed, semi-double, of a bright clear rose-pink with salmon base to the petals. \$1.00 each.

Star of Persia—A brilliant new Rose with flowers on the order of the lovely old Harrison's Yellow; semi-double, bright yellow, and about 3 inches across. It makes a striking low climber or pillar Rose from 8 to 10 feet high, bursting into showers of sparkling bloom in June. It does not fade and the flower trusses last several weeks. \$1.25 each.

Tausendschoen (Thousand Beauties)—A popular variety with large flowers with wavy azalea-like petals. In color it is a most delicate shade of soft pink when first opening, changing to a carmine on the reverse of petals when fully expanded. Almost thornless.

Price on any on this page, except where noted, 75c each, 10 for \$6.75; two-year-old field grown shrubs; all charges prepaid.

MOE'S LINE

Five Fingered Weeder—Each, 25c.

MOE'S LINE

Transplanting Trowel—Each, 25c

MOE'S LINE

Garden Trowel—Each, 25c.

Set of Three—One each of above—70c. Shipping weight 2 lbs.

"NORCROSS" CULTIVATOR-HOES AND WEEDERS

Will cultivate closer to plan s without injuring them than any other type of implement known, leaving the soil level, loose and untrampled.

Three Sizes and Prices— Each
5-prong, 4 ft. handle, wt. 3 lbs...\$1.25
3-prong, 4 ft. handle, wt. 2 lbs... .90
"Midget," 9 in. handle, wt. 12 oz. .60

Each

No. 907—Garden Hoe (Steel)...\$1.30
No. B4—Beet Hoe (Steel)... .85
No. B16—Turf Edger (Steel)... 1.50
No. B14—Garden Rake (Steel)... 1.55
No. B16—Garden Rake (Steel)... 1.65
No. OL—Spading Fork (Steel)... 1.50
No. O.H.T.—Spading Fork (Steel) 2.25
No. A62—Spade (Steel)... 2.00
No. 124—Lawn Rake (Steel)... .90
Bamboo Lawn Rake (Strong)... .75

Dandelion Digger No. 219—Forged from best material. Each 50c; postpaid, 60c.

Spading Fork No. A-30—No home gardener should be without this handy tool. Each, 70c; postpaid, 80c.

Weeder No. 830—5 prong, green corrugated handle. Forged from Octagon Tool Steel. Each, 50c.

Trowel T20—6 inches long, steel. Each, 40c.

Trowel T10—6 in. long extra heavy enucle steel forged in one piece. Each, \$1.00.

T25—Trowel—6 in. Transplanting trowel, one piece rolled steel. Each, 25c.

Pruning Shears No. 12—A good low priced shear. Each, \$1.25; postpaid, \$1.35.

Pruning Shears No. 14—High grade, strong, easy to handle, very durable. Each \$2.25; postpaid, \$2.50.

Pruning Shears No. 19 — Highest grade, best style and design, patent adjustable lock nut. Transforms pruning into a real pleasure. Each, \$1.25; postpaid, \$4.50.

Pruning Shear No. 140 — Forged tool steel, ratchet nut, brass spring, length 9 inches. Each, \$1.85.

Hedge Shears No. 8WS — Heavy steel, long blades, very serviceable. Each, \$3.00; postpaid, \$3.25.

Grasnip No. 1—All-around shear for grass, vines and light shrubs; 6 in. steel blades. Each, \$1.35.

Grass Shears No. VI—6 in. blade, hollow ground; trowel shank, polished all over. Each, \$1.15.

Grass Sickle No. 3—Evenly tempered, keen edged. Just the right tool for long grass and weeds. Each, 75c; postpaid, 85c.

Grasnip No. 160—With offset made of forged steel. Cuts both with forward and backward swing. The new way to cut your grass and weeds without stooping.

Length over all 37 inches; blade length 9 3/4 inches; blade width 1 3/4 inches. Each, \$1.10.

SPRINKLER 2-PURPOSE

The 2-Purpose takes the place of both the ordinary hose nozzle and stationary garden sprays. Weight 1 1/2 lbs. Price, \$2.10.

RAIN KING SPRINKLER

This is one of the best, it throws a fine mist and can be regulated to cover large or small area. Price, each, \$3.75.

Lawn Sprinkler No. 10—Stationary, 6 in. long. Brass, indestructible. Each, \$1.00.

Lawn Sprinkler No. 19—Very efficient and sure to give service. Each, 90c; postpaid, \$1.00.

BROWNS Adjustable and Variable

Whirling Showers LAWN SPRINKLER

It has a simple and positive adjustment, wide range, is leak proof without using soft packing, very durable and perfect balance, and is the acme of simplicity.

Whirling Shower Lawn Sprinkler, Price, \$2.75 each.

THE "OUT-U-KUM" WEED PULLER An Entirely New Principle

A slight Push and Pull thoroughly loosens the surrounding soil and removes not only the weed, but the ENTIRE ROOT. Price, \$1 each.

Germaco Hotkaps New Method of Plant Protection

HIGHER PRICES FOR YOUR CROP

Last year thousands of growers added to the value of their vine crops by using HOTKAPS—shown above. This remarkable invention consists of a scientifically constructed wax paper cone that you place over each plant. Thus they are miniature hot-houses that protect plants from frost, wind, rain, insects and ground crustings.

HOTCAPS not only protect plants, but make them grow harder and faster. Thus you get a greater crop production earlier for higher prices.

You can add to your next year's profit with Hotkaps. They cost but a fraction over a penny each.

One man can "set" 3000 Hotkaps per day. They not only bring you higher prices, but are a method of crop insurance—against the danger of the elements. Prices—\$1.50 per 100; \$4.00 per 250; \$11.50 per 1000; \$55.00 for 5000; \$107.50 per 10M; \$231.35 for 25M. "Hotkap" Setter \$2.50 each. "Hotkap" Garden Setter, 50c each.

POT AND TREE LABELS

	Per 12	100	1000
Pot Labels, 4-in., plain, 1000 in box.	\$0.10	\$0.35	\$2.75
Pot labels, 6-in., plain, 1000 in box.	.15	.50	3.50
Pot Labels, 10-in., plain, 500 in box.	.25	1.10	8.50
Tree Labels, copper wired, plain.	.10	.45	3.00

PLANT STAKES

Green Bamboo Stakes—For supporting tall plants—

3 ft. long.	12 for 35c; 100 for \$1.50; 250 for \$2.75
2 1/2 ft. long.	12 for 30c; 100 for \$1.25; 250 for \$2.25
2 ft. long.	12 for 25c; 100 for \$1.00; 250 for \$2.00

Dahlia Stakes—5 ft. x 1 inch x 1 inch, pointed, painted green. Each 18c; dozen, \$1.80; per 100.....\$13.50

Bamboo, heavy, dyed green, for dahlias and roses—
3/4 inch diam.; 4 ft. long; dozen, 75c; per 100, \$6.00
5/8 to 3/4 inch diam.; 6 ft. long; dozen, 85c; 100, \$6.75

RAFFIA

Natural, in skeins weighing from 1 1/4 to 2 1/4 lbs; excellent for tying up plants, grafts, etc.; in original skeins. Per lb., 35c; less original skeins, per lb., 40c.

PLANT URNS

Made of Cement Concrete—Molded to last a life time. Very attractive designs and convenient sizes. Write for details and prices.

REDWOOD FLOWER BOXES

The material used in making these boxes is genuine redwood. The following sizes are carried in stock prices f.o.b. Salt Lake City.

No. 4	Length 2 ft. Depth 8 in. width 8 in. each,	\$1.25
No. 5	Length 3 ft. Depth 8 in. width 8 in. each,	\$1.75
No. 6	Length 4 ft. Depth 8 in. width 8 in. each,	\$2.25

P.-W.'s SELF WATERING FLOWER BOXES

These are made of the best grade of metal with neat round corners and a full roll rim. We consider these boxes the best value on the market today of the self-watering type.

Sizes and prices as follows:

H't in.	W'th in.	Length in.	Each
No. 1—9	x 7 1/2	x 27 1/2	\$3.00
No. 2—9	x 7 1/2	x 33 1/2	3.50
No. 3—9	x 7 1/2	x 39 1/2	4.00

"HARRIS READY TO USE" PLANT BANDS AND POTS

They are the only really Read-to-Use bands on the market. There are no locks to put together, no tacks to drive, no folding of corners. All the corners are scored. They always open up square.

They are packed nicely in cartons containing a given quantity and are in order; ready-to-use. Many others makes come loose and have to be arranged in order before using.

2B Plant Bands, 2x2 in.	\$1.25 per 250; \$4.30 per M
3B Plant Bands, 3x3 in.	\$1.50 per 250; \$6.10 per M
4B Plant Bands, 4x4 in.	\$2.25 per 250; \$7.15 per M
2P Plant Pots, 2x2 in.	\$1.50 per 250; \$4.80 per M
3P Plant Pots, 3x3 in.	\$2.00 per 250; \$7.50 per M
4P Plant Pots, 4x4 in.	\$2.50 per 250; \$8.65 per M

MOSS

Suitable for use in lining hanging baskets and for packing perishable plants. 1/2 lb., 25c; lb., 40c; 5 lbs., \$1.25, postpaid. Not prepaid in bales of about 75 lbs., \$7.50 each.

GRAFTING WAX

Excellent to apply to young trees and shrubs that have been barked. It is put on easily and quickly, and will remain there and prevent decay until the wound is covered with new bark. Price, 1/4 lb., 20c; 1/2 lb., 30c; lb., 50c. Postage extra.

CYCLONE SEED SOWER

A good large sower that meets the most exacting demands. Hangs by a strap over shoulders of operator. Hopper-sack has a capacity of 1/2 bushel. Broadcasts evenly all varieties of grain and grasses. Weight, 4 lbs.

Price—Each, \$2.50. If by mail add 25c extra for postage.

SOILTEX

Test for acid soil with Soiltex (a new, quick, easy and accurate soil testing method. Each outfit will make 75 to 100 tests. Full directions, color chart and lime table included. Pocket-size Soil Testing Outfit, with color chart and lime table, postpaid, \$1.00.

NO. 136 IMPERIAL LAWN EDGE TRIMMER

For the man who takes pride in his home and lawn. Trims off the rough straggling grass that overhangs sidewalk and curb, also provides quick drainage for sidewalk. Delivers the cutting on the walk to be shoveled up. Each, \$1.75.

NO. 97 SPRINKLING STAND

Instantly attached or detached. Holds hose firmly at any elevation. Light in weight. Will sprinkle small portions of garden or lawn not reached with sprayer. Each, 80c.

HUDSON CULTIVATOR NO. 212

No. 212 may be used as a double wheel hoe plow, or cultivator astride the row during early cultivation, and as a single wheel cultivator between the rows later. The angle steel arch is high enough to permit straddling until the plants are well grown. Shipping weight 37 lbs. Each, \$12.50.

Hudson Garden Plow No. 320

This high wheel plow is a favorite. Frame is steel with adjustments for varying the pitch of the tools. Wheel is 24 inches high with 1 1/4 inch tire, insuring easy running. Shipping weight 21 lbs. Each \$4.75.

Garden Plow No. 320**HUDSON GARDEN CULTIVATOR NO. 228**

No. 228—Single wheel cultivator, light enough for or woman, yet sturdy enough for a man. Equipment consists of a pair of hilling plows, pair of surface hoes, four cultivating teeth and a vineyard. Plows are of carbon steel. Shanks are malleable and unbreakable. Frame is of high carbon steel, light and rigid. Shipping weight 25 lbs. Price, \$8.00.

**Protect
Chicks &
Plants with**

CEL-O-GLASS

At last an **unbreakable** material that is neither glass nor wire cloth, yet combines the transparency of glass with the toughness of metal. Extremely light in weight, weatherproof, flexible and durable. CEL-O-GLASS is admirably suited for chicken house fronts and windows, cold-frames and hotbeds ash; greenhouse sides, fronts and partitions. Put up in rolls 3 feet wide up to 100 feet long. Price—50c per running foot.

Cleveland Lawn Weeder **HUDSON SEEDER AND CULTIVATOR NO. 203**

No. 203—(See cut above). It is ideal for the gardener whose requirements do not justify separate machines for seeding and cultivating, being equipped for use as hill and drill seeder, or wheel hoe plow or cultivator. Changes from one to the other are made quickly and easily. Cultivating tools are high grade steel; all shanks are malleable and unbreakable. Weeding hoes and hilling plow have polished and lacquered surfaces and sharpened cutting edges. Wheel is 16 inches high, with 1 1/4 inch tire. Handles are seasoned hardwood adjustable in height. Weight 56 lbs.; Each, \$18.75.

LAWN MOWERS

A machine for the home lawn, is unsurpassed in quality, durability, and the perfection of its working parts. It is a machine of the very highest class in every respect.

	Size	Price	Grass Catcher
"Berkley"—14-inch cut		\$12.50	\$1.50
"Speedy"—14-inch cut		14.00	1.50
No. 305B—16-inch cut		15.00	1.75
No. 505 —16-inch cut		17.50	1.75
No. 705 —16-inch cut		21.25	1.75
No. 905 —18-inch cut		25.85	1.75

Glass Cloth

Glass Cloth is a strong fabric treated by a patented process to make it transparent, weather-proof and water-proof. It costs much less than glass and for many purposes is superior. Anyone can put it up. It admits abundant light which is diffused and scatters to all parts of the enclosure. It comes in rolls 36 inches wide and any length. Yard, 40c; 10 yds., \$3.75; 15 yds., \$5.00.

CLEVELAND LAWN WEEDER

No more broken backs. This device gets at the root of the evil and removes it bodily.

The curved edge of the blade enters and loosens the soil, pressure on the lever then causes the toothed jaw to grasp the plant, and a slight pull suffices to dislodge it without disturbing the surrounding sod. Price each, \$1.50.

SPRAY PUMPS—For Every Purpose

All Sprayers are quoted F. O. B. Salt Lake City, unless otherwise noted.

AUTO-SPRAY NO. 3-D

The Auto-Spray No. 3 is a most powerful and durable wheelbarrow sprayer. It is an excellent general purpose sprayer. On account of its adequate agitator it is especially well suited for handling whitewash and cold water paints. It can be easily moved about on the large single wheel truck. By virtue of its having only one wheel it can be handled as a wheelbarrow and will turn around in very small space. This pump is used extensively for spraying trees. It can also be used in the garden.

Auto Spray 3-D

Auto-Spray No. 3-D is equipped as follows: It has a 12-gallon galvanized iron reservoir with 1½" diameter all brass pump, 8 feet of ¾" high pressure hose, stop cock shutoff and brass nozzle. It is packed knocked down. Total shipping weight 57 lbs. It also has an iron truck with 20-inch wheel. Complete each, \$20.00.

HUDSON'S NEW SUNSHINE SPRAYER NO. 36

General purpose orchard, field and whitewash sprayer. Galvanized tank capacity 12½ gallons. Discharge equipment 5 feet ¾ in., 5-ply hose, 2 foot extension rod and "Ideal" angle spray nozzle. Truck equipped with double wheels. The pump is similar to Auto-Spray 3-D, but of lighter construction. Shipping weight 45 lbs. Price \$17.75.

AUTO-SPRAY NO. 9

Auto Spray No. 9

The simplicity, ease of operation and durability of this sprayer has made it a large volume number. The brass screw lock on this sprayer is a patented feature which enables the operator to use the handle as a wrench to tighten the brass cup on the pump cylinder without revolving the pump cylinder, thereby chewing up the gasket and breaking the pressure seal. Pump is all brass valve. Furnished with 2-foot brass extension. Brass lever shutoff and it has all of the advantages that

can be built into a compressed air sprayer. This full 4-gallon size machine can be used anywhere that a compressed air sprayer is required. Shipping weight, 10 lbs.

Auto-Spray No. 9-B, with 4-gal. brass tank, each, \$10.00
Auto-Spray No. 9-D, with 4-gal. gal. tank, each, 7.50
Hudson's Perfection No. 110-G, with 4-gal. gal. tank, each, 7.50

TROMBONE No. 123 and No. 50

This pump is double acting, main-taining without undue exertion on the part of the operator. All parts are brass with bronze ball valves, easily accessible for cleaning, etc. This may be used with bucket or knapsack same as "Standard Sprayer." Shipping weight 6 pounds. Price \$5.25.

No. 71

Trombone No. 123 and 50

BORDEAUX WHITWASH NOZZLE NO. 71—For spraying, whitewashing or cold water painting. Adjustable to regulate the quantity of liquid used. Throws a wide flat spray, and can be graduated from a fine mist to a solid stream, or shut off completely. Made entirely of brass. Threaded ¼ inch standard pipe. Price \$1.00 each.

SCOLLAY'S RUBBER PLANT SPRINKLER

Mist spray suitable for house plants indoors; shipping weight 1 pound. Price, \$1.25 each.

Auto Spray No. 3-F

AUTO-SPRAY NO. 3-F

The pump in the Auto-Spray No. 3-F is the same as the pump in the Auto-Spray No. 3-D. The truck and reservoir are the same. There is added to this outfit a pressure tank and pressure gauge so that pressure may be stored in this reservoir. This reservoir evens the pressure between strokes so that the spray is of a constant fine mist. Enough pressure is stored in this reservoir so that the outfit will continue to spray sometime after the opera or has stopped pumping. This is a very desirable machine for spraying trees, gardens, potatoes and is also excellent for handling whitewash and cold water paints. Shipping weight 145 lbs.

Auto-Spray No. 3-F 12-gallon galvanized tank and air chamber, complete, each, \$10.00

Hudson Ideal No. 33—Similar construction, appearance and capacity to Auto-Spray No. 3-F. Price, each, \$10.00.

AUTO-SPRAY NO. 50

There is a constantly increasing demand for a smaller than 4-gallon compressed air sprayer. This sprayer of 2½-gallon capacity is recommended where a compressed air sprayer is required and the spraying is not extensive. On account of its being smaller and lighter in weight is most desirable when used by women or children. It is a most convenient size for use in a greenhouse. As time goes on this size compressed air sprayer increases in demand. Auto-Spray No. 50 has all of the mechanical advantages that are incorporated in Auto-Spray No. 9. Shipping weight 7 lbs.

Auto-Spray No. 50-D, galvanized tank, each, \$6.00

Auto-Spray No. 50-B, brass tank each, 8.85
Hudson Jr. Sprayer, No. 140-G galvanized tank, each 6.00

Auto Spray No. 50

Armstrong Standard Spray Pump

STANDARD SPRAYER

Can be used with bucket, knapsack, tank or barrel for spraying orchards, gardens, vineyards, whitewashing, disinfecting chicken houses, killing vermin on stock. Made entirely of brass. Nothing to get out of order.

For pump and nozzle, price \$5.25; weight 4 lb. For knapsack, price \$3.50; weight 5½ lbs., Extension rod, price \$1.25; Veterinary Nozzle, 75c.

AUTO SPRAY NO. 5

Similar type, weight construction and operating features to Standard Sprayer described above. Price \$5.25.

Perfection Nozzle No. 176—Adjustable and suitable for use on all compressed air machines, shown in cut "Compressed Air Sprayer." Handles all solutions. Fitted with ¼ inch pipe thread so extended rod can be added. Price \$1.75 each.

HUDSON BARREL CART SPRAYER NO. 4-C

This is a portable sprayer desirable for use where the trees or bushes are too close or too low to permit driving a wagon through between them. It is easily and quickly wheeled from place to place. After the spraying is completed, the cart can be detached and used for hauling water, etc. The Pump and Barrel can also be used as a separate unit when desired. It has ample capacity for two line hose. Will spray whitewash, cold water paints or any insecticide. The steel barrel tank holds 50 gallons and the cart is entirely of steel construction; discharge equipment same as Hudson Barrel No. 4-A. Shipping weight complete 248 lbs. Price \$52.50.

Knapsack

Auto-Spray No. 6—A very powerful bucket pump easily generating pressure of over 200 lbs. with remarkable ease. Similar in appearance to No. 60. (See cut). The extension handle and foot rest are of malleable iron. Pump proper and plunger made of seamless brass tubing. Hose is $\frac{3}{4}$ " diameter, 5-ply. Weight 6 lbs., price complete \$4.50 each.

AUTO-SPRAY NO. 60

This bucket pump is very durable, extra heavy, and generates high pressure. Air chamber on handle insures continuous discharge. Built to last a lifetime. Is equipped with lever shutoff nozzle. 3 feet of $\frac{3}{4}$ " 5-ply hose, and adjustable iron foot rest. Pump cylinder, valves, plunger, shutoff and nozzle are

Auto Spray No. 60
all solid brass, weight 9 lbs., price complete each, \$7.00.

CONTINUOUS ATOMIZERS

It Sprays Continuously

Brown's No. 26A—Tin, each (See cut No. 26).....\$1.00
Brown's No. 26C—Brass, each (See cut No. 26)..... 1.50
Hudson's No. 124G—Tin (See cut)..... 1.00

HUDSON HOUSEHOLD SPRAYER (F2)

This tiny little sprayer holds about one-half pint. It is just the thing for household use for a few house plants or for flies, moths, ants, roaches, bedbugs, etc. Price 25c each, postpaid.

Hudson Household Sprayer

HUDSON CADET DUSTER No. 663

A small but effective Dust-Gun. Price 60c each.

HUDSON MAJOR DUSTER 665 A

This model of Major Duster is designed for handling Cyanogas. It is equipped with the regular 12-inch pipe extension and a piece of flexible tubing 12 inches long. This equipment facilitates reaching underground passages of burrowing pests such as rats, moles, etc. Each \$1.25.

DUSTER BROWN NO. 2 C

Dusting in some districts is becoming very popular. With a small quart duster, such as the No. 2-C, quite a good size garden can be conveniently dusted. This duster is a new type direct compression duster and envelops every twig and leaf. The dust is well diffused and allows the operator to spray from underneath. The extension on this Duster makes it very satisfactory for all types of dusting and particularly for dusting underside of leaves. This Duster length overall 19 $\frac{1}{2}$ ". Length of pump cylinder 12". Diameter 2". Weight 12 $\frac{1}{2}$ lbs.

Duster Brown No. 2-C—Each \$1.25.

THE "LITTLE BEAUTY" GARDEN DUSTER

The powerful "bellow" drives a perfect cloud of fine clinging dust a distance of 12 to 15 feet, making it easily possible to care for plants of all kinds, including small trees. It is constructed of only the best materials, will last for years. Price \$2.35 each.

AUTO-SPRAY NO. 4

A comparatively inexpensive but durable and powerful barrel pump. The long air chamber stores up reserve pressure so that the nozzle throws a continuous spray. Agitator is automatic and functions as long as the pump is being operated. Pump cylinder of seamless brass tubing, 1 $\frac{1}{2}$ " diameter. The bottom casting and the ball valves are of brass. Compression plunger head works on both up and down stroke. Castings on top of pump and handle are of malleable iron. Air compression cylinder is made of steel tubing. Equipment consists of stop cock and Auto-Spray Nozzle 15 ft. $\frac{3}{4}$ " hose with coupling, extension pipe, iron, 2' 8" in length. Weight complete, 19 lbs. Price \$15.00 each.

Auto Spray No. 4

Hudson 424-G
Continuous Atomizer

"P.-W.'s Handy"

P.-W.'s HANDY SPRAYER NO. 22 A

We recommend this handy sprayer to the poultryman for spraying disinfectant, lice spray, etc. It is well made of bright tin, and with reasonable care will last a long time. The reservoir holds a quart. Weight, 1 lb. Price each, 55c.

P.-W.'s BABY MIDGET SPRAYER

Same style as P.-W.'s Handy. Capacity, 1 pint. Price 35c each.

HUDSON EXTENSION RODS

An extension rod is a great convenience with any compressed air sprayer, bucket or barrel pump. Trees, sidewalks, ceilings and other places can be taken care of easily.

No. 172B—2 foot Brass Extension Rod. Each.....\$0.60
No. 173B—3 foot Brass Extension Rod. Each..... .75

THE CALIFORNIA BEAUTY DUSTER

The bellow's action is so rapid as to give an almost continuous flow of dust and still completely under control at all times. Ideal for row crops, such as Peas, Beans, Cabbage, Cauliflower, etc. It weighs less than ten pounds and holds twelve pounds of dust. Throws cloud of dust twelve feet. Price \$14.25 each.

THE AMERICAN BEAUTY DUSTER

This is the most powerful, most efficient and fastest machine ever built for the control of plant pests. It is always ready; requires less than five minutes to get into action. Same California Beauty Duster in general appearance as the "California Beauty Duster" but is larger and more powerful.

A powerful bellows drives the dust 25 feet high, and will dust 8 acres of trees per day. Weight 16 lbs. Price \$19.50 each.

DUSTER BROWN NO. 1

Duster Brown No. 1 is an excellent duster of small capacity for use in the garden, for spraying roach powder, etc. Each, 60c.

PEST AND DISEASE KILLERS

Posions Are Not Admitted to the Mails, so are shipped by Express or Freight only. On all other items not quoted at Postpaid prices, see Zone Rates for amount to remit for postage.

Antrol itself is more attractive to the ants than almost any other food, it speedily draws a crowd of workers who quickly start carrying the **Antrol** syrup from the jar to the colony as food. In this way the entire colony is poisoned.

Prices—Cottage Set (Like illustration and consisting of 9 **Antrol** containers and **Antrol** syrup)—per set, \$1.60.

Antrol Containers only 15c each.

Antrol Syrup, pint, 65c; quart, \$1.00; gallon, \$2.75.

Flyrol

Destroys Flies, Moths, Mosquitoes, Roaches, Bedbugs, Beetles, Silverfish, Fleas, Chicken Lice, Mites and their eggs. **Flyrol** sprayed thoroughly within the house, in a sanitary measure insuring against contagion. It is 100% active and non-poisonous. Will not stain. Easy to use. No unpleasant odor. A few minutes, and the work is done. Use **Flyrol** freely during spring and summer months. Pint, 55c each; qt., \$1.00; gal., \$2.75; 5 gallons, \$12.50.

Snarol

Snarol is a snail to the gardener. It quickly destroys these garden pests. Just sprinkle **Snarol** around and under newly planted vegetation. Insure it against destruction. Kills snails, slugs, worms, sow bugs, earwigs, and grasshoppers. 1 lb. pkg., 40c; 3-lb. pkg., 75c.

"Black Leaf No. 40"

Nicotine Sulphate—40 per cent Nicotine—

In addition to its effectiveness in killing Garden Pests, **Black Leaf 40** is pure death to poultry lice and mite, write for details.

You cannot go wrong by ordering "**Black Leaf 40**" for sucking insects. Prices: 1 oz., 35c; ½ lb., \$1.25; 2 lbs., \$3.25; 10 lbs., \$11.85; 1 oz. makes 6 gallons; ½ lb., 40 to 60 gallons.

Carco

For Root Maggots—Use 1 before planting. For cut worm, grubs, and other worms—dilute one part **CARCO** to 125 parts water and apply freely, preferably in the late afternoon. **Important**—Use a coarse spray, always. Price—½ pint, 50c; pint, 75c; quart, \$1.25; gallon, \$2.75.

CALISPRAY DUST NO. 16

Very effective dust, containing 10% nicotine, for killing Thrips, Squash Bugs, Aphids, etc., on Truck crops such as onions, melons, cucumbers, etc. 5 lbs., \$2.00; 25 lbs., \$7.50; 50 lbs., \$13.25; 100 lbs., \$25.35.

CALISPRAY DUST NO. 81

Contains 6% nicotine and 20% Arsenate of Lead. Effective against Worms, Aphids, Beetles or Cucumbers, Cabbage, Cauliflower, Melons, etc. 5 lbs., \$1.80; 25 lbs., \$7.00; 50 lbs., \$12.25; 100 lbs., \$22.80.

Cow Ease (Fry Driver)

It a liquid preparation from non-poisonous materials, and will not gum the hair or blister the skin. A herd of milch cows sprayed regularly through the fly season will yield on the average of 10 to 20 per cent more milk.

Price—Quart, 60c; weight 4 lbs.; ½ gallon, weight 8 lbs., \$1.00; gallon, weight 15 lbs., \$1.80.

Dusting Sulphur

The most common fungus diseases that annoy the gardener and orchardist are Early Blight on potatoes, Scab on apples and pears, and Brown Rot on Peaches. Dusting Sulphur is good for all these and can be used by itself or in combination with Arsenate of Lead, mixing the two in equal proportions. Price—1 lb., 20c; 5 lbs., 65c; 10 lbs., \$1.10; 100 lbs., \$7.50.

Cresote

Used extensively for disinfecting poultry yards and pens. 5 gal., \$2.75; 30 gal. bbl., \$15.50; 50 gal bbl., \$25.00.

Kellogg's Ant Paste

"**Rattle Cap**"—A very effective remedy for control of ants affording a quick, temporary relief. 25c per bottle.

Nico Dust No. 6

Six per cent Nicotine. Especially prepared for garden pests. 1 lb., 50c; 5 lbs., \$1.75; 25 lbs., \$5.85; 50 lbs., \$10.00; 100 lbs., \$18.00.

Nico Dust No. 6

Similar to No. 6 but containing 10% nicotine. 5 lbs., \$2.00; 25 lbs., \$7.25; 50 lbs., \$13.25; 100 lbs., \$25.35.

Tobacco Dust

When dusted over young plants, it is very effective in repelling many kinds of bugs and in keeping the foliage free from Aphids and Lice.

Price—½ lb., 15c; 1 lb., 25c; 10 lbs., \$1.40; 100 lbs., \$8.75.

VOLCK

A very meritorious new insecticide, the best remedy we know about for mealy bug which has heretofore been beyond control. It is effective, also, against Cyclamen Mite, Thrips, Red Spider, Aphids, White Fly, Rose Mildew and Scale Insects. Dilute one part "**Volck**" to 32 parts water for general use. Price—½ pint, 50c; pint, 75c; qt., \$1.00; gallon, \$3.00; 5 gal., \$12.00; 14 gal. drum, \$25.00; 28 gal. drum, \$40.00.

Weed Killers

There is nothing more annoying to the well-kept home grounds than weeds constantly coming up in the roadways, paths and gutters. This weed killer may be applied by means of a sprinkling apparatus of any kind.

Weedicide—Very effective. Price, \$1.75 per gallon. Dilute with 10-25 parts of water.

Sodium Arsenite—Powerful destroying agent. Dilute with 30-150 parts of water according to toughness of the weed to be killed. Price, \$2.50 per gallon.

Whale Oil Soap

Fish Oil—Dissolve 2 ounces of soap to 1 gallon of water for all small fruit. For large fruit trees, shade trees, etc., use 3 ounces of soap per gallon. Very effective as a spreader for "**Black Leaf 40**," **Nico-Pume**, **Liquid**, etc.

Price—¼ lb., 15c; ½ lb., 20c; 1 lb., 35c.

Revenge

A most effective powder for head lice and other vermin on Poultry, Hogs, Dogs, Cattle and Horses. "**Revenge**" gets them when other remedies fail. Apply direct as well as sprinkle in runs and bedding places 1½ lb. pkg., 65c; 3 lbs., \$1.00; 6 lbs., \$1.75; 50-lb. pail, \$6.25.

Health Paint

Health Paint is a white paint and a powerful disinfectant in powder form. Ready to use when mixed with water. Easily and quickly applied to wood, brick, stone, cement, etc., and over whitewash. One pound will cover 100 square feet.

Low in cost and an excellent disinfectant white paint. 5 lb. pkg., 85c; 10 lbs., \$1.50; 25 lbs., \$3.50; 50 lbs., \$6.00; 100 lbs., \$11.00.

Effective against most other plant pests, including Cucumbers and Melons, Beetles, Cabbages, Worms, Rose Slugs, Leaf Hoppers, Currant Worms, etc.

SAFE—Kills only insects—harmless to man, live stock, birds and pets.

NON-INJURIOUS—Spray freely on the tenderest plants. Won't injure the ground.

EASY TO USE—Just mix with water and stir. No unpleasant odor.

WON'T GUM SPRAYER—No bad effect on metal or rubber. Stays in solution and can't clog sprayers.

Prices—1½ oz., 35c; 6 oz., \$1.00; 16 oz., \$2.00; 32 oz., \$3.50; 1 gal., \$13.00.

EVER GREEN CAN BE SENT THROUGH THE MAIL.

PEST AND DISEASE KILLERS—Continued

Prices Subject to Change—All f.o.b. Salt Lake City except where otherwise noted.

Garden Guard

No Sprayers, No Water, No Mixing. Dust on plants from sifter top carton or through burlap sack. Garden Guard is the strongest garden insecticide of its type on the market—yet safe to use. Ideal to use on vegetables, flowers and shrubs of many kinds. The Bordeaux Mixture in Garden Guard acts, in a measure, as a fungicide. Prices—1 lb. sifter carton, 25c; 5 lb. paper bag, 75c.

Acme All Round Spray

"Acme All Round Spray" is composed of nicotine sulphate, arsenate of lead and bordeaux mixture, scientifically combined, and recognized by leading authorities as the proper combinations for controlling chewing and sucking insects, and blight and fungus diseases all in one application.

It meets the ever-growing demand for a preparation to control chewing and sucking insects, blight and fungus diseases that infest vegetables, flowers, fruit and shade trees, shrubbery and berry bushes.

Price— $\frac{1}{4}$ -lb. size, 35c; 1 lb., 85c each.

NOTE:—A complete spray chart is enclosed in each package, showing the uses of this material on flowers, vegetables, shrubbery, berry bushes, trees and other plant life.

Devoe Double Duty and 2-Way Spray

Contains 15% Arsenate of Lead and 85% Bordeaux Mixture—2 results with one spray. Controls insects. Combats Blight, Stimulates Foliage.

Easy to apply—wet or dry—For dusting, apply lightly, as it comes in the package. In spraying apples, grapes, and most vegetables, use $9\frac{1}{2}$ level tablespoons to 1 gallon of water. On pears, sour cherries, egg plant and peppers, use 7 level tablespoons to 1 gallon of water.

Prices— $\frac{1}{2}$ -lb. carton, 25c; 1-lb. carton, 45c; 4-lb. paper bag, \$1.00.

Paris Green

Always uniform, fluffy and free running. Used dry will not clog the dusting machinery.

For potato bugs, use from $\frac{1}{2}$ to $\frac{3}{4}$ of a level tablespoon to 1 gallon of water. Apply as a dust on cotton, using 1 part Paris Green, 1 part flour, 5 parts lime. On tobacco, use as a dust alone or mixed with Arsenate of Lead.

Prices— $\frac{1}{4}$ -lb. cartons, 20c; 1-lb. cartons, 50c; 4-lb. cartons, \$1.75.

Arsenate of Lead

It kills the bugs, sticks to the leaves and does not burn or injure the foliage.

While these qualities make it the favorite spray for fruit trees, it also gives splendid results on vegetables and tobacco.

Arsenate of Lead is recommended to control all leaf eating insects on trees, shrubs, flower and vegetable plants.

When dusting fruit, add 5 parts by-drated lime. Vegetables 8 parts lime.

Prices— $\frac{1}{2}$ -lb. carton, 25c; 1-lb. carton, 45c; 4-lb. bag, \$1.00 Write for quantity prices.

Bordeaux Mixture

Prevents large losses caused by blight, rot, mildew, scab, anthracnose, and certain other fungous diseases, will stimulate plant growth and greatly increase the harvest. On most trees, shrubs and vegetable plants use 8 level tablespoons to 1 gallon of water.

Prices—1-lb. carton, 45c; 4-lb. paper bags, \$1.40.

Lime Sulphur

For dormant spraying in the fall or early spring against Scale, Peach Blight, Leaf Curl and Twig Borer, use 9 to 11 tablespoons to 1 gallon of water.

For summer spraying against Scab, Soot and Blotch, Red Spider and Mites, use from $2\frac{1}{2}$ to 3 level tablespoons to 1 gallon of water.

Prices—1-lb. can, 35c; 5-lb. can, \$1.25; 10-lb. can, \$2.00.

"Sure Noxum"

No Sprayers, No Water, No Mixing. Dust on plants from sifter top carton or through burlap sack. "Sure Noxum" is the strongest garden insecticide of its type on the market—yet safe to use. Ideal to use on vegetables, flowers and shrubs of many kinds. The Bordeaux Mixture in "Sure Noxum" acts in a measure, as a fungicide. Lh. can. 30c.

Fine Chart Telling When and How to Spray Sent Free on Request. Chart Measures 10 x 18 Inches.

CYANOGAS

Cyanogas or Calcium Cyanide is a most valuable insecticide as well as rodent destroyer. Cyanogas is used for the control of ants, grape-leaf hoppers, fleas, chinch bugs, grasshoppers in hatching beds, squash bugs, and many other insect pests, as well as rats, gophers and other rodents. It is also used for the fumigation of greenhouses and bulbs.

With Cyanogas the hydrocyanic gas is gradually liberated and a high gas concentration is avoided. The residue after the gas has escaped is largely ordinary slaked lime which is harmless to stock.

It was used very effective here in Utah in controlling the squash bug Mr. Christensen, County Agent of Weber County, demonstrated this very conclusively on squash bugs. In his experiments he used the "A" Dusting Cyanogas and applied with "the California Beauty Buster" at the rate of 8 pounds per acre. The pest was entirely cleaned up on the area treated. Labor entailed, three hours per acre for one man.

Price—Cyanogas "A" Dust, 1 lb., 75c; 5 lbs., \$2.65; 25 lbs., \$9.50. Cyanogas "G" Fumigant, for greenhouse, 1 lb., 85c; 5 lbs., \$3.50; 25 lbs., \$12.50

Modern farmers demand modern methods of farming, and agree that all legume seed should be inoculated. McQueen's inoculator is the modern legume inoculator—made for farmers—by farmers—to make farming pay. It is field bred and farm grown and is able to give fine results under your field conditions.

McQueen's inoculator is the only nitrogen fixing bacteria this is **ABSOLUTELY GUARANTEED** to give satisfactory results or your money back. This is for your protection. You are the judge of results.

Inoculate your Alfalfa, Sweet Clover, Soy Beans, Vetch, Peas, Beans and Clover of all kinds with McQueen's guaranteed inoculator that hastens maturity, increases the crop, improves its quality, enriches the soil and saves fertilizer bills.

Simple directions for mixing Inoculator with your seed are printed on each and every package of McQueen's. Only a few minutes of your time is required to inoculate your legume seed. Many Master Farmers use McQueen's. Tremendous sales on McQueen's Inoculator enables us to offer this quality merchandise at the following reduced prices:

FOR CLOVER AND ALFALFA

1/2 bushel size Inoculates	30 lbs. seed	\$.50
1 bushel size Inoculates	60 lbs. seed	1.00
3-1 bushel size Inoculates	180 lbs. seed	2.50
6-1 bushel size Inoculates	360 lbs. seed	4.50

FOR SOY BEANS, COW PEAS, VETCH AND OTHER PEAS AND BEANS

1 bushel size Inoculates	60 lbs. seed	\$.50
2 bushel size Inoculates	120 lbs. seed	1.00
3-2 bushel size Inoculates	360 lbs. seed	2.50
6-2 bushel size Inoculates	720 lbs. seed	4.50

GARDEN SIZE

For Garden Peas, Beans, Sweet Peas and Lima Beans .20

Be sure to include McQueen's inoculator with all your Legumes Seed orders.

Always state kind of seed you wish to inoculate.

CUPRO-JABONITE (Copper Carbonate Dust)

U. S. Department of Agriculture recommends it. Convenient and easy to use. Smut is controlled, germination not impaired, stand is better, less seed required. It is conservatively estimated that the farmers of the Northwest alone lost five million dollars last year due to the ravages of smut.

There is no reason why the wheat grower should suffer such losses as his report shows, when it can easily be avoided by treating the seed with Cupro-Jabonite (Copper Carbonate—18-20%). During the last two or three seasons reports from experimental stations have shown that the use of the 18% to 20% Carbonate is equally as efficient as where the stronger grade is used. It has proven quite as beneficial and is available at a much less cost than the Pure Copper Carbonate. The usual way to use it is to put 4 oz. of the dry powder per bushel of seed grain by heavily smutted districts, 3 oz. per bushel for ordinary conditions and 2 oz. where smut is not bad and to tonic the stand. This mixing can be done at any time prior to planting, after which the seed can be allowed to remain with no fear of deterioration of any kind. The mixing can be done by hand with a shovel or in any kind of a mixing machine from a barrel churn to the large concrete mixer used by the wheat interests in the Northwest and Canada. Lb., 45¢; 5 lbs., \$1.50; 100 lbs., \$22.50; 250 lb., kegs \$52.50 each.

(The flower) kills it completely and permanently. It is easy to use and obtains results that are miraculous. Rid your lawn of this obnoxious pest—get a bottle today—it makes Dandelions "curl up and die" and STAY DEAD! One bottle will clean up an average size lawn. Price, \$1.00 each.

K-M-G MORNING GLORY KILLER

The root of the Wild Morning-glory plant is often fifteen feet or more in length. For this reason, it is next to impossible to eradicate it by cultivating.

The one satisfactory way to eradicate Wild Morning-glory, Canadian Thistle, etc., is to kill the root. And that is exactly what K-M-G does. Applied as a liquid spray to the leaves and stems, it is absorbed and distributed throughout the entire root system—killing the entire plant. One or two sprayings solve the Wild Morning-glory problem permanently. Wild Morning-glory treated with K-M-G is dead—dead beyond any chance of resurrection.

An area 35x30 feet requires 1 gallon of K-M-G. An acre of solid Morning-glory requires from 20 to 40 gallons of K-M-G. Mix 1 part K-M-G to 16 of water.

Price—1 gallon, \$3.00; 5 gal. drum, \$12.25; 10 gal., \$17.50; 50 gal., \$75.00; 100 gallons, \$145.00. All prices f.o.b. Salt Lake City.

SEMESAN DISINFECTANTS

AMERICA'S PREMIER AGRICULTURAL DISEASE TREATMENT

Ask for Free Semesan Booklets

Seed disinfectant is now generally regarded as an essential requirement of profitable farming.

Semesan provides the one effective method of controlling the various damping-off diseases. It is being used with wonderful results in all sections of the country on grains, field crops, vegetables, flowers and ornamentals. Brown Patch of grasses, a disease which swiftly destroys the expensive turf of golf greens, estate lawns and tennis courts, can be prevented, and, if treated soon enough, curl with Semesan.

Easily applied—little skill required—at a cost of only 1/4c to 1c per pound of seed. The cheapest crop protection you can buy.

Semesan Jr. is used as a dust disinfectant to control the ear, root and stalk rots of corn. In tests conducted in both Illinois and Iowa by Governments, the Federal and State **Semesan Jr.** increased yields from diseased seed varying amounts up to 38%. These tests confirm the experience of other agricultural experts and practical farmers who report increased corn crop yields from Semesan Jr.-treated seeds of 20 to 40% or more. The 33% increase shown in the illustration, below is the result of Semesan Jr. seed treatment.

Semesan Bel

Applied to whole or cut seed potatoes, either as a dry powder or in liquid form, Semesan Bel will prevent or control the common seedborne potato diseases. Also very effective in treatment of Gladioli and other bulbs, and produces healthier plants. Ask for Semesan Bel Potato Booklet.

PRICES FOR SEMESAN DISINFECTANTS

SEMESAN		SEMESAN JR.	
2 oz.	\$.50	25 lbs.	\$ 62.50
8 oz.	1.60	50 lbs.	122.50
1 lb.	2.75	100 lbs.	240.00
5 lbs.	13.00	300 lbs.	705.00

SEMESAN JR.	
4 oz.	\$.60
1 lb.	1.75
5 lbs.	8.00
25 lbs.	\$ 37.50
50 lbs.	\$ 72.50
100 lbs.	\$ 140.00

Prices for SEMESAN BEL are the same as SEMESAN JR. except there is no 4 oz. package available

K-M-G Dandelion Killer

The old-fashioned, inefficient and back-breaking grief of "grubbing" to get rid of Dandelions is gone forever, and K-M-G Dandelion Killer is responsible. A drop or two of this remarkable new preparation in the center of a Dandelion Plant

HOW TO KILL DANDELIONS WITHOUT INJURY TO THE LAWN

FERTILIZERS AND SOIL BUILDERS

New Whizz Fertilizer

"New Whizz, fills a long felt want for rebuilding fertility in run down and poor soils. The formula for Whizz was carefully worked out by one of the leading Soil Experts of the West. It is scientifically right and its practical value has been fully proved. It not only contains the desired chemical elements so essential but these are combined with organic humus materials in such a manner to insure their being properly assimilated and taken up by plant life.

In the application of "Whizz" the soil is enriched not alone by the plant food elements in the fertilizer itself but also by chemical elements already in the soil heretofore insoluble, which, are now rendered available by the action of the materials contained in this meritorious new fertilizer.

We unhesitatingly recommend "Whizz" as a fertilizer that fully measures up to general soil requirements in this region and as a leader for Lawns, Shrubbery, Vegetable and Flower Gardens.

For lawns used at rate of three to five pounds per hundred square feet; it is so finely pulverized that it can be sown similar to seed.—After applying sprinkle immediately with water.

Prices—25 lbs., \$1.00; \$3.50 per 100 lbs. Write for prices on ton lots.

"Plant Life" Lawn Special

This is a mixture especially for the lawn. A 25-pound package contains more available plant food (nitrogen, phosphoric acid and potash) than is found in 1,000 pounds of ordinary manure, without the disagreeable features connected with it, and at a lower cost. One 25-pound bag will cover a space of lawn 30-40 or 1,200 square feet, though larger applications will give increased results.

Prices—10-oz. carton, 25c; 10-lb., 90c; 25-lb., \$2.00; 50-lb., \$3.50; 100-lb., \$6.00; not prepaid.

Fertilizers are quoted f.o.b. Salt Lake unless otherwise noted, if by mail add extra for postage.

Delicious Vegetables

Colorful Flowers

Velvety Lawns

This is a scientifically compounded fertilizer, according to definite specific formulas designed for special orchard, garden and farm crops. The formulas given below represent proportionate content of Ammonia, Phosphoric Acid and Potash in the order named and all prices quoted are f.o.b. Salt Lake and are subject market changes. Write for confirmation.

Red Steer Formula 4-8-12—For apricots, strawberries, peaches, plums, pears and celery. Use 1000 lbs. to 2000 lbs. per acre. Price \$37.50 per ton.

Red Steer Formula 3-10-10—For apples, raspberries, cauliflower, cabbage, potatoes and tomatoes. Use 1000 lbs. per acre; price \$54.75 per ton.

SPECIAL NOTE—An application of **SULPHATE OF AMMONIA** is very beneficial when weather is cold, to such crops as Onions, Lettuce, Corn and Potatoes, especially when they appear to be making no growth.

STIM-U-PLANT

STIM-U-PLANT is the only complete plant food in tablet form. Guaranteed analysis 11 per cent Nitrogen, 12 per cent Phosphoric Acid, 15 per cent Potash—all of which elements are water-soluble and immediately available to the feeding root-hairs of the plant.

The tablet form is of great value because it gives an exact feeding unit, there is no messy mixing, no unpleasant odor, and gives a maximum efficiency because no food-value lost in scattering, leaching, or run-off of soil surface-water. Makes repotting of plants unnecessary as it replaces the food withdrawn by the growing plant. Easy to use, complete directions with every package. Order STIM-U-PLANT tablets with your seed and plant order. Price: 10 tablets, 15c; 30 tablets, 25c; 100 tablets, 75c; 1000 tablets, \$3.50.

Ground Bone Meal

An excellent fertilizer for all gardening purposes; particularly adapted for fruit trees, roses, and all nursery stock. Should be forked in the soil in the fall if possible. 5 lbs., 15c; 10 lbs., 75c; 25 lbs., \$1.25; 50 lbs., \$2.00; 100 lbs., \$3.50.

Fish and Meat Meal

Very much in demand for celery, lettuce and other garden crops. 25 lbs., \$1.25; 100 lbs., \$4.50. Write for quantity price.

SULPHATE OF AMMONIA

Use only after plants are above the ground. If used in liquid form dilute 2 oz. to gallon of water and do not apply oftener than twice a week.

Apply 75 to 100 lbs. per acre; stimulating growth almost immediately. 5 lbs., 50c; 25 lbs., \$1.75; 100 lbs., \$5.50.

VIGORO

Specially prepared plant food

Clean, Odorless, Easy to Apply

Enjoy Better Lawns, Flowers and Gardens by using Vigoro

There is no secret in having a velvety lawn, colorful flowers, crisp, succulent vegetables, luxuriant shrubbery, and stately trees.

You can enjoy these beauties of nature if you use good seed, plants, bulbs, and the right plantfood. The right plantfood is important because plants must be fed the same as human beings.

VIGORO provides an economical, practical, and effective way to secure finest results. Economical because the cost is only 10c to 20c for every 100 square feet. Practical because it is clean, odorless, easy to apply—can be sown by hand like grass seed or applied with an ordinary kitchen colander. Effective because it contains all of the elements of plantfood required to produce early, vigorous growth, and bring fruit, flowers, and foliage to full development.

Complete directions for applying VIGORO for all plants are contained in every bag. VIGORO should be used at the rate of four pounds per 100 square feet (10 ft. x 10 ft.) in the spring and fall. Use one-half this amount for summer feeding. Using this as a basis, the amount of VIGORO needed for large areas such as parks, large estates and cemeteries can be easily calculated.

Many years of extensive research work and actual growing tests have been devoted by Swift & Company's horticultural experts to the development of a product containing the right kind and amount of plant food necessary to produce the best flowers. As a result of that work, VIGORO, the scientifically prepared plant food, has been developed.

VIGORO is a complete plant food furnishing all the elements necessary to produce strong, hardy plants and flowers of the highest quality. When VIGORO is used it is unnecessary to use such materials as bone meal, liquid cow manure, or sheep manure. VIGORO produces more blooms, increases the size, and improves the color of the flower, besides producing blossoms of lasting quality. Prices f.o.b. Salt Lake. 5-lb. bag, 60c; 25-lb. bag, \$2.00; 50-lb. bag, \$3.75; 100-lb. bag, \$6.00.

Swifts' Red Steer Brand Fertilizer

Red Steer Formula 3-5-26—Recommended especially for onion crops. Use about 1000 lbs. per acre. Price, \$60.50 per ton.

Red Steer Formula 0-8-12—This formula is made up especially to supplement stable manure and should be applied in conjunction with it for all crops where manure is used. Price, \$45.00 per ton.

PET STOCK DEPARTMENT

P.-W.'s CANARY BIRDS

Every singer we sell is known by us to be a singer. Just mention the amount you wish to pay and leave the selection to us. All birds are graded as to singing qualities and range of notes.

We have at all times a complete showing of domestic and imported canaries, both male and female. We are exceedingly careful at all times to keep nothing but the very highest grade canaries obtainable for distribution and can assure you that any of our birds will give complete satisfaction.

St. Andreasburg Rollers—Our imported St. Andreasburg Roller Canaries, with their soft, pleasing, beautiful bell-note that inspires the mind and brings happiness to the heart of everyone that hears them, will surely become a real joy in any home.

The prices of these wonderful songsters are from \$10.00 to \$15.00. Some extra select at \$25.00 each. The \$25.00 Rollers make wonderful breeders and trainers. The colors of these birds range from pure yellow to a dark green. We can also supply female imported St. Andreasburg Rollers at \$5.00 each.

Hartz Mountain Warblers—The imported Hartz Mountain Triller, or Warbler Canaries. The song of these canaries is more loud than the Roller, but beautiful in its variation. A great many like them equally as well as they do the Rollers. The price of these canaries range from \$7.50 to \$10.00. Extra select for training and breeding purposes at \$15.00. Price of female \$2.50.

Domestic Warblers—These birds have a loud song similar to the imported warbler, and are of the same color variations. Our stock are all very good singers. The price for the male birds is \$7.50. Extra select at \$10.00. Females are priced at \$1.50 each.

MISCELLANEOUS BIRDS

We also carry a large stock of fancy birds, including: Bullfinches, Parrots, Macaws, Java Sparrows, Finches, Paroquets or Love Birds, etc.

As the seasons for obtaining the different birds vary, we do not always have all these different kinds in stock, but you will always find at least a variety of different kinds of fancy birds in our cages, including some kinds not listed above.

CARE AND CLEANLINESS

Just a word about how to care for your birds. A bird cannot be expected to keep clean if his cage or aviary is not kept clean. If you use a cage in the house, whenever necessary give it a washing in cold water; (hot water will remove the lacquer of a brass cage). Give the bird or birds a bath daily in summer and twice a week in winter. Take the bath dish out of the cage as soon as the bath is given. Always keep fresh, clean water in the drinking water containers. Use nothing but the very best re-cleaned seeds as feed. You will always find P.-W.'s bird seed clean and fresh. We take the birds health into consideration when offering our bird seed for sale.

Clean the cage thoroughly daily. Be sure to scrape the perches in the cleaning. Keep a liberal supply of gravel in the bottom of the cage or aviary and be sure that the gravel is not dirty or dusty. By all means, at all times keep your bird out of drafts. Place him in a sunny place whenever possible.

If you want advice concerning your pets, call or write us no doubt we can assist you.

Single Spring

CAGE EQUIPMENT

Cage Charm Bells, tiny bells to hang on cage, each...\$0.10
Perches, all lengths, plain wood; give size wanted, each......15
Seed and Water Cups, "Single Point" opal, porcelain, also glass, either 2 for 35c; each......20

Unbreakable Seed and Water Cups, colors match cages, Duco finish, 35c each, 2 for 60c.

Seed and Water Cups, open top, "Tulip Cup," opal, porcelain, also glass, either 2 for 35c; each, 20c.

Seed and Water Cups, closed top, "Shell," opal, porcelain, also glass, either 2 for 35c; each, 20c.

Cuttle Bone Holder, Hendryx No. 1, to hold small piece in place, 15c.

Bath Dishes, porcelain, oval shape, medium size; 2 for 45c; each, 25c.

Bath Houses, glass sides, fits to side of cage; each, \$1.15.

Bird Cage Nests, wire cloth, 4 inches diameter; 2 for 45c; each, 25c.

Nesting Hair; per pkg., 15c.

Cage Springs, single coil, brass, heavy; each, 15c.

Cage Spring; single, with 2-ft. ladder chain, adjustable; each, 30c.

Cage Spring, double coil, brass, prevents cage swinging; each, 30c.

Cage Bracket, brass plated, heavy, swinging, No. 7 wire; 12-inch; each, 30c.

BIRD FOODS AND REMEDIES

Postpaid Prices

Bird Manna, in cakes ready to attach to edge, each...\$0.15
Bird Bitters, Iron Tonic, per bottle......25
Bird Salve, small size can......25
Bird Books, Raising and Care of Canaries......40
Bird Cage Disinfectant......25
Bird Biscuit......10
Bird Ointment......30
Canaradyne, wheezing and Asthma, per bottle......25
Coloring Pepper......25
French's Bird Seed and Biscuit, 10 oz. pkg., each......25
French's Canary Exercise Balls......25
Lice and Mite Powder, with guns......25
Leg Bands for Birds, numbered; per doz......25
Mexican Salve, for sores, package......25
Mite Powder, in bags......20
Nesting Food, Spratt's, package......30
Orange Color Food......25
P.-W.'s Parrot Food, mixed for parrots, 2 lb. pkg......45
Pollicrackers, special biscuit for parrots, 12-oz., ctn......30
Song Restorer, valuable tonic......25

BIRD SEED, ETC.

Not Prepaid, add postage if by mail

Canary Seed, re-cleaned, 2 lbs., 35c.....\$0.20
Cuttle Bone, 5c a piece, 1/4 lb., 30c.....1.00
Flax Seed, medicinal laxative, 1/2 lb., 15c......25
Hemp Seed, re-cleaned imported, 2 lbs., 25c......15
Maw Seed (Poppy), re-cleaned, 1/4 lb., 15c......40
Millet Seed, large yellow, 2 lbs., 25c......15
Oats, steel cut, special bird size, 2 lbs., 25c......15
Rape Bird Seed, imported, 2 lbs., 35c......20
Sunflower Seed, 2 lbs., 25c......15
Thistle Seed, 1/4 lb., 20c......60
Bird Sand, Sterilized, 2 lbs., 15c......10
French's Parrot Food, 1 lb. package......30
French's Bird Seed and Biscuit, 10 oz., pkg......25
P.-W.'s Mixed Bird Seed—We make a very nice mixture consisting of sweet re-cleaned canary, re-cleaned Millet, Hulled Oats and the large Essex Rape. Price, 20c per lb., 2 lbs. for 35c.
P.-W.'s Special Bird Seed Mixture for Roller Canaries—Consisting of Imported Large Sweet Rape and Re-cleaned Canary. This is especially good for your Roller canaries. No waste. Price, 25c per lb.

Brass Cage No. 274, 275
276 Brass Cage Series
1274-5-6

Brass Cage No. 2030DB

Brass Cage 2274-5

BRASS CAGES

All cages which we describe as "Brass Cages" are made of solid brass throughout, there is no plated work of any description. The wires and rails are securely fastened together by rivets. This method permits using the Best Spring Wire and results in a cage unequaled by any other on the market for durability, and lightness.

All edges are rolled over and the hook fasteners are of practical and improved types. Only the best grade of lacquer obtainable is used to protect the high finish which is given to these cages.

No. 274—Polished Brass. (See cut)—10 in. diameter, height 15½ inches, each, \$3.50.

No. 275—Polished Brass. (See cut)—11 in. diameter, height 15½ in. each, \$4.25.

No. 276—Polished Brass. (See cut)—11¼ in. dia., height 17¼ inches, each, \$4.75.

No. 1274—Polished Brass. (See cut)—10 in. diameter, height 13½ inches, each, \$3.25.

No. 1275—Polished Brass. (See cut)—11 in. diameter, height 13½ inches, each, \$4.00.

No. 1276—Polished Brass. (See cut)—11¼ in. diameter, height 15¼ inches, each, \$4.50.

No. 2030—D. B. (See cut)—Diameter 10 inches, height 17¼ inches. Body of cage and cups are finished in color. Base, roof rail and top piece are polished brass, finished in 2-tone red, 2-tone black and 2-tone blue, each, \$8.75.

No. 2274—(See cut)—Finished in red 2-tone, green 2-tone, blue 2-tone, 10¼ in. Diameter, height 13 in., each, \$4.00.

No. 2275—Same style and colors as No. 2274—11 in. dia., height, 13¼ in., \$4.50.

No. 2040DB—(See cut). Brass finished in Red, 2-tone green, 2-tone, blue 2-tone. Diameter 10 in., height 18¼ inches, \$8.50.

Brass Cage No. 2040

Pyralin Cage No. 1400

The colors in our Pyralin Cages and Stands are permanent. This material is smooth and hard and has a rich lustre. It may be washed freely in lukewarm water with soap without harm to the finish.

No. 1400—Finished in black and white; orange and black; amber and ivory; blue and ivory; pink and ivory; and all ivory—state colors desired. Diameter of cage 11 inches, height 19 inches. Each, \$25.00.

No. 1401—Same style and shape as No. 2030 Brass. Finished in Chinese red and black; green and black; green and ivory; state color combination desired when ordering. Diameter of cage 11 inches, height 19 inches. Each, \$35.00.

BREEDING CAGES

With Solid and Wire Partitions, Metal Drawer and Closed Back. Complete with 4 glass cups, 6 perches, and 2 nests.

No. 86S—17¼x8¾ in., height 14 in. \$5.50

No. 86—19½x10 in., height 14¼ in. 6.75

No. 87—22x11 in., height 16¼ in. 7.75

PARROT CAGES

Standard tin wire material and tin base

No. 80-P—14 inches diameter; 23 inches high. Each, \$8.50

No. 85-P—15¼ inches diameter; 24 inches high. Each, \$10.00

No. 90-P—17¼ inches diameter; 30 inches high. Each, \$11.50

BIRD CAGE STANDS

No. 29—Finished in 2-tone red, 2-tone green, 2-tone blue, height 65 inches. (Same style as No. 31. See cut). (Each, \$4.50).

No. 29-A—Polished brass. Height 65 inches. Same style as cut No. 31. Each, \$4.00.

No. 30-A—Polished brass finish. Height 65 inches. Style like that of No. 31, but with full circle top. Each, \$5.00.

No. 31—Solid steel upright and arch duco finish in colors ivory, bronze, green, ebony and gold. Height 65 inches, style see cut. Each, \$3.50.

No. 57—Solid steel upright and arch 65 inches high, finished in Duco colors red and black, green and black, blue and gold. Style cut No. 31). Each, \$3.75.

No. 58—Same material, height, style and color combination, as No. 57 but the top is a full circle. Each, \$4.25.

No. 3150—Wrought iron, height 67 inches in Duco colors, 2-tone gold and blue, red and black, and green. Each, \$3.00.

No. 101—Pyralin, height 65 inches. In colors to match Pyralin cages No. 1490 and 1491. (See cut). Each, \$10.50.

No. 102—Pyralin. Same as No. 101 except top is full circle. Each, \$6.00.

Brass Stand Pyralin Style
No. 31 No. 10 Breeding Cage Style No. 86S
86 and 87

We carry a full line of feed and water crocks for rabbits as other supplies. Write for special information on items of interest not found listed in this catalog.

Mange Remedy (Oily dark color)—For swin disease.....	\$0.60
Distemperine, liquid (tablets)—For distemper.....	.60
Condition Pills with Pepsin.....	.60
Blood Purifying and Cooling Pills—For Eczema, etc.....	.60
Laxative Pills—Keep the bowels right.....	.60
Worm Pills—For the expulsion of worms.....	.60
Vermifuge—liquid—for worms, al lages and breeds.....	.60
Canker Lotion—liquid (tablets), Canker, deafness, etc.....	.60
Puppy Tonic—Weak puppies, relieve colic.....	.60
Diarrhoea Remedy—liquid (tablets).....	.50
Ceoline Dog Wash and Disinfectant—For fleas.....	.60
Killflea—(Dog Soap).....	.25
Skin Medicine—(Colorless) For skin diseases.....	.60
Cough Remedy—For coughs and colds.....	.60
Digestive Tablets—For all forms of indigestion.....	.60
Little Red Worm Bullets—For toy puppies and dogs.....	.60
Chorea Tablets.....	.60
Killflea Powder—For dogs and cats, per can.....	.35
Tape Worm Expeller—Especially prepared for tape worm.....	.60
Fit Remedy, liquid (tablets)—For fits and convulsions.....	.60
Barnes' Vita-Tone—Controls worms.....	.50
Spratt's Catnip Mice.....	.15
Dog Collars, various sizes and styles, each 50c up to.....	1.25

CAL-O-RATION

THE WONDER MEAT FOOD

For Dogs, Ca's, or any Carnivorous Animal

CAL-O-RATION is a cooked, canned, meat product, ready to feed, containing meats, cereals, vegetables and oils. It contains the necessary vitamins and the proper amount of calories necessary for the proper development of any species of Dogs, Cats or Foxes. The amount to feed is regulated by the size of the animal. Generally speaking, animals weighing 8 to 15 lbs. 3 meals in one can, 25 to 30 lbs. 2 meals in one can, 45 lbs. and over, 1 can per day. Best results will be obtained if CAL-O-RATION is fed once or twice a day. To afford the necessary change of diet for dogs, which the dog authorities advocate, is to mix with CALIFORNIA DOG FOODS. Price per can, 20c each; 3 for 50c; 1 case, 4 doz., \$7.80. We stock Ken-L-Ration at the same price as Cal-O-Ration.

GOLD FISH AND SUPPLIES

GOLD FISH

Small Fish about 2 in. long; each 15c to.....	\$.035
Medium Size, 2½ to 3 inches long; each, 35c to.....	.50
Large Size, 3½ to 4 in. long; each 60c to.....	.75
Fan Tails, according to size, each, 50c, 75c and.....	1.00
Tin Pails, for use when shipping fish, are sold at about cost; quart, 15c; 2-quart, 20c; 3-quart, 25c; gallon, 35c; 2-gallon.....	.50
Fish must travel by express. Customers' pay expressage. Pamphlet on Care of Gold Fish FREE with order.	

AQUARIUM SUPPLIES

Fish Food, Imported, Rice Wafer.....	\$0.15
--------------------------------------	--------

CATTLE AND HOG SUPPLIES

BAG BALM (OR HEALER)

This is a splendid remedial agent for the various diseases that attack he udder. Per can 65c each, postpaid.

KOW-KARE

The Best and Cheapest Insurance on the Health of your Cows. Price: Large size, \$1.25; medium size, 65c; six large cans, \$6.25.

Lee's Hog Oil Wormer

Lee's Hog Wormer has proven in thousands of tests that it will positively and unfailingly expel the worms from swine. One quart is 32 doses for pigs weighing from 40 to 75 lbs. Qt. size, \$3.50; half gal., \$6.00 gal., \$10.00

DOG SUPPLIES

Note: Add postage on all sizes if wanted by parcel post. Allow a little extra for weight of packing. CALIFORNIA DOG FOODS are a prepared food containing all the ingredients necessary to maintain health and vigor in the dog. It does away with the cooking and the mess. If good health in your dog is to be maintained you must feed good, clean, wholesome food.

DOG BISCUITS

For grown or Large Dogs, Feed California Meat-Bone Dog Biscuits once or twice a day. Observation is the only means of telling how many biscuits to feed at one meal. Don't feed too much. Dogs are in best condition when not too fat. The biscuits can be fed dry or moist. If fed moist, cook them with vegetables or pour milk, gravy or soup over them. The dry biscuit keeps the teeth and gums in good condition. Gnawing on them produces the saliva so beneficial to digestion. Keep fresh water where the dog can drink at will and give plenty of exercise. If any food is left remove it.

(Bulk: 1 lb., 20c; 2 lbs., 35c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$3.50; 50 lbs., \$6.75; 100 lbs., \$13.50.

Puppy Foods

Puppy Biscuits Nut Bone—

A perfect food for puppies. Puppies should be put on these when about two to three months old and continued until about six months old. (Bulk) 1 lb., 20c; 2 lbs., 35c; 5 lbs., 85c; 10 lbs., \$1.60; 25 lbs., \$3.50; 50 lbs., \$6.75; 100 lbs., \$13.50.

Circles or Ovals—Miniture oval cakes for puppies and dogs. Ideal pocket size (Bulk) 1 lb., 20c; 5 lbs., 90c; 10c, \$1.70; 100 lbs., \$14.00.

Pup. O—Granulated for puppies, for young puppies, shy feeders or those recovering from sickness. (Bulk) 1 lb., 25c; 5 lbs., 95c; 10 lbs., \$1.80; 100 lbs., \$15.00.

Fish Moss, in bunches, tied with lead; when in stock per bunch, 20c; 2 for.....	.35
Dip Nets—4 in. diameter; 13½ in. handle, each.....	.35
Grottoes, similar to Castles; small, 2½ in. high, each.....	.35
Castles, 3 inches high; for ½-gallon Globes, each.....	.40
Castles, 4 inches high; for 1 gallon Globes, each.....	.50
Castles, 6 inches; for 3-gallon Globes, each.....	.65
Fancy Small Sea Shells, assorted.....	.20

FISH GLOBES—Heavy Glass (By Express or Freight)	
1-quart size; round Globes, each.....	\$0.35
½-gallon size; round Globes, each.....	.60
1-gallon size; round Globes, each.....	1.00
1½-gallon size; round Globes, each.....	1.25
2-gallon size; round Globes, each.....	1.75

Blatchford's

CALF MEAL

One pound makes a full gallon of pure milk-substitute at less than half the cost of using milk.

Blatchford's Calf Meal raises calves from babyhood, easy to feed, saves both milk and money. Satisfaction guaranteed with every bag. 25 lb. bag, \$1.65; 50 lb. bag, \$3.15; 100 lb. bag, \$6.00.

No. 5783

**Tycos Incubator
Thermometer**

When used with Stand

When used without Stand

- Incubator—Brooder Thermometer, with legs, each...\$.90
 Brooder Thermometer, each... .70
 Brooder Wood Mounted Thermometer, each... .85
 Reliable Incubator Special Retested, (on stand) ea... 1.25
 No. 5981—Tycos Hotbed Thermometer, special construction for soil, each... 2.50

**Double Unit
Wafer Thermometers
for Brooders and
Incubators**

The double units have a solid post between them, making each wafer independent of the other, so if one wafer should become injured the other would continue to function. They are dependable and accurate and intended for coal burning brooders, oil brooders, incubators or most any place that a wafer thermostat is required. No. 297—Double Unit Wafer. Size 3 in., wt. each 4 oz. Each, 50c; 2 for 90c.

Reliable Egg Scale

EGG SCALES

Reliable This scale grades eggs quickly, easily and exactly. Has a quick double shift, just a flip of the finger, and you can get all weights required with the one shift, thereby taking the place of two scales. It has four steel knife-edge bearings, which guarantee a correct weight and long life. Price \$2.90 each.

**MEASURE
THE EVAPORATION
IN YOUR INCUBATOR
with the
MOISTURE GUIDE.**
IT "SOLVES THE MOISTURE PROBLEM"**MOE'S HANDLED SCRAPER NO. 51**

Made of hard stiff sheet steel, strong and durable. The toothed or rake edge is excellent for cleaning sand or sifted ashes on drop boards. Length of blade 9 1/2 in. Width 4 in. With 30 in. hardwood handle securely riveted to the blade. Weight, 1 lb. Each, 50c.

**TYCOS CERTIFIED
INCUBATOR
THERMOMETER
NO. T5783**

Worth the slight addition in cost. Retested and certified. Makes sure, doubly sure. To the man about to "set" an expensive hatch this reassurance means much. Can be used to test other incubator thermometers. Black scale and white figures, and every single degree graduation engraved directly on the glass tube, and every fifth line and figures stamped on the metal scale. Each in a box with stand and certificate.

Price, each, \$1.25.

PAPER EGG BOXES

Paper Egg Boxes—All styles made of extra heavy cardboard and will carry eggs safely. Shipping weight 2 lbs. per dozen.

Standard—3x4, dozen, 20c; 100, \$1.25; 250, \$3.00.

Standard—2x6, dozen, 25c; 100, \$1.50; 250, \$3.50.

We are car load shippers of Egg Cases and Fillers. Write for quantity price.

LEG BANDS

Spiral Colored Bands—These are made of celluloid and in six different colors, black, red, green, yellow, cerise and dark blue. They can be taken off and put on very quickly and easily and will last a life-time. Birds cannot lose or remove them. They are made in sizes for every breed of poultry, pigeons and baby chicks. Please state breed when ordering.

	12	25	50	100	1000
No. 5—Pigeon	\$0.10	\$0.20	\$0.35	\$0.60	\$4.00
No. 4—Day Old Chick	.10	.20	.35	.60	4.00
No. 8—Mediterranean	.15	.25	.40	.70	6.00
No. 11—American	.15	.25	.40	.70	6.00
No. 12—Asiatic	.15	.30	.55	1.00	8.75
No. 14—Turkey	.20	.30	.55	1.00	9.75

Champion—Adjustable—Best adjustable leg band. Has neat, compact and smooth fastening, with no eating points; easily attached and absolutely secure. Prices, 12 for 20c; 25 for 30c; 50 for 60c; 100 for 75c, postpaid.

Smith's Sealed—Of aluminum and so constructed that by simply crushing a soft rivet they are sealed on the bird's leg, and must be destroyed to be removed. Prices, 12 for 35c; 25 for 65c; 50 for \$1.15; 100 for \$1.75, postpaid. Plain sealers, 75c each.

CHICKEN MARKERS

Chicken Markers—All Postpaid.

Petty's Uerfect Poultry Punch, small hole; each, 30c.

Moe's Ideal Poultry Punch, nickel plated, each, 50c.

NEST EGGS

Lime Nest Egg—Preferred by many as they are unbreakable and more natural in shape and color. Price, 5c each; 40c per dozen. Wt., 2 lbs. per dozen. Postage extra.

Porcelain—Best grade, strong and durable. Each, 5c; dozen, 40c; weight, 1/4-lb. per dozen.

CAPONIZING SETS

Caponizing has become very popular with the poultrymen, as it brings the highest prices in poultry. The capon makes quick, tender meat, and much of it. To make a profit in poultry raising all male birds should be made capons. Very easy to do after reading special book of instructions. Set complete, each, \$1.00, postpaid.

**RELIABLE POULTRY NET
(FOR CATCHING POULTRY)**

This net is made of stout cord attached to heavy galvanized wire 17 inches in diameter, securely riveted to a wood handle 51 inches in length. Users say "it's the handiest tool out for catching 'em." It is equally serviceable as a fish net for landing the "big fellows" that heretofore have been left in the lake. Price \$1.35 each.

Reliable
Poultry Net**MOISTURE GUIDE
(For Incubators)**

The Patterson and Young Incubator Moisture Guide is composed of an Aluminum Holder, which is fastened in the incubator, and a glass tube which is filled with water when the eggs are set. The tube is sealed to show the correct evaporation of the eggs for each day of incubation, as well as for the total period. No incubator is properly equipped without a Moisture Guide as well as a thermometer. Millions of chicks die in the shells each year because of improper evaporation. Price complete, \$1.00 each.

EGG-O-LATUM

Keeps fresh eggs for one year. Simply rubbed on, it seals the egg tight and is air, moisture, odor and germ proof. Eggs put down in August, September or October, are as fresh in January, February or March as when first laid and are worth double the price. Coat the palms of your hands with Egg-O-Latum and then roll and rub the eggs in your hands. You can do a dozen per minutes.

50c per jar—enough for 50 dozen eggs. Add 10c per jar if by mail.

NEW ROYAL BROODER STOVES

Burns Hard or Soft Coal or Coke

The Royal Coal Burning Brooder Stoves are made from the best grey iron castings and are furnished complete with one piece wire-bound extra heavy gauge galvanized iron canopies, which are riveted to heavy cast rings and fit tightly about the top of the stoves. They are guaranteed to burn the fuels listed above satisfactorily.

The No. 1 Stove requires a 4-inch pipe and all other sizes 5-inch.

All Royal Brooder Stoves are absolutely guaranteed to be satisfactory as to material and workmanship and are sold on a money back guarantee.

Automatic Regulation

The fire is controlled by a check draft on the top of the stove and a direct draft below the grate, both automatically regulated by two wafer thermostats which are simple yet positive in action and keep the fire under perfect control, insuring uniform temperature at all times.

Larger Coal Capacity

The most essential feature of the Royal Stoves is the shape and capacity of the fire-pots. The larger the body of fuel the less fuel is actually used and the more sure you are of having a constant, steady fire at all times. The Royal Stoves will carry fire through the night, long after smaller stoves, with unsatisfactorily designed fire-pots have gone out. Thousands of chicks are lost each year by brooder stoves not having sufficient capacity to carry fire throughout the night.

Rocker Type Grates

The grates in the Royal Brooder Stoves are all of the rocker type being much larger in diameter and about twice as thick as the grates put on the average brooder stove. This insures more satisfactory and much longer service.

This BIG new Royal Stove Made in Four Sizes. See Details Below.

New Improved Type. Burns Hard or Soft Coal or Coke. Bigger and Better. Larger Coal Capacity. Larger Pipe.

Burns Soft Coal Successfully

This statement in the past has been badly abused as many manufacturers have declared their brooder stoves would burn soft coal successfully when their construction was such as to not permit their doing so. We call your attention to three features which are necessary in burning soft coal.

1st: Larger coal capacity, because soft coal burns faster than hard coal.

2nd: Larger pipe size and combustion chamber, to prevent clogging from coal tar or soot which accumulates from any slow burning fire, especially more so with soft coal.

3rd: More accurate draft control, because soft coal will check down much more rapidly than hard coal and requires an auxiliary draft to build it back up again.

Sizes and Prices F. O. B. Salt Lake City are as follows:

No.	Chick Capacity	Coal Capacity	Size Hover	Height	Diameter Grate	Shipping Weight	Price
1.....	250.....	23 lbs.	42"	22 "	9 "	78 lbs.	\$18.00
5.....	500.....	35 lbs.	42"	21 1/2 "	9 1/2 "	90 lbs.	23.75
6.....	1000.....	46 lbs.	56"	23 "	10 3/4 "	115 lbs.	29.50
7.....	1200.....	73 lbs.	60"	33 "	12 1/2 "	150 lbs.	34.00

MOE'S AUTOMATIC OIL BROODER

Moe's Automatic Brooder, with Thermostatic Control, uses Kerosene as fuel, and gives a steady, even warmth without fumes or gases. Has a new and improved wickless blue flame burner with perfect combustion, and a cold air chamber around the burner prevents overheating.

The Twin Thermostats automatically control the flow of the oil and the fuel feed pipe is protected by a metal housing through which it passes, connecting the burner with the oil reservoir.

The Oil Reservoir is of heavy glass, capacity one gallon of Kerosene or Coal Oil, which will run the brooder for twenty-four hours or longer without refilling. Can be filled without extinguishing the burner.

The Canopy of heavy galvanized steel, properly insulated to better retain the heat. A thoroughly efficient brooder, no complicated parts, easily adjusted to any desired temperature, and automatically maintains this temperature at all time. Full directions with each Brooder.

No.	Capacity Size Canopy	Chicks	Shipping Weight	Price Complete
226	42 in.	500	42 lbs.	\$17.50
227	52 in.	1000	49 lbs.	20.00

MOE'S CHICK HOVER

No. 154—A dependable and simple lamp-heated brooder at a low price. Capacity 50 chicks. Diameter of canopy 19 in., height of hovering space 6 1/2 in., depth of curtain 6 in., height to top of draft pipe 14 in., weight complete 6 1/4 pounds. Shipping weight 10 lbs. Price each, \$5.75.

LAMPS, BURNERS

And Extras for Incubators and Brooders
Lamp Bowls for No. 3 Burners, galvanized; each (postage 10c).....\$.80
Lamp Burners, No. 3, brass; each.....\$.70
Burner Reducer, fits No. 3 bowl and No. 2 burner.....\$.15
Burner Enlarger, fits No. 2 bowl and No. 3 burner.....\$.15
Wicks, Common, for all sizes; each, 50c; 6 for.....\$.25
Tin Chimney, for No. 2, 30c; for No. 3 burners; each.....\$.35

Non-freeze Fountain

Moe's Adjustable Milk Fountain No. 139

Royal Two-piece Fountain No. 71

Reliable Automatic Float Valve

MASON JAR FOUNTS

Will fit pint, quart, or half gallon Mason Jar. Convenient, cheap, sanitary. Can be used for feed as well as water. Both "Round" and "Star" shaped styles.

No. 0—Galvanized (postpaid), each.....	\$0.10
No. 1—Enameled (postpaid), each.....	.10
No. 32—Star Shaped Tin (postpaid), each.....	.10
No. 133—Star Shaped (Made of Charcoal Tin) For Feeding Buttermilk. Each.....	.15

NON-FREEZE DRINKING FOUNTAINS

These fountains are constructed like Thermos Bottles, so thoroughly insulated that even at zero and below the water is protected from freezing and in hot weather the water remains cool for a long time.

Two-gallon size, shipping wt., 18 lbs.; each.....	\$4.25
Three-gallon size, shipping wt., 23 lbs.; each.....	5.00
Five-gallon size, shipping wt., 27 lbs.; each.....	5.75

MOE'S ADJUSTABLE MILK FOUNTAIN No. 139

Magazine Feeder in Tin Plate. Adjustable up and down to feed slowly or rapidly, for any kind of milk or feed. Capacity about 2 quarts. Has 12 feeder holes. Each, 85c. Shipping weight 1 1/2 lbs. each.

MOE'S IMPROVED WALL FOUNTAIN

Made of galvanized iron in three sizes; covered outlet keeping out dust and dirt.

No. 97—Capacity, 2 quarts; weight 3 lbs.; each.....	\$1.00
No. 98—Capacity, 1 gallon; weight, 4 lbs.; each.....	1.15
No. 99—Capacity, 2 gallons; weight, 5 lbs.; each.....	1.50
No. 74—Capacity, 5 gallons; weight, 6 lbs.; each.....	2.00

MOE'S "TOP FILL" FOUNTAINS

Galvanized iron with double walls, keeps water cold in summer and retards freezing in winter. Fills from the top and feeds automatically. Easy to clean. Made in three sizes.

No. 1—Capacity, 1 gallon; weight, 4 lbs.; each.....	\$1.75
No. 33—Capacity, 2 gallons; weight 7 lbs.; each.....	2.75
No. 34—Capacity, 4 gallons; weight, 9 lbs.; each.....	3.25

ROYAL TWO-PIECE CLEAN OUT FOUNTAINS

These fountains are similar in appearance to Improved Wall Fountains but made from extra galvanized iron with double walls which keeps the water cool in summer and retards freezing in winter. Can either be set on the door or hung on the wall. Covered outlet keeps dust, dirt and litter from getting into water in the drinking pocket.

No. 70—1 gal. capacity; weight, 5 lbs.; each.....	\$1.25
No. 71—2 gal. capacity; weight, 7 lbs.; each.....	1.50

ROYAL WATER FOUNTAIN No. 33

A handy, practical and durable fountain of such capacity that it does not have to be filled so often. Strictly a grown fowl fountain, especially fine for ducks or geese; can be used for either water or feed; cannot be overturned. Easily filled and cleaned and carried by bail. Capacity, 3 gallons; shipping weight, 6 lbs.; each, \$1.85.

P.-W.'s Wizard Automatic Fount No. 1

This fount is regulated to feed buttermilk or water on the vacuum principle. It holds five gallons, and one filling supplies the needs of 500 chicks for 12 hours. Fifty chicks drink conveniently at once. The drinking space is so constructed that it prevents the chicks from getting their feet or bodies wet, and prevents no dirt or litter to befoul the water. The four inch opening in the bottom allows for a thorough washing and cleansing and is closed by an air tight snap cap easily removed by hand. It is made of rust-proof copper-bearing metal. Weight 7 lbs; price, \$4.00 each.

Reliable Automatic Float Valve

For regulating running water. One of the simplest and most efficient automatic water valves on the market. It is made entirely of brass and copper, making it rust-proof and it will wear indefinitely. Capacity about one quart per minute. Can be attached to any city water line, farm water tank, supplying fresh water automatically. Price \$1.00 each.

Mason Jar Fountain

Improved Wall Fountain

Moe's Top Fill Fountain

Royal Water Fountain No. 33

P.-W.'s Wizard Automatic Fount No. 1

Founts and Feeders for Poultry

Bottom Filled Fountain No. 103

An inexpensive fountain, made from heavy galvanized iron. Two piece cone shape, neatly striped with green around top. Easily filled and cleaned. To be used in connection with brooders in brooding larger lots of chicks. No. 103—3 gal. cap.; shipping weight, 3 lbs.; each, \$1.25. No. 16 (Moe's)—1 gal. cap.; shipping weight, 1½ lbs.; each, 55c.

Royal Charcoal Tin Large Buttermilk Fountains

Made from 135 lb. charcoal tin and have two large openings, one on each side, with a piece of spring steel attached to two pieces of metal in the inside; in order to keep the milk from running out when the fountain is filled, when the outer can is slipped down over the inner one, the pressure of these springs opens both holes and permits the feeding of all kinds of buttermilk. No reversing. Easily cleaned and filled. Two sizes.

No. 301	Cap. 1 gal.	Shipping wt. 9 lbs.	Each \$1.35
No. 303	Cap. 3 gal.	Shipping wt. 11 lbs.	Each 2.50

Royal Water Fountains

Same style as Royal No. 303, but made from heavy galvanized iron, double tank construction, of large capacity for grown fowls.

No. 203	Cap. 3 gal.	Wt. 11 lbs.	Each \$2.00
No. 205	Cap. 5 gal.	Wt. 14 lbs.	Each 3.00
No. 208	Cap. 8 gal.	Wt. 17 lbs.	Each 3.75

Royal Buttermilk Fountain
No. 303.

Bottom Filled Fount.
No. 103.

Royal Chick Hopper
No. 56.

Royal Chick Hopper No. 56

Made of heavy galvanized prime sheets, has cone-shaped bottom to keep feed from clogging. Edges of holes are turned under which makes them smooth. Top easily removed for filling; bottom easily removed for cleaning. Height, 12 inches; diameter, 8 inches; diameter of pan, 12½ inches. 22 feeding holes. Shipping weight 27 lbs., capacity 1 pack; each, \$1.50.

Royal Large Capacity Chick Hoppers

Made from heavy galvanized iron with slide top. Turned edges on all holes over feeding trough. Most economical of large chicken hoppers on the market.

No. 424—length 24"	holes 34; cap. 17 qts; wt. 11 lbs; each \$2.75
No. 436—length 36"	holes 54; cap. 26 qts; wt. 16 lbs; each 3.25
No. 42—length 42"	holes 34; cap. 12 qts; wt. 7 lbs; each 1.40
No. 63—length 36"	holes 54; cap. 18 qts; wt. 9 lbs; each 2.00

Moe Chick Hopper

Same style as Royal Large Capacity Hoppers (see cut)

No. 140—length 21"	holes 32; cap. 10 qts; wt. 4 lbs; each \$1.30
No. 141—length 35"	holes 54; cap. 17 qts; wt. 8 lbs; each 1.95

Moe's Buttermilk Feeder Trough No. 138

Buttermilk Feeder Troughs

Feeding Troughs—made from charcoal tin plate, making them safe for feeding buttermilk. Sliding top. Easy to clean. No seams, rivets or solder. Clean sanitary feeders.

No. 137—length 10 in.; 10 holes; wt. 1 lb.; each.....\$0.30
No. 312—length 12 in.; 16 holes; wt. 1 lb.; each..... .35
No. 138—length 20 in.; 20 holes; wt. 1 ½ lbs.; each..... .45
No. 318—length 18 in.; 26 holes; wt. 1 ½ lbs.; each..... .45
No. 324—length 24 in.; 34 holes; wt. 1 ¾ lbs.; each..... .55

MOE'S PEERLESS FEEDERS

Made from heavy galvanized steel, with a large capacity and perfectly suited for either large or small flocks. The magazine or hopper is adjustable up or down for different kinds of mash and feed and can be set to feed slowly or rapidly. Has a removable cover, so it is easy to fill, and the bottom is cone-shaped so the contents will not clog. The vertical feeder holes make it impossible for the chicks to waste the feed. Thirty chicks can feed at one time. Made in two sizes. No. 192—Dia. of base 12 in. 30 feeder holes. Dia. of mag. 9½ in. Total height 12 in. Cap. 10 qts.; wt. 6 lbs., each, \$1.65. No. 193—Dia. of base 12 in. 30 feeder holes. Dia. of mag. 9½ in. Total ht. 18 in. Cap. 18 qts.; wt. 7 lbs.; each, \$2.20.

Peerless Feeder
No. 192

Royal Large Capacity Hoppers

Royal Feed
Troughs
Nos. 212,
218 and
224

Royal Feed Troughs

Extra heavy slide top made from best quality prime galvanized sheets; no sharp or rough edges; well-made trough with slide top. Made in three sizes.

No. 212—length 12"; 16 holes; wt. 2 ⅓ lb.; each.....\$0.35
No. 218—length 18"; 26 holes; wt. 1 lb.; each..... .50
No. 224—length 24"; 34 holes; wt. 1 ½ lbs.; each..... .60

Moe's Sanitary Feeding Troughs

(Same Style as Moe's Buttermilk Feeder Trough No. 138)

Made of best quality iron, with removable tops. Edges turned under. Safe for chicks. Easy to fill and clean.

No. 27—10"; (Double); 10 holes; wt. 1 lb.; each \$.25
No. 28—20"; (Double); 20 holes; wt. 1 ½ lbs.; each .40
No. 58—12"; (Double); 18 holes; wt. 1 ½ lbs.; each .35
No. 59—18"; (Double); 26 holes; wt. 2 lbs.; each .55
No. 60—24"; (Double); 36 holes; wt. 3 lbs.; each .65

DRY MASH HOPPER

Prices are not prepaid, please send postage if by mail

The curved bottom of the Hopper keeps the feed within easy reach of the birds. The gradual enlargement from the top to base prevents clogging. The wire grid and the wires running from the flange through the wire grid prevent any chance of the fowls throwing out or wasting any of the feed. The sloping cover prevents the birds from roosting on the Hopper, and when covers enclosed, it is rat and mouse proof. A trial will convince you that it is a Hopper of the greatest merit.

Dry Mash Hopper

Manufactured of heavy galvanized iron in three sizes.
No. 35—8½ in. wide, wt. 5 lbs.; cap. 10 qts., each. \$1.50
No. 36—12 in. wide, wt. 6 lbs.; cap. 14 qts., each. 2.10
No. 37—18 in. wide, wt. 8 lbs.; cap. 22 qts., each. 2.40
No. 37—24 in. wide, wt. 12 lbs.; cap. 32 qts., each. 3.00

NEW MASH HOPPERS

No. 81—Width 12 in.; cap. 14 qts.; ea. \$2.00
No. 82—Width 18 in.; cap. 22 qts.; wt. 8 lbs.; ea. 2.40
No. 83—Width 24 in.; cap. 32 qts.; wt. 9½ lbs.; ea. 3.00
No. 84—Width 36 in.; cap. 45 qts.; wt. 23 lbs.; ea. 5.50

GRIT AND SHELL BOXES

Grit, shell and charcoal can not be more economically supplied than in one of our inexpensive compartment boxes. Can also be used as a feed hopper for little chicks. Made of heavy galvanized iron in three sizes.

No. 9—For grown birds, 3 comp., wt. 3 lbs., each, \$0.90.

No. 90—For grown birds, 4 comp., wt. 4 lbs., each, \$1.20.

No. 9 Grit and Shell Box

Lee's Geromozone

For Poultry—Never fails to cure Bowel Complaints, Cholera, Roup, Colds, etc. Don't be without it. Price: Liquid, 4-oz. bottle, 40c; liquid, 12-oz. bottle, 75c; 32-oz., \$1.50; ½ gal., \$2.50; gallon, \$4.50. We do not ship the liquid by mail. But furnish tablets at same price, postpaid.

Lee's White Diarrhoea Remedy—The best medicine for this dangerous disease of little chicks. 100 tablets 50c postpaid.

Lee's Egg Maker

Is not a tonic nor a medicine, but a meat food of great value. It will make hens lay, chicks grow, and keep them in a healthy condition. 2 lb. pkg., 50c; 5 lb. pkg., \$1.00; 12 lb. pail, \$2.25; 25 lb. pail, \$4.25. Shipping weight 30 lbs.; 100 lb. drum, \$15.00.

A Triple
Combination
Worm
Medicine
Contained
In An
Insoluble
Capsule

Wormy hens are poor layers, especially in winter, when eggs are high. Worm your birds with **GIZZARD CAPSULES** before cold weather sets in.

Mammoth Mash Hopper No. 8-S

MAMMOTH MASH HOPPER

Large capacity hopper made from heavy galvanized iron of sufficient size to accommodate full hundred pound box of mash. Hopper is larger and wider at the top, provided with slide top which slides on heavy galvanized rolls. Stand is made from heavy galvanized angles and has wooden bars for fowls to rest on. Length of hopper, 36 in., capacity, 100 pounds.

No. 8-S. Hopper and stand complete, packed one to crate; shipping weight, 50 pounds, each. \$13.00

No. 3. 35 in. wide, height on stand 34½ in., wt. 50 lbs., cap. 100 lbs. \$13.00

Lee's Lice Killer

Destroys either by vapor or contact. No trouble to apply; just paint the roosts or wall at night. Rids poultry and houses of all vermin; is prepared exclusively for this purpose, and there is nothing just as good.

Price: Qt., 60c; ½-gal., 90c; 1-gal., \$1.50. Shipping weight: Quarts, 4 lbs.; ½-gal., 8 lbs.; gallon, 15 lbs.

Lee's Louse Powder

For direct application to body of fowl. 1¼ lb. can, 30, mailing weight, 2 pounds; 3 lb. packages, 60c, mailing weight 4 pounds.

Flu-Koff Emulsion and Vapo Spray

Flu-Koff Emulsion is an internal medicine which is largely liberated through the lungs, has a soothing action on the mucous membrane, which allays the cough and reduces the temperature. Vapo Spray is a combination of healing oils which are sprayed in the air of the hog sheds or Hen Houses, so that the fowls or pigs are forced to breathe the Vapors. These products also give excellent results in the treatment of colds and Roup in the early stages. Prices: Flu-Koff Emulsion, 12-oz. bottle, \$1.25; 32-oz. bottle, \$2.25; one-half gallon bottle, \$3.75; gallon bottle, \$7.00. Vapo Spray, one-half gallon cans, \$1.25; gallon cans, \$2.25; 5 gallon cans, \$9.00.

LEE'S "GIZZARD CAPSULE"

FIVE TIMES AS EFFECTIVE AS WORM REMEDIES GIVEN IN THE FEED OR DRINK

Why? It is **INSOLUBLE** and therefore carries through to the gizzard. Here it is ground up, pouring the correct dose in full strength directly into the intestines upon the worms. Furthermore there can be no absorption of the medicines in crop or stomach to cause sickness, throw off feed or laying. No starving birds to force eating of bad tasting food. Gets all three kinds of worms.

Two sizes: Adult, for chickens, turkeys, etc., half grown or older. 50-capsule pkg., \$1; 100 for \$1.75; 500 for \$7; 1,000 for \$12. Chick size for birds, under half grown, \$1 per 100.

PRATTS POULTRY PREPARATIONS

PRATTS POULTRY REGULATOR

(For Health and Eggs)

Has no equal. It is the world's original poultry regulator and has been the standard for over 50 years. Not a dope or stimulant but a natural tonic supplying numerous health necessities required by heavy laying hens and breeding stock. Tones up the system, regulates bowels, aids digestion, sharpens appetite, wards off disease and increases vitality. Added to any mash it makes more eggs. Use it the year round and make bigger profits. Guaranteed to give satisfaction or your money back. 30c, 65c, \$1.30 packages; 12-lb. pail, \$1.85; 25-lb. pail, \$3.50; 100-lb. drum, \$11.00. Add extra for postage. Packed in cloth bags, 12 lbs., \$1.60; 25 lbs., \$3.00; 50 lbs., \$5.65; 100 lbs., \$10.00.

PRATTS POWDERED LICE KILLER

A powerful and economical lice killer that quickly rids your fowls of these profit eating pests. Use it on the poultry, in the nests and dust boxes, etc. Also used to free horses, cows, sheep, dogs, cats, etc., from lice, fleas and other vermin. Easy, safe and effective to the highest degree.

In sifter top cans at 30c weight 1-lb. and 60c. weight 2½-lbs. Add extra for postage.

PRATTS POULTRY DISINFECTANT

Insures poultry health. A cheap, powerful, non-poisonous disinfectant. A gallon makes a barrel of disinfecting solution. Use it freely. Spray it about the poultry houses, roosts, dropping boards, nests and wherever a strong disinfectant is needed. Acts as a deodorizer, germicide, and liquid lice killer. Effective in the treatment of roup, colds and contagious diseases. Quarts, 70c; half-gallon, \$1.20; gallon, \$2.00, weight 10-lbs. Add extra for postage if by mail.

PRATTS ROUP REMEDY

(Tablets or Powder)

Use it as a treatment or preventive. An easy powerful remedy with a long record of success in the treatment of colds, roup, diphtheria, catarrh, etc. Keep a box always at hand, guaranteed to give satisfaction. 30c, 60c, and \$1.20 packages, post paid.

HEAD LICE OINTMENT

Rub a little of this special ointment on the head and under the wings of each little chick and you will not only avoid losses from head lice but also have stronger and healthier chicks. 30c a tube. Post paid.

PRATTS GAPE COMPOUND

Made in two forms for either external or internal use. Equally effective and a safe and quick remedy for gapes in chicks. Use it as a preventive and avoid heavy losses from this trouble. Fully guaranteed. 35c and 70c packages. Post paid.

PRATTS WHITE DIARRHEA REMEDY

Use this in the chicks drinking water for the first ten days and you will avoid losses from white diarrhea and like bowel troubles. This is "life insurance," for chicks that will save you dollars. Very easy to use and fully guaranteed. 30c, 60c and \$1.20 packages. Post paid.

PRATTS SPECIAL COMPOUND

For all sorts of digestive troubles commonly known as "cholera," such as indigestion, diarrhea, sour crop, dysentery, etc. This remedy offers a safe, sure and quick relief. Can be used as a preventive as well as remedy. Always have a package in your poultry medicine chest. 30c and 60c per package. Post paid.

PRATTS RED MITE SPECIAL

Is a powerful preparation put up specially to rid flocks of red mites, ticks, blue bugs, fleas and like blood sucking vermin. It should be sprayed or painted on the roosts, dropping boards, nest boxes, and in all cracks. One application is effective for months. Many times more powerful and effective than ordinary liquid lice killers. Quart, 75c; ½ gallon, \$1.25; gallon, \$2.00. Add extra for postage.

PRATT'S POULTRY WORM POWDER

Worms kill thousands of fowls every year. Twice a year wise poultrymen use Pratt's Poultry Worm Powder. It rids poultry of round, tape and thread worms. Is safe, sure, easy to use and costs only a little over one cent to treat a fowl.

P.-W.'s BABY CHICKS

Baby chicks are a great specialty with us. We recommend the raising of our day-old chicks as the most satisfactory way of establishing a new flock of poultry, or of renewing an old flock, for utility purposes. It is really less expensive to buy chicks than to hatch them in small lots, and you are much more certain of having just the number that you want when you want them. You are saved all the bother of operating an incubator or caring for a setting hen, the expense of maintaining male birds which lower the value of the eggs for table use, and the expense of the incubator, or loss of body weight and time off from laying of the setting hen.

The regular utility grade of **Baby Chicks** that we offer are the product of free range flocks, pure bred, of standard type, carefully culled, and selected for their performance as layers. These flocks have been developed and maintained for years especially for the production of our **Baby Chicks**. They are the very highest quality of flock matings.

We list below the most popular breeds but are in touch with sources of supply of many other strains, so if you do not find what you want in the list below write us, and without doubt, we can supply you.

Terms on Chicks 25 % deposit; Ducks, Turkeys and Goslings 50 % deposit with order, balance C. O. D. Shipping charges prepaid. Live Delivery Guaranteed. We ship orders for 100 chicks and over direct from hatchery; time required for delivery three weeks to one month after order is received.

As prices fluctuate greatly from month to month, kindly write for prices; and quotations will be sent by return mail. We handle the following breeds:

DAY OLD BABY CHICKS (Utility Grade)

White Leghorns, Utility Grade.....
Anconas, Utility Grade.....
Brown Leghorns, Utility Grade.....
Single & Rose Comb Reds, Utility Grade.....
White, Buff & Barred Rocks, Utility Grade.....
Light Brahmas, Utility Grade.....
White & Buff Orpingtons, Utility Grade.....
White Wyandottes, Utility Grade.....
Jersey Black Giants, Utility Grade.....
Heavy Mixed Breeds, Utility Grade.....
Light Mixed Breeds, Utility Grade.....
Black Minorcas, Utility Grade.....

DAY OLD BABY CHICKS (Exhibition Grade)

White Leghorns, Exhibition Grade.....
Single & Rose Comb Reds, Exhibition Grade.....
Buff and White Orpingtons, Exhibition Grade.....
White Wyandottes, Exhibition Grade.....
S. C. Anconas, Exhibition Grade.....

DAY OLD DUCKS, GEESE, TURKEYS

White Pekin Ducks.....
Mammoth Bronze Turkeys.....
Toulouse Goslings.....

PLEASE NOTE!

We Guarantee the full number of BABY CHICKS ordered to be alive, free from cripples, and true to name upon delivery to you by PARCEL POST. Any error or loss must be reported at once and all Valid Claims will be settled either by free replacement or a refund at our option.

Refer to pages 35 to 40 for Chick Feeds, Feeders, Drink Fountains and Remedies. We invite correspondence on all kinds of Grains, Seeds, Feeds, etc., for Poultry and Pet Stock, as prices fluctuate greatly. We handle the following in large quantities and can always give attractive prices: Feed Wheat, Kaffir Corn; Whole and Ground Feed Corn, Rolled Oats, Feeding Barley, Bran, White Shorts, Millet, Sunflower Seed and Field Peas. Weight, Quantity and Prompt Service Guaranteed. Phone or write us.

PRATTS BUTTERMILK BABY CHICK FEED

The original "baby food for baby chicks." As a result it is today possible to raise every liveable chick by using this splendid feed for the first three or four weeks of a chick's life. That is the critical period when the use of Pratts Buttermilk Baby Chick Food will more than pay for itself in the extra chicks you save.

Pratts Buttermilk Baby Chick Food is made of the most carefully selected, high grade ingredients skillfully prepared so that it is mechanically predigested. It furnishes everything needed for health, growth and a sturdy foundation. Leg weakness, diarrhea and other chick troubles are unknown where Pratts is used.

Don't waste time, chicks or money on imitations of Pratts. We guarantee it will give complete satisfaction. Price: 5 lb., 35c; 10 lb., 65c; 25 lbs., \$1.50; 50 lbs., \$2.75; 100 lbs., \$5.25.

PRATTS BUTTERMILK GROWING MASH

Contains beatful dried buttermilk; growth making oatmeal; ground No. 2 old yellow corn; rich wheat middlings; meat scrap and fish meal that make muscle and frame; and nourishing bone and health building wheat bran and sterilized bone meal. Every element is carefully selected, skillfully prepared and mixed as only Pratts know how. It is guaranteed for quality and uniformity. Analysis—Protein, 17.5 %; Fats, 4.5 %; Carbohydrates, 58 %; Fibre, 7 %. Price: 10 lbs., 60c; 25 lbs., \$1.35; 50 lbs., \$2.50; 100 lbs., \$4.75

LET US HAVE YOUR NAME FOR OUR "POULTRY LIST SPECIALS"

Special quotations are made at intervals during the year whenever market fluctuations justify. Several hundred of our Poultry Supply Customers are now on this mailing list. Upon request we shall be glad to add your name so that you may receive the benefit of this special information.

FREE FALL CATALOG ON BULBS, SEEDS, SHRUBS, TREES, ETC.

Ready About Middle of August

Our Dutch Bulbs such as Hyacinth, Tulips, Crocus, etc. come to us in car load lots direct from the best Holland growers. In variety, quantity, quality and price, no better service can be had in America than we offer.

POULTRY FOODS AND REMEDIES—Continued

Prices are not prepaid. If by mail add postage to your order. Prices change rapidly. Write for current poultry price list. If interested don't fail to get your name on Our Poultry List for Special Quotations.

Alfalfa Meal in original sacks of 100 lbs. at \$1.75; write for prices on quantities.

Barnes' Worm Emulsion

This will allay the irritated condition of the intestinal tract, kill the worms, increase the digestive fluids, which will as readily seize upon and devour the worms as they will meaty substance. So instead of attempting to expel the worms, they go back into the anatomy of the chick, thus not only preventing death to the fowl but making use of this enemy to the betterment of the bird.

Under the treatment with EMULSION greater assimilation obtains, so there is a saving of money in feed as well as less mortality and greater growth in the chicks. Price—Pint, 60c; Quart, \$1.00; Gallon, \$3.00; 5 Gallons, \$12.50; 30 Gal. Bbl. \$58.50; 50 Gal. Bbl., \$92.50. Charges prepaid in lots of 1 gallon and over.

Dried Skim Milk As a poultry feed is fast becoming more popular. It is ninety per cent digestible, increases palatability of any feed, aids growth of baby chicks, stimulates egg production. Live lactic acid organisms, per gram 4,000,000. The carbohydrates of this product exist in the form of easily assimilated lactose or milk sugar and the ash constituents are the minerals of milk; the value of which in the feeding of young poultry is well recognized. Lb., 15c; 25 lbs., \$3.00; 50 lbs., \$5.50. Write for quantity prices.

Ful-O-Pep Egg Mash Contains a large amount of Oatmeal from the finest oats in the country, as well as Hominy Feed, Wheat Bran, and Wheat Middlings, all of which are produced in our own mills. To this we have added the best Fish Meal, Meat Scrap, Bone Meal, and Alfalfa Meal that we can buy. Now Cod Liver Meal, especially produced for us, has been incorporated in this feed. To these ingredients have been added the minerals and other materials that are necessary to balance the feed. Be sure to use it according to instructions. 10 lbs., 70c; 25 lbs., \$1.15; 50 lbs., \$2.00; 100 lbs., market price.

Ful-O-Pep Fattening Mash Same price as Full-O-Pep Egg Mash.

Ful-O-Pep Chick Starter Contains a large quantity of Oatmeal from the very finest oats, as well as Hominy Feed, Wheat Bran, Wheat Middlings, Ground Puffed Wheat, Fish Meal, Bone Meal, Cod Liver Oil, Cod Liver Meal, and other valuable ingredients that are necessary to provide the proper variety of proteins, minerals, carbohydrates, and vitamins that are necessary for good growth and rapid development. 5 lbs., 45c; 10 lbs., 65c; 25 lbs., \$1.50; 50 lbs., \$2.75; 100 lbs., market price.

Steel Cut Oats—Valuable food for young chicks and Canary birds. 3 lbs., 25c; 25 lbs., \$1.25; 100 lbs., market price.

P.-W.'s Developing Food and Pigeons' Mixture—Just the food for chicks when they are two months old—after they have grown too large to be fed P.-W.'s Chick Manna. 4 lbs., 25c; 25 lbs., \$1.25; 100 lb., market price.

P.-W.'s Chick Manna (Ideal Scratch Food)—Conceded by all users to be the leading balanced ration of pure grains, seeds, etc., on the market today. It is truly "Health Insurance" to the baby chicks. This splendid preparation is made according to the best formula that science and experience has discovered to date. Scatter about a pint of P.-W.'s Chick Manna on the floor among an inch or two of alfalfa meal for 50 chicks. Only feed as much at a time as they eat up clean, and do not over-feed. 4 lbs., 25c; 25 lbs., \$1.00; 100 lbs., market price.

Full-O-Pep and Pratt's Baby Chick Food are excellent chick starters and should be fed the first few days.

Ground Oil Cake—Is a great milk and butter producer; a most economical cattle food. To poultrymen it is likewise of value in keeping fowls in good health. Price fluctuates. Present prices: 1 lb., 10c; 25 lbs., \$1.25; 50 lbs., \$2.00; market price.

Mammoth Russian Sunflower Seed—splendid for parrots and poultry. Lb., 20c; 2 lbs., 35c; 100 lbs., market price.

Meat Scraps We supply standard brands, fresh, clean and high protein content. It is hard to estimate the great value of meat scraps for growing chicks or laying hens. 3 lbs., 25c; 25 lbs., \$1.50; 50 lbs., \$2.50; 100 lbs., market price.

P.-W.'s Sure Egg Mash

This splendid well balanced mash is mixed according to latest scientific formula. It contains in proper proportion all the essential elements for egg production. The unusual merit of P.-W.'s Sure Egg Mash is best evidenced by its extended use since introduction. Almost without exception wherever tried permanent use surely follows. You too, will be convinced by a trial order. Price—6 lbs., 25c; 25 lbs., 95c; 50 lbs., \$1.65. Write for quantity prices.

Charcoal is indispensable in successful raising; an efficient aid in arresting bowel trouble; it greatly assists in proper digestion and promotes health of poultry at all ages. Two sizes, Fine and Coarse. Price either size: 3 lbs., 25c; 50 lbs., \$1.50; 100 lbs., market price.

Economy Hen Food A balanced scratch ration of pure whole grains. 6 lbs., 25c; 100 lbs., market price.

Ground Bone—As an egg producer, bone is invaluable. 1 lb., 10c; 50 lbs., \$2.00; 100 lbs., market price.

Granite Grit—Is absolutely necessary to supply the fowls with plenty of good, clean grit. Fine, for small chicks; medium, for half-grown fowls; coarse for turkeys, etc. All sizes the same price. 8 lbs., 25c; 50 lbs., \$1.00; 100 lbs., \$1.40.

Flax Seed Meal—One tablespoon full in a mash of each dozen fowls, daily is a great help during the moulting season. Present prices: 1 lb., 20c; 10 lbs., \$1.50; 25 lbs., \$2.75; 100 lbs., market price.

Fleischman's Yeast—For poultry. 1-lb. can, \$1.00; 2½ lb. can, \$2.00.

Oyster Shell (Crushed)—Most important article of food; always keep fowls liberally supplied. 8 lbs., 25c; 50 lbs., 85c; 100 lbs., \$1.40.

Utah Lime Shell—Same chemical content as oyster shell, it has proven to be a very economical feed among local users. Price—8 lbs., 25c; 50 lbs., 50c; 100 lbs., 85c.

Buttermilk Dried—Recognized by a poultryman as an essential to any regular ration. Lb., 15c; 25 lbs., \$3.00; 50 lbs., \$5.50; 100 lbs., market price.

Pratt's Baby Chick Mash See page 41. Same price as Full-O-Pep Chick Starter.

Cod Liver Oil This contains certain necessary life-giving elements, a very important one of which is Vitamin D, without which the chicken cannot utilize minerals in the feed for its body functions. In the winter time especially when the chickens are shut out from the sunshine they are particularly short in this vitamin and Cod Liver Oil supplies this deficiency. The benefits derived from feeding this are less disease, better egg shells and additional strength and vigor. Adult birds should receive two pints per week per 100 birds. Keep oil in tight container in a cool, dark place. Price: Gallon, \$1.75; 5 gallons, \$7.50; 30 gallon barrel, \$40.50.

EPSOM SALTS Used extensively as a poultry medicine. Lb., 10c; 10 lbs., 80c; 100 lbs., \$7.50.

Partial View of the Attractive Lawn of One of Our Salt Lake Customers

P.-W.'s LAWN SEEDS

The lawn is the most important factor in the development of the home grounds. It furnishes the setting for the house and puts the finishing touch on an attractive home. Proper grass seed mixtures cannot be selected and compounded in a haphazard manner. It requires precise knowledge and experience to produce a formula that will meet the varying condition of soil, situation and climate and produce throughout the entire season a beautiful green sward. Through years of experimentation we have developed Lawn Grass Mixtures which we can unhesitatingly recommend. They are composed of only plump, clean, vigorous seeds which are sure to produce satisfactory results.

How to Make a Lawn The ground should be well raked, so that the soil is fine and free from lumps and its surface smooth, even and firm. If a thick, heavy sod is wanted quickly, seed should be sown at the rate of one pound to 150 or 200 square feet. It takes twice as much seed to make a lawn as it does for raising hay and it frequently happens that good results are not obtained on account of scanty seed.

After sowing seed should be well raked in, and on a light sandy soil, well rolled. Heavy soils do not require much rolling when grass is established. The lawn may be much improved by rolling after each cutting. The best time to sprinkle is early in the evening. Lawns always do best if seeded in early spring or latter part of August, but when necessary to seed in midsummer it will be advantageous to furnish a light covering of straw to protect the tender grass from the intense heat of the sun. The weeds and foul grass, which most soils produce, can be kept down and destroyed by repeated mowing.

Among the best fertilizers are "Plant Life," "Vigoro," Bone Meal, "Groz-it" or pulverized Sheep manure. See page 31.

If the lawn is kept clipped fairly short, it will not be necessary to rake the clippings, but they may be allowed to remain where cut and will be washed down among the roots by the rain and furnish a mulch which will be valuable in the hot, drying days of summer. If, however, the grass has been allowed to get so long that a considerable length must be cut, it must be raked. Only the fine clippings should be left upon the lawn.

These fine clippings again go back into the soil in time and add humus.

P.-W.'s Velvet Green Lawn Mixture The best lawn seed experience can suggest or that money can buy. Produces a beautiful, permanent lawn in four to six weeks. By properly choosing early, medium and late grasses a smooth, even green lawn is assured from early spring to late autumn. In P.-W.'s Velvet Green Grass Seed are included only the very best varieties—pure clean and free from foul seed. Sow at rate of one pound to 200 square feet. Price: Lb., 65c; 3 lbs., \$1.85. Postpaid. Not prepaid. Lb., 60c; 10 lbs., \$5.50.

P.-W.'s Lawn Terrace Mixture This produces a fine, green, closely interwoven, velvety surface, which will hold together under the most severe conditions. Price: Lb., 75c. Postpaid. Not prepaid, lb., 70c; 10 lbs., \$6.50.

Shady Nook Lawn Mixture—Prepared especially for shady places where it is difficult to get a turf established. Lb., 75c, postpaid. Not prepaid, 65c lb.; 10 lbs., \$6.00.

White Clover—First class re-cleaned seed. Specially selected for lawn use. Lb., 80c, postpaid. Not prepaid, lb., 75c; 10 lbs., \$7.00.

P.-W.'s Creeping Bent This is the true Creeping Bent Grass, which we are able to offer to the trade this season.

P.-W.'s Creeping Bent has been harvested under closest inspection. Especially recommended for Lawn and Golf Courses, for the reason that it makes an exceptionally fine turf that smothers out dandelions and other weeds. It is an ideal lawn grass, makes a very blue, green color, close sward and adapts itself readily to any soil.

Sow in Fall or Spring 3 to 4 lbs. to 1,000 sq. ft. We offer the best obtainable grade of this species. 4 lb., \$2.00; 3 lbs., \$5.75. Postpaid.

Red Top Grass Fancy re-cleaned solid seed; in popularity for lawn use it is a close second to Kentucky Blue Grass. Lb., 50c, postpaid. Not prepaid, lb., 45c; 10 lbs., \$4.00.

Kentucky Blue Grass The main stay for lawn making our stock is extra fancy re-cleaned heavy seed. The purest and cleanest obtainable. Lb., 70c; 3 lbs., \$2.00. Postpaid. Not prepaid, lb., 65c; 10 lbs., \$6.00.

Red or Creeping Fescue (Festuca rubra)—Because of its good creeping root system this makes splendid turf for putting greens. When used for greens it should be sown alone. It makes a good ingredient for lawn mixture as it does well in sandy soil and in shaded places. Sow in spring or about the first of September. Lb., 65c; 3 lbs., \$1.85. Postpaid. Not postpaid, lb., 60c; 10 lbs., \$5.50.

GRASS SEEDS

Our stocks are critically grown, of highest germination and purity. Prices fluctuate. Write for prices on quantities.

Bromus inermis (Hungarian Brome Grass)—Remarkable drought-resister, not injured by frost. Sow 20 to 30 lbs. per acre. Pound, 30c, postpaid. Not prepaid, 10 lbs., \$2.25.

Orchard Grass—Furnishes pasture three weeks before any other, and after close grazing a ten days' interval is sufficient for another growth. Makes a heavy sod, which remains for years. Sow from 20 to 25 pounds per acre. Pound, 45c, postpaid. Not prepaid, 10 lbs., \$3.00.

Kentucky Blue Grass—Remains green from early spring until snow flies in the fall. It will do well on almost any land. Sow in the fall or spring, 30 pounds per acre. Pound, 70c, postpaid. Not prepaid, 10 lbs., \$6.00.

English or Perennial Rye Grass—Produces an abundance of foliage. 30 pounds per acre spring or fall. Pound, 35c, postpaid. Not prepaid, 10 lbs., \$2.50; 100 lbs., at market price.

Meadow Fescue, Randal for English Blue Grass—Excellent for hay and pasturage. Succeeds even in poor soil, roots penetrate deep, stands extremely dry weather. Sow in spring or fall at the rate of 30 pounds to the acre. Pound, 45c, postpaid. Not prepaid, 10 lbs., \$3.75.

Timothy—Of hay grasses Timothy leads all. Succeeds on clay or heavy loams, lowlands or in mountainous districts, where there is an abundance of moisture. Alone, 12 pounds to the acre, or with clover, 10 pounds timothy and 6 pounds clover. Pound 25c, postpaid. Not prepaid, 10 lbs., \$2.00.

Tall Meadow Oat Grass—Out yields Timothy or Orchard Grass, and affords better grazing, becoming very

Zawadke's Alkali Grass

A new forage plant that will make your alkaline lands productive. A Montana grower has this to say about this valuable new grass:

"My experience with this grass has shown me that on alkali ground that will produce no other crop, it will yield a crop as large as timothy, on first-class timothy land. Its feeding value has been repeatedly demonstrated to be greater than either timothy or red top. It will stand an unlimited amount of water in the spring, and has successfully resisted every drought that has occurred in these parts.

I find that the seed will not germinate on blotting paper nor in loam or earth free from alkali. If sown on land that is too dry, even on alkali land suitable to its nature, it will not germinate until the following year. It seems to become rootbound in from seven to ten years and thrives best where the land has been plowed and disced and quite firmly packed.

The seed is very fine and as it stools it should be sowed very thin for a permanent crop. I have counted as high as 450 stalks in one plant in the third year, and the shortest of these stems was over two feet tall. I think that if properly distributed, no more than two pounds of seed to the acre should be planted.

The seeding can be done any time from September 1 until spring; broadcast right on the snow and not after the snow is gone and land dries off and starts to crack. Use "Cyclone" seeder, sowing two pounds per acre for meadow or pasture.

The seeds find their way into the ground without covering when covered, the seeds are too deep and fail, they lay in the ground for years and come up after they come to the surface again. It is better to keep stock off in the spring, while plant roots are forming and the ground is soft.

When instructions are followed, this grass will grow and produce a large crop, either white or black alkali. It will make a fair crop the first year and a full crop the second year, and stand more summer drought than any grass I have ever seen. The third year will be still better than the second.

It commences to bloom when the head is about half way out of the boot. If the season is very dry, it may not completely head out and it is better to cut it before it bleaches. Cut it under these circumstances when it commences to bleach.

Price: pound, \$2.00. Write for quantity prices.

P.-W.'s "GOLF LINKS" GRASS MIXTURE

Prepared with the object of producing a thick turf that will stand the hard usage suffered by the average fairway. For the Golf Course, Teeling Ground, Football and Polo Fields and other Athletic Grounds, or for the Lawn which has to withstand hard wear, this mixture will give perfect satisfaction. We prefer to prepare special mixtures to suit the location and soil to be seeded. In ordering, please state whether low and wet, high and dry, sandy or clayey as the case may be, and we will send a mixture specially adapted to the condition you name. Where large tracts are shown, we quote special prices.

P.-W.'s Special Golf-Course Mixture for Fair-Greens. 10 lbs., \$6.00; 25 lbs., \$14.00; 100 lbs., \$50.

popular. Sown alone, use 30 pounds to the acre, either spring or fall. Pound, 50c, postpaid. Not prepaid, 10 lbs., \$4.00; 100 lbs., at market price.

Italian Rye Grass—Annual type of English Rye Grass. Pound, 35c, postpaid. Not prepaid, 10 lbs., \$2.50.

Red Top—Reaches highest perfection in moist, rich soil. Sow 25 pounds per acre. Pound, 60c, postpaid. Not prepaid, 10 lbs., \$5.00.

Sudan Grass—Sudan is a tall annual grass, reaching to a height of from seven to nine feet when planted in rows and allowed to mature for a seed crop; broadcasted and cut "in the bloom" for hay, about four feet. It dies each year. Should not be planted until all danger of frost is past.

Plant in rows, thirty-six inches apart using about two pounds of seed: where irrigated, plant in rows eighteen inches apart, using from 4 to 6 pounds per acre.

Yields an immense tonnage excellent for feeding. Price, 1 lb., 30c, postpaid; 10 lbs., \$2.50, not prepaid.

Johnson Grass—This variety is considered a pest in the South, but it is highly valued by stock raisers in this climate on account of its extreme hardness in unfavorable situations. While it is tender and will not endure cold winters, yet it is a good drought resister and is a valued hay grass. Belong to the same family of sorghums as Sudan and resembles it very much in looks and habits of growth. We would recommend sowing it thickly as it does not grow so coarse as when thinly seeded. Sow at the rate of 30 pounds per acre. Price, lb., 30c, postpaid; 10 lbs., \$2.50, not prepaid. Ask for special price on quantities.

P.-W.'s Grass and Clover Seed Mixture No. 1 —For Meadows and Pastures

Our well-balanced mixture is made up of a number of native and acclimated grasses and clovers, blended in such a way as to best suit the climatic and soil conditions found in our intermountain regions. The main varieties of this combination are Kentucky Blue Grass, Perennial Rye Grass, Red Top, Orchard Grass, Meadow Fescue, Bromus. Tall Meadow Oat, Alsike, Red Clover, Lucerne, White Clover. Sow 25 pounds per acre. Pound, 45c postpaid. Not prepaid, 10 lbs., \$3.50; 100 lbs., \$3.50; 100 lbs., at market price.

"Putting-Green"—Salt Lake City

P.-W.'s Special Putting-Green Mixture. 10 lbs., \$8.00; 25 lbs., \$18; 100 lbs., \$70.

P.-W.'s Grass and Clover Mixtures Make Best Dairy Pastures

FIELD PEAS

A wonderful crop for fattening Sheep, Hogs, and Cattle and very valuable poultry feed. It is also a splendid soil builder and cover crop for Market Gardeners, Orchardists and Farmers. In this connection an added value is given by treating the seed with Humogerm. See Fertilizers, page 88.

Culture—Sow in March or early April, although a peahay crop can be obtained if sown as late as in July. Early sowing is best, giving full season for matured crop.

When early sowing is made, 30 to 40 pounds of seed per acre makes a crop. If late sowing is made, 60 to 80 lbs. per acre is advisable, as the crop does not get to matured growth. Thick sowing will aid in choking out weeds.

Canada Field—This is a small-seeded, very hardy pea, vigorous, thrifty, growing 5 to 6 feet; very productive. Can't be beat for all purposes. **Lb., 20c, postpaid. Not prepaid, 10 lbs., \$1.00.** Write for quantity prices.

San Luis Valley—This Colorado stock pea is a hybrid. Very hardy. Can be grown at an altitude of 9,000 feet. **Lb., 20c, postpaid. Not prepaid, 10 lbs., \$1.00; 100 lbs., at market price.**

SUNFLOWER, LARGE RUSSIAN

This has very large single heads borne at the top of a single unbranched stalk usually, and with much more and larger seed than the common sorts. It is used extensively for feeding poultry and is an excellent egg producer. Sow seed as soon as ground is fit for planting corn, in rows three to four feet apart and about one foot apart in row. Cultivate the same as corn. This variety will yield 1000 pounds or more of seed per acre. **Lb., 30c; 2 lbs., 55c postpaid; for larger quantities inquire for prices.**

PEANUTS

Peanuts are a profitable crop where grown in the correct manner. They thrive best in a rich, sandy, loamy soil. Prepare the ground well, laying it off with a shovel plow in rows about 3 feet apart. Plant either in the hull 12 to 15 inches apart, or hull them and plant two kernels to the hill. Cultivate well, keeping the land as level as possible. When they mature, pull them up, turning the roots to the sun. In bright weather they will be cured in 24 hours. After picking, or threshing, the nuts, the vines make splendid hay; 35 to 40 pounds of unshelled peanuts will plant an acre.

Spanish—This variety is the best suited for growing in the North, being earlier. **Postpaid: Lb., 40c; 2 lbs., 65c.** For larger quantities ask for Special Prices.

SPRING VETCH

Valuable for both soiling and as a cover crop. Sow 60 to 75 pounds per acre. Write for prices.

Sand or Hairy Vetch—Hardy, fall variety, growing well that season and remaining green all winter. Prevents washing or leaching of soil and also gathers nitrogen, enriches soil. Valuable for hay or pasture. For hay use 1 bushel per acre, for cover crop 10 to 20 pounds per acre. **Lb., 25c, postpaid. Not prepaid, 10 lbs., \$2.00; 100 lbs., Market Price.**

SORGUM

Early Amber—Furnished a large yield of most nutritive forage, which can be fed either green or cured, and will yield two or three cuttings a year. Broadcast for forage sow 60 pounds per acre. In drills, sow 10 pounds per acre. **Lb., 25c, postpaid; Not prepaid, 10 lbs., \$1.25; 100 lbs. at market prices.**

CLOVER SEEDS

INOCULATE THIS SEED

See page 31

Prices subject to market changes. Ask for quantity prices. Seamless bags extra, at cost. Inoculate All Clovers

ALFALFA

GRIMM—This variety is especially recommended for shallow soils or those underlaid with hardpan. The claim made for it is that in addition to extreme hardness it has spreading roots instead of a single top-root and that it makes underground creeping stems. We offer as follows:

"Blue Tag"—Certified seed, purity 99.50%; Price, 55c per lb., postpaid.

"Purple Tag"—Certified seed, purity 99.50%; removed not more than three generations from stock of introducer. Price, 75c per lb., postpaid.

P.-W.'s Mountain Grown Dry Land). This has been especially selected from highland sections of the Mountain states and grown without irrigation, developing a most sturdy type much to be preferred than seed produced under other conditions. **Fancy Grade, lb., 35c, Postpaid. Not prepaid, 10 lbs., \$3.00; 100 lbs., market price.**

Alsike Clover (Swedish Hybrid)—Is recommended both for sowing with Timothy and also with the Red and Mammoth Clovers, as well as for a hay crop by itself. It does not winter-kill. The use of Swedish Alsike Clover is increasing rapidly; cattle prefer it to other clovers. It is very fine for honey bees. Sow at the rate of six or eight pounds per acre; sown in mixtures, five or six pounds per acre is sufficient. **Lb., 50c, postpaid. Not prepaid, 10 lbs., \$4.00; 100 lbs., market price.**

Medium Red Clover (Trifolium Pratense)—It is sometimes called June Clover, and is a dependable, all-round variety for farmers and stockmen. It makes two crops each year. Sow either in the spring or fall at the rate of fifteen pounds to the acre. **Lb., 50c, postpaid. Not prepared, 10 lbs., \$4.00.**

Prices Fluctuate Rapidly. Write for Special Quantity Prices on All Farm Seeds.

Sweet Clover or Bokhara (Melilotus Alba) White Blossom—As a money-maker this has been rightfully named "Alfalfa's Twin Sister." Its value in the redemption of alkaline lands cannot be over-estimated. It grows in a variety of soils—heavy, light, wet or dry, almost anywhere except in acid soil. Sow at the rate of 10 to 14 pounds per acre. Cover the seed very lightly. **Lb., 30c, postpaid. Not prepaid, 10 lbs., \$2.25; 100 lbs., market price.**

Yellow Blossom (Melilotus Officinalis)—Same family as White Blossom Sweet Clover but it is not so prolific in growth and flowers are yellow instead of white. For bee pasture we believe it to be equally valuable. **Lb., 35c, postpaid. Not prepaid, 10 lbs., \$2.75; 100 lbs., market price.**

Melilotus indica has become recognized as the legume best adapted for green manuring, easily plowed under, and rich as a fertilizer. **Per lb. 20c; 10 lbs., \$1.75, postpaid.**

P.-W.'s Improved Leaming

FIELD CORN FOR ENSILAGE

Of all the crops for ensilage, Corn is the most largely used and without doubt the most profitable. Alive to this situation, we have made Ensilage Corn a speciality and we are now able to offer our customers the most profitable varieties adapted to the climate conditions of various sections of the West.

There is perhaps no crop of more value to the dairy farmer during the hot summer months when the pastures are dry, than a nice green field of fodder corn. Though the varieties of field corn we list can be matured and are profit-

able as a grain crop, it is our opinion the greater value is secured in most sections of the Rocky Mountain states by feeding the fodder green, or using for ensilage.

Generally speaking, the seed should be sown in drills 3 feet apart, using 15 to 40 pounds of seed per acre, depending not only on the soil, but also for the purpose for which silage is to be used. Whenever less grain and more bulk is desired more seed may be planted to the acre, giving a greater amount of leaf and stalk but less ear corn.

P.-W.'s Silo Corn No. 1—This variety is the heaviest yielding corn for ensilage ever introduced in the Mountain States. It is positively the earliest of the tall-growing large yellow Dent corn in cultivation. It is our selection from Improved Leaming and will mature its grain in 100 days, even under unfavorable conditions; and about 90 days where climate conditions are suitable. You will never regret giving it a trial this year. See below for price.

P.-W.'s Silo Corn No. 2—This is a shorter growing variety than P.-W.'s Mountain States Silo Corn No. 1, the height ranging from 8 to 12 feet, depending upon soil and other conditions. Consequently the fodder tonnage is less, but it makes up this loss to a large degree in the increase of grain yield. See below for price.

P.-W.'s Improved Leaming—Ripens in 90 to 100 days. Extra early; not a hardy flinty corn. We can furnish both Utah and Nebraska grown.

Reid's Yellow Dent—Best all around purpose Yellow Dent. Deep yellow, lighter cap; closely packed, slightly rough, grains dented on top. Leaves and stalks make fine ensilage and fodder. Matures in 110 days.

Any of above—Pound 20c, postpaid. Not prepaid, lb., 15c; 10 lbs., \$1.00. Ask for Quantity Prices.

Australian White Flint (90 days)—The earliest and surest variety. Will endure more drouth and cold than any other variety known. Grows to a height of six to ten feet. Price, see below.

Boone County White—A very large white corn something like Silver Mine, but larger and later in maturing. At Davis County Experiment Station last year, it made a larger growth than any other variety. In sections with no shorter seasons than the Salt Lake Valley, this variety should be a most valuable ensilage corn.

Minnesota No. 13—The ears are of handsome appearance bearing 16 to 20 rows of bright, rich yellow, smooth, Wedge-shaped kernels packed closely on the cob from butt to tip. Matures in ninety days.

North Dakota Flint—Excellent White variety very popular. Small cob, early maturing.

Northwestern Dent—Early red dent, extremely hardy—will produce a crop when all other dents fail owing to its frost and drought resistance. Matures in 90 days.

Pride of the North—An exceptionally early Dent variety. Stalks of medium height with broad leaves. For cold valleys where seasons are short it is not excelled.

Australian White Flint

Poor Seeds Are
Dear at Any
Price

MISCELLANEOUS FARM SEEDS

BARLEY

Sow 60 to 90 pounds per acre; on dry land 40 to 50 pounds. Prices quoted are not postpaid.

Blue or Feed Barley—10 lbs., 50c; 100 lbs., at market price.

Club or Brewer's Barley—10 lbs., 60c; 100 lbs., at market price.

Naked, Beardless or White Hullless—No heard, shell hull-like wheat. 10 lbs., 60c; 100 lbs., market price.

Trebi Barley—This variety is a recent introduction in this region. Fast becoming very popular. Yields much heavier, larger kernels than any of the other varieties. Price—10 lbs., 75c. Write for quantity price.

FETERITA

From 20 to 30 days earlier than Kaffir Corn, makes good fodder; in some instances made an excellent yield of grain without having received any rain from the day it was planted until it was harvested. Not postpaid, lb., 15c; 100 lbs., market price.

OATS

Swedish Select—Grain plump, white and very heavy, averaging 40 pounds per bushel. 10 lbs., 60c, not prepaid. 100 lbs., at market price.

New Kherson—Sometimes called 90-day oats, as it has ripened crops in 80 to 90 days. 10 lbs., 50c, not prepaid; 100 lbs., at market price.

Prices On All Farm Seeds Fluctuate Greatly—Write For Quantity Prices. Quotations Will Be Sent By Return Mail

KAFFIR CORN

Is unsurpassed for dry alkali land, on which no better fodder and grain crop grows. Lb., 15c, not postpaid; 100 lbs., at market price.

MILLET

Common—Very early; abundant. lb., 10c, not postpaid. 100 lbs. at market price.

Liberty—A valuable fodder plant. Makes excellent hay. Sow 25 pounds to the acre. 10 lbs., \$1.50 not postpaid. 100 lbs., at market price.

Billion Dollar Grass or Japanese—Sow 40 pounds per acre. 10 lbs., \$1.50 not postpaid; 100 lbs. at market price.

RAPE

Dwarf Essex—The fattening properties of Rape are much better than those of clover; makes splendid green feed for poultry. Ground should be prepared same as for turnips. Sow in June or July, with a turnip drill, in rows two and one-half feet apart, at the rate of two and one-half pounds of seed per acre. It is sometimes sown with spring grain, to provide fall pasture after the grain is cut, also sown at the last cultivation of corn. It may be sown broadcast, either with other fall forage crops or by itself, using one to five pounds of seed per acre. 10 lbs., \$1.75 not prepaid; 100 lbs. at market price.

RYE

Sow 60 to 80 pounds per acre; on dry land 30 to 40 pounds.

Liberty Rye—Same habits as regular Fall rye except larger heads and kernels. Yields from 30 to 50 per cent larger crop than the ordinary variety. 10 lbs., 75c, not prepaid; 100 lbs., market price.

Fall or Winter—A good crop for early fall or spring pasture. 10 lbs., 50c, not prepaid; 100 lbs., market price.

Rosen Rye—This is fast, becoming a very popular variety for winter rye for fall planting. Its chief merits are that it stools more, is hardier, and out-yields the old standard Fall or Winter Rye. Price—Lb., 15c; 2 lbs., 25c, postpaid. Write for quantity prices.

SPRING WHEAT

Early Bart—Leading spring wheat to date, not only for the dry farm, but on irrigated farms as well. It is a large, white-berried, headed variety of finest milling quality. 10 lbs., 75c, not prepaid; 100 lbs. at market price.

All Standard Varieties (Marqua, Dicklow, Club, Sonora, etc.)—Sow 60 to 80 pounds per acre on irrigated land; 40 to 50 on dry land. 10 lbs., 60c, not prepaid; 100 lbs. market price.

P.-W.'s Wonder Bell Pepper

We believe this pepper to be a great find, especially for the market gardener. Its beautiful appearance, regularity in size and shape, make it very desirable for shipping. The plants are of vigorous growth and covered with enormous peppers about 4 inches in length and about 3½ inches in diameter at the top, slightly tapering toward the bottom, (see cut).

Peppers are deep green, turning to brilliant red with very thick flesh of sweet, mild, pleasant flavor. The weight of the average size is approximately 9½ oz. This variety will prove not only valuable for market, but for the Home Gardener as well. Pkt., 20c; ¼ oz., 65c; oz., \$2.00; ¼ lb., \$6.00.

It costs hundreds of dollars annually to maintain our Centerville Trial Grounds. It, however, eliminates guess work and pays handsome dividends in satisfied customers.

P.-W.'s New Wonder Bell Pepper

P.-W.'s New Worlds Record Pea

This is an improved type of Gradus, being slightly earlier, more dwarf, true to type and more productive. Height 2 feet. Vines moderately stout, medium green; pods medium green, 4 inches long, fairly broad, pointed and well filled with 7 to 9 very large, dark green peas of exceptional quality. Bound to win a place with every Market Gardener who will give it a trial. Pkt., 10c; lb., 35c; 2 lbs., 65c, postpaid.

P.-W.'s Early Laxton Superb Pea

This splendid novelty is a semi-wrinkled, extra early dwarf pea. It can be planted much earlier than the fully wrinkled sorts as it does not rot nearly so easily. It is without doubt one of the very best dwarf Peas ever grown. We have found none so near perfection in a Market Gardener's type. It is the best-flavored and the largest podded dwarf growing sort. It is ready and about three days after the earliest smooth sorts, and bears an enormous crop of handsome, intensely dark green, fairly broad and pointed pods, 4 inches long, containing from 8 to 10 large, dark green peas of excellent quality. The vines are 16 to 18 inches high, sturdy, and resist heat well. Our tests show it requires about 60 days from planting for green peas for table use, and 88 days to ripe seed stage. Pkt., 10c; lb., 40c; 2 lbs., 75c, postpaid.

P.-W.'s Laxton Progress Pea

This remarkable new variety is a true wrinkled sort. Trials show last year that green peas were ready for use three to four days earlier than P.-W.'s Laxton Superb. Vines grow to an average height of 15 inches, heavy dark colored foliage. Pods are large, pointed, very dark green color averaging 4½ inches in length. Peas remain tender and sweet for a long time after being picked from the vines. It has dwarf habit of growth, extreme earliness, attractive deep green color combined with the fact that it is a true wrinkled, large podded sort will without question make this a leading market garden type for early use. Pkt., 10c; lb., 45c; 2 lbs., 80c, postpaid.

P.-W.'s Laxton Progress

See page 101 for quantity prices.

P.-W.'s Early Laxton Superb

"P.-W.'s
Golden
Acre"

P.-W.'s Golden Acre Cabbage

A most profitable
extra early mar-
ket variety.

A sure money
maker for the
Market Gard-
ener.

A trial order will
convince you of
its splendid
merits.

P.-W.'s Golden Acre Cabbage is a new, early, round-headed Cabbage which closely resembles Copenhagen Market, in type. As its name implies, it is a money-maker. It is 8 to 10 days earlier than Copenhagen Market but is smaller and can be planted closer. Because of its earliness and fine quality it commands a higher price than any round-headed Cabbage. Pkt., 15c; $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.25. See page 101 for quantity prices.

P.-W.'s Wonderful or Golden Plume Celery

(See Cut)

This new variety is rightly named "Wonderful." It is a decidedly distinct type, ten to twelve days earlier than Golden Self-Blanching and very much superior in eating quality. Plants are very large in size, short, stout, stocky and full of heart. It blanches easily to a beautiful clear, creamy white color. Vigorous grower, disease resistant. Plants grown under favorable conditions average about four pounds. It is decidedly a worth-while sort and no Market or Home Gardener should fail giving it a trial. Pkt., 15c; oz., \$1.25; $\frac{1}{4}$ lb., \$4.00.

P.-W.'s Golden Sunshine

P.-W.'s Wonderful Celery

Mary Washington Asparagus

This is a new development from the Washington rust resistant variety. It comes into market earlier and has all the rust resistant qualities of the old type. The advantage of earliness is, of course, a very great one for all market growers. The shoots are large size, excellent quality, deep rich green color with a trifle purple tint at the tips. Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 45c; $\frac{1}{4}$ lb., \$1.50.

The Klondike Watermelon

A very popular new melon from the southwest. The seeds are quite small, color brown mottled black, while the flesh is a distinctive shade of deep red. The rind is dark green; the shape is long with an average weight of 25 pounds. While more a home garden than a market variety, it is adapted for shipping moderate distances. Though cylindrical in shape, the Klondike tapers slightly toward the blossom end. Edible in 82 days. Size averages 16x10 inches. It is a better shipper than most of the thin rind melons and is proving a favorite with the Market Gardeners in the Salt Lake valley. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c, postpaid. Crown Set Stock Seed, \$2.00 per lb.

P.-W.'s Golden Sunshine--Sweet Corn

This new introduction is a cross between Golden Bantam and that exceptionally early white corn, Portland Early Market. The Sunshine fills a long felt want for a Golden Bantam type which will come on the market earlier than that variety. To compete with the first early white corns. Sunshine is ready for market a week to ten days before Golden Bantam, in fact will be off the market before that variety is ready. The plant growth is more dwarf and the ears closer to the ground. The ears are the same size as Bantam but 12-rowed instead of 8, of equally good color and with a high quality grain. Sunshine will be a Money Maker for the Enterprising Gardener. Pkt 10c; lb., 35c; 3 lbs., 90c, postpaid

See page 101 for quantity prices.

By means of our Centerville Seed Trial Grounds we select only the BEST in both old and new.

See page 101 for Quantity Prices

P.-W.'s Sweet Spanish Onion Seed Field at Our Centerville Stock Seed Farm and Trial Grounds

P.-W.'s Peerless White Onion

Best For Bunching—Valuable For Winter Use—Finest All Purpose Variety in the List.

In our estimation this splendid new variety is the best bunching onion that has come under our observation. We especially recommend it to our Market Gardener customers who desire a bunching onion that will be marketable over an extended period. It holds its tops longer than any other type and comes into market as early as the Pearl or White Queen. It is a true globe form, pure white, solid, ripening evenly. It makes a splendid winter onion and it is a very good keeper. The mature onions grow to a good size, some average from $7\frac{1}{2}$ to 9 inches in circumference. The flesh is white and fine grain and has a good flavor. We are sure that wherever tried this will become a Market Gardener's favorite, and equally desirable for the home garden as a green onion for use during the Summer season. Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.20.

See page 101 for quantity prices.

P.-W.'s White Sweet Spanish

P.-W.'s
White Sweet
Spanish

P.-W.'s Peerless White Onion

P.-W.'s Sweet Spanish Onion

Genuine "Valencia" Type—Riverside Strain

This giant, mild flavored onion was originally imported from Spain and this particular strain was developed by selection at Riverside, California. It is a big, globe-shaped, brownish yellow onion weighing from one to three pounds depending on how it is grown. It has an unusual sweet, mild flavor and in the Salt Lake Valley and sections of similar climatic conditions, if planted early, it can be thoroughly cured, insuring its good keeping and shipping qualities. It has become very popular here and is now the leading onion grown by Market Gardeners in the Inter-Mountain region. Hundreds of carloads are shipped out annually. On good soil this variety produces onions measuring from four and one-half to five and one-half inches in diameter. A yield of two thousand bushels per acre is not uncommon. In the ordinary method of planting here it requires three pounds of seed per acre when planted directly in the field. This is a most popular method in this section. The seed we offer has been grown from selected onion bulbs and we unhesitatingly recommend it as having no superior anywhere. Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

P.-W.'s White Sweet Spanish Onion

This new Spanish type of onion is identical in shape and size and habits of growth to the P.-W.'s Sweet Spanish Onion, Valencia type, described above. The chief difference being the outer skin of the White Sweet Spanish is pure white while the other is a brownish yellow. Our observation of his onion at our own Trial Grounds, as well as experience of growers in the Salt Lake Valley, would indicate that it requires a slightly longer maturity season than the regular type of Sweet Spanish. It has the advantage of the beautiful white skin which makes it a more desirable onion for market. The flavor is unusually sweet and mild. In sections where it can properly be matured it is a good keeper and possesses excellent shipping qualities. The size of the bulb and the yield is just as large as the Yellow Sweet Spanish. Our seed strain has been most critically developed through long selection and we are sure no better seed can be found anywhere at any price. Pkt., 10c; oz., 65c; $\frac{1}{4}$ lb., \$2.25; lb., \$6.50, postpaid.

P.-W.'s Honey Ball

P.-W.'s Honey Ball Muskmelon

Recently introduced, this cantaloupe comes to us from Texas, but thrives generally where other melons will ripen. Perfectly round covered with netting, this variety is claimed to be a cross between honeydew and Cannonball. It certainly has the good qualities of both and with its keeping and shipping qualities it will play a large part in the cantaloupe industry, in our opinion. The flesh is greenish, seed cavity extremely small, and edible to the very rind. While very sweet, yet there is some of the spiciness of the green fleshed cantaloupes which is lacking in one of its parents, the Honeydew. Edible in 100 days. Size $6\frac{1}{2} \times 6\frac{1}{2}$ inches. Weight about $3\frac{1}{2}$ pounds. (See cut). Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., 90c.

Persian Muskmelon

While not properly a casaba, the Persian is also of tropical origin. It shows no trace of ribs and is completely covered with netting. The shape is oblong, the flesh extremely thick and pink in color. It is a large melon, weighing about 10 pounds. Edible in 102 days. Size 12-10 inches.

A good keeper and a good shipper. It should be picked while yet quite solid. Customers should be educated to purchase half a dozen at a time and set them away to be eaten as they become mellow like a Casaba. When properly picked they are ready for the table within six to ten days. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 80c.

You might buy seeds the equal of ours from other equally painstaking seedmen, but we have gone to a big expense to make sure that you can get none better anywhere than **P.-W.'s MOUNTAIN GROWN SEEDS AND TREES.** Let us prove that they really "are more vigorous."

P.-W.'s Longfellow Cucumber

To supply an ever increasing demand for a cucumber which when grown out of doors would have the slender, dark-green appearance of a hothouse product, we present the "Longfellow." This variety, unlike most other sorts, succeeds equally well in the garden or the greenhouse.

The Longfellow is a White Spine type with an admixture of Emerald Blood, from which it gets its intense dark-green appearance. The vines are exceptionally healthy and productive and fairly early. The fruits will average 12 to 14 inches in length by $2\frac{1}{2}$ inches in diameter and are very symmetrical. The color is all that could be desired and this variety will retain its dark-green color when shipped to distant markets. An ideal type for the private garden or as a "straight pack" variety for shipment.

Hale's Best Early Muskmelon

This new variety comes from the Imperial Valley in California. It is a melon of decided merit that will fill a long-felt want in long distance shipping because of its extreme earliness. Checking the several tests on this melon, the average period required is 65 days, and some of the tests were made in sections where the season was remarkable for its coldness. It is a salmon flesh melon of exceptional thickness. The shape is oval. Average size is $8 \times 4\frac{1}{2}$ inches with very heavy netting with fairly prominent ribs. There is no question but what it will be a very valuable market garden variety as it leads the list in earliness among the desirable types of cantaloupes. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 55c. (See back cover for cut).

Super Perfecto (Pink Tint) Muskmelon

A new type of the Rocky Ford, showing a trace of Burrell's Gem. The seed cavity is triangular and the flesh extremely thick, sweet and spicy. There are two strains, the salmon tint and the pink meat, but we believe the pink to be the better. The melons are almost perfectly round, heavily netted, no ribs, and the shipping qualities are splendid. We think the Perfecto will supercede many of the older shipping varieties. Edible in 96 days. Average size, 6×5 inches. Weight 3 pounds. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

See page 101 for quantity prices. To secure earlier melons use Hot Caps. (See page 25).

New Orange Flesh

P.-W.'s Orange Flesh Muskmelon

Undoubtedly the "last word" in the Rocky Ford type of shipping melons and has brought the highest price in every market shipped to. Its appealing deep orange flesh is its distinctive characteristic. It is the most solid, more to the crate. Fruit very uniform in size, nearly with the smallest seed cell of any type and will weigh round and densely covered with a hard gray netting. Recommended for its hardness, prolificness, deep flesh and excellent eating and shipping qualities. **Extra Selected Stock Seed.** Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 65c.

P.-W.'s Longfellow Cucumber

boxed, to high grade markets. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c, postpaid.

See page 101 for quantity prices.

ASPARAGUS

Sow early in the spring, in a bed of light, rich, well manured soil, in drills one foot apart. When the plants become withered, cut them down and spread well rotted stable manure two inches deep over the bed. Let the plants remain in the seed bed until they are about to grow, early in the spring.

For private garden use, set in rows two feet apart and the plants about a foot apart in the row, with crowns four inches below the surface, and spread the roots. For field culture, the rows should be six feet apart and two feet apart in the rows.

Before winter cover the transplanted beds with about four inches of manure and fork it in the next spring, being careful not to injure the roots. In autumn cut the ripe tops and burn the refuse. One pound of good fresh seed will produce plants sufficient for an acre, and an ounce of seed will sow a fifty-foot drill.

Conover's Colossal—The standard variety for all purposes. Large, thick, wide, tender shoots of very greenish-white color.

Barr Mammoth—Large and tender.

Palmetto—Light green.

P.-W.'s Early Giant Argenteuil—Special strain of this famous Parisian Asparagus. Grows to a large size, free from rust, superb flavor. Locally a favorite for canning.

Any of above—Pkt., 5c; oz., $\frac{1}{4}$ lb., 35c, postpaid.

Washington Rust Resistant Most uniform in type; blight and rust resistant; large and excellent quality. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

New Mary Washington—See Novelties, Page 48 and back cover page.

See page 101 for quantity prices.

Asparagus Roots

Strong one year-old roots of any of the varieties listed above, 30c per doz.; \$1.50 per 100, postpaid. Not prepaid \$1.00 per 100; \$8.00 per 1000.

Two-year-old roots—50c per doz.; \$2.75 per 100, postpaid. Not prepaid, \$1.75 per 100; \$12.00 per 1000.

CHIVES—Allium Schoenoprasum

An onion-like plant used as a salad and for flavoring soups. Also, the plant makes an excellent ornamental garden bed edging which may be frequently cut, a new growth of leaves appearing soon after each cutting. One sowing will answer for about three years. Pkt., 10c; $\frac{1}{4}$ oz., 25c; oz., 85c. **Plants:** 25c per bunch; two for 45c, postpaid. Not prepaid, 20c each; \$2.00 per dozen.

ARTICHOKE

Artichokes are cultivated for the edible bud that resembles the giant thistle. The plants want a very rich soil and plenty of moisture. The seed should be planted in boxes in February and transplanted in the field about the latter part of March or April. With slight winter protection they will remain in bearing three or four years.

Large Green Globe—The most popular variety, buds large, globular, deep green, with a slight tint of purple at base. Pkt., 10c; oz., 50c.; $\frac{1}{4}$ lb., \$1.85.

Jerusalem (Tuberous Rooted)—For hog pasture. When once established it is hard to kill out. Lb., 20c; 10 lbs., \$1.50, postpaid. Not postpaid, 100 lbs., \$7.50.

Brussels Sprouts

The plants are very hardy and grow from two to three feet high, bearing a large mass of leaves at the top. The sides of the main stem are covered with three or four dozen small cabbage heads which are broken off and cooked the same as cabbage, which see for cultural directions.

Odense Market—Produces an abundant crop of firm, well formed sprouts, thickly set around. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 85c.

Odense Market

Chicory

Sow seed the same as for late cabbage plants. The crop of green may be transplanted and set a foot apart in the rows. Best after being touched by frost. One ounce will produce about 3,000 plants.

Large Rooted Madburg—Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., \$1.00; 1 lb., \$3.00, postpaid.

Collards

Sow seeds as early in the spring as the ground can be prepared in a rather light, moderately rich soil, in drills two or two and one-half feet apart, for either garden or field culture. When plants are sufficiently large, thin to six inches apart in the row. Cultivate well and in the fall dig the roots, slice them and dry in an apple evaporator or kiln constructed for the purpose.

Creole or Southern—Cabbage, Greens, used as a substitute for cabbage in the south. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 70c; 1 lb., \$2.00, prepaid.

Corn Salad

Sow in spring in drills a foot apart; it will mature in six or eight weeks. For winter and early spring use, sow in drills in August or September. Three ounces to 100 feet of drill. Large seeded.

Broad Leaved—Pkt., 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50, postpaid.

BEETS

One Ounce 50 Feet; 4-6 Pounds per Acre

The soil best suited for beet culture is that which is rather light and well enriched. Sow in drills one foot apart and one inch deep, as early as the ground can be worked. When the young plants are two or three inches high, thin to five or six inches. The young plants that are pulled out make delicious "greens," considered by many superior even to spinach. It is a common practice to plant the seed extra thick to assure an abundance of these tender, fresh plants to use for this purpose. Sowings should be made for succession at least once a month up to the first of July, then making a large sowing to produce a supply of well grown roots for winter use.

After repeated comparative tests we recommend P.-W.'s Early Wonder as the best first early for market gardeners. For all purposes and general planting the Detroit Dark Red is still the leader.

P.-W.'s Dark Leaved Globe Beet

A Real Asset to the Beet Family

We believe this new variety to be without equal for either the market or home garden and will also become a favorite for canning. The tops are small and upright in habit of growth allowing close planting. The leaves are deep green, stems and veins of the darkest red. The roots are uniformly globular, possessing a deep blood red smooth skin, flesh rich dark red zoned with a lighter shade, very sweet, crisp and tender. Its uniformity in shape, size, color and productiveness make it a strong asset to the Beet Family. You will make no mistake in giving it a place in your garden this year. Price—pkt., 5c; oz., 15c; ¼ lb., 50c, postpaid.

P.-W.'s Dark Leaved Beet

Crosby's Egyptian—This is more globular in shape than the Earlier Egyptian, and one of the best known and most popular varieties. It is very early and of fine quality. Bright red with clear vermillion flesh. Our choice as a first early. Pkt., 5c; oz., 10c; ¼ lb., 35c, postpaid.

Detroit Dark Red Extended experience has shown this variety to be the best deep red turnip beet. Tops small, upright growing, so that the rows may be close together; leaves, stems and vines dark red, blades green; roots globular or ovoid, peculiarly smooth; color of skin dark blood red, flesh bright red zoned with a lighter shade, very crisp, tender and sweet, and remaining so for a long time. Pkt., 5c; oz., 15c; ¼ lb., 35c, postpaid.

Early Wonder Beet This comparatively new introduction is the earliest of the table varieties. It is globe shape and very uniform in size, skin smooth, flesh a deep blood red, making it especially desirable for pickling and canning. The tops are small and deep colored. It is fine flavored, remaining tender and crisp for a long period. For a first early type it is unexcelled either for home use or market garden. Pkt., 5c; oz., 15c; ¼ lb., 35c, postpaid.

Extra Early Egyptian—Popular early forcing or market beet.

Eclipse—Almost as early as the Egyptian, but of much finer quality.

Improved Blood Turnip—Very regular, a deep blood red, exceedingly sweet.

Any of the above, except where noted, Pkt., 5c; oz., 10c; ¼ lb., 35c, postpaid.

SWISS CHARD (Large-Ribbed Spinach Beet) (The City Man's Garden). This vegetable gives maximum returns for minimum space. Sow early in spring, in rows sixteen inches apart, and thin out to six inches apart in the rows. It can be used all summer when spinach is not available.

Lucullus Swiss Chard—A new moss curled sort. Very large leaves. The mid-ribs are very broad and form a good substitute for asparagus during the summer months. The leaves are very large and tender and may be cut continuously from June until frost; cooked and eaten the same as spinach. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25

SEE PAGE 69 FOR STOCK BEETS

Outline Chart Illustrating Beet Types and Their Relation to the Ground Line

STRINGLESS BEANS

Most people concede there is very little difference either in flavor or tenderness between the wax-podded and the green-podded types. Precisely the same culture should be given to each. In both classes there are round and flat podded varieties; it is thought the round are a little more brittle and the flat are better yielders.

Culture—Beans are somewhat tender, but it often pays to take some risks. Plant in warm, loamy soil at the beginning of settled, warm weather in spring, and at intervals for succession until August. Rows may be made 2 feet apart, and the beans planted a few inches apart in the drills, or 3 or 4 beans in hills, 6 to 8 inches apart. 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. 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. One pound will sow 100 feet of drill, 60 lbs. per acre.

IT IS NOT GENERALLY KNOWN THAT—

When your bush varieties of string beans have borne a crop don't pull them up but as soon as you have finished the last pickling, cut the bush off about six inches above the ground. A new growth will appear and in a remarkable short time bear another crop of beans. The same is true of Fordhook Limas.

Green Podded Beans

The green podded beans are by far more popular, and much more universally grown than the wax varieties. Burpee's Stringless Green Pod is the popular favorite wherever grown and used. As a home garden variety it is in a class by itself, but is too tender for shipping any distance, and rather light colored for canning. It is medium early and quite productive. Giant Stringless Green Pod is a larger type of Burpee's Stringless Green Pod, bush and pods larger and a deeper green, more productive and a few days later. A decided favorite with the market gardener on account of its large pods and heavy yielding qualities.

The yield of beans can be greatly increased by seed inoculation. See page 31 for prices.

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, or 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 and brownish circle about eye. Bountiful is a most desirable early sort for snaps for the home garden.

Price—Any of above varieties, Pkt., 10c; 1/2 lb., 25c; lb., 40c; 3 lbs., \$1.00, postpaid.

Wax Podded Beans

New Pencil Pod—This variety is our selection as the best for the home garden or for near-by markets. It is extremely productive, bearing magnificent, straight, pencil-shaped pods, six to seven inches in length, of a rich golden-yellow color; beautifully rounded, meaty, deeply saddle-backed, fresh, brittle, solid and entirely stringless and of mild, sweet flavor.

Round Pod Kidney Wax (Brittle Wax)—An excellent early, round-podded, stringless variety of highest quality. Pods 5 to 6 inches long and of a light yellow wax-like color. Seed white with brownish-black eye.

Price—Any of above varieties, Pkt., 10c; 1/2 lb., 25c; lb., 40c; 3 lbs., \$1.00, postpaid.

Giant Stringless Green Pod—An immense type of "Improved Early Valentine" and nearly as early. The pods have all the excellent qualities of the original with much greater size, which greatly improves the appearance. A splendid succession sort to Stringless Green Pod.

Burpee's Stringless Green Pod—Excellent early variety. Unexcelled for canning. A standard everywhere.

Early Red Valentine—Early, tender, heavy yielder.

Black Valentine—Pods long, straight, heavy yielder; rustproof.

Refugee or One Thousand to One—Pods about five inches long, round curved, light green, slightly stringy. Used extensively for canning.

Challenge Dwarf Black Wax—The pods are quite round, very fleshy, crisp, tender and stringless. A good market sort, being a prodigious yielder.

White Kidney Wax—Hardy, productive, desirable where white-seeded midseason sort is wanted.

Improved Rust-Proof Golden Wax—Early, productive; pods are long, nearly straight, broad, flat, very fleshy; good snap bean.

ORDER EARLY

In January and February, if possible, before the Spring rush begins. March and April are our busy months and our full force works day and night under top pressure. We allow you 5% discount for the privilege of filling your order BEFORE MARCH 1.

5%

Stringless Green Pod

POLE AND RUNNING BEANS

These beans require a pole or trellis to climb on, if planted in the garden, although if raised in the open field they need no support whatever. Set poles four feet apart each way and plant four to six beans about one inch deep around each pole. Thin out to three plants to a hill, if soil is rich. Pinch off ends of plants when they overrun poles, to get more perfect growth below. One pound will plant about 75 to 100 hills.

Kentucky Wonder or Homestead—The pods are very thick, meaty and deeply saddle-backed and entirely stringless. Bright yellow in color. The best variety of this class for all purposes. Pkt., 10c; ½ lb., 20c; lb., 35c, Postpaid.

Lazy Wife—Pods medium dark green color, grown in abundance; measures from 4½ to 6 inches in length, broad, thick, fleshy and entirely stringless. Make excellent shell beans. Pkt., 10c; ½ lb., 20c; lb., 35c, Postpaid.

Pole Lima (King of the Garden)—Pods large, straight and handsome. The pods frequently contain five or six very large beans. These beans are of excellent quality, easily shelled. Pkt., 10c; ½ lb., 20c; lb., 35c, Postpaid.

Scarlet Runner—This well known and old fashioned climber has a bright scarlet pea-like flower. It not only holds its place as a flower, but the pods when young are fine quality for cooking. Pkt., 10c; ½ lb., 30c; lb., 55c.

Kentucky Wonder (Old Homestead)

DWARF LIMA BEANS

We recommend the Dwarf or Bush type as being much more desirable than the Pole Limas. They are of easier culture as the vines require no support; the beans are fully equal in quality and yield, maturing much earlier; a very decided advantage, especially for the Mountain States. Plant the seed, if possible, in rich light soil after all danger of frost is over. For kitchen garden the rows should be about 18 inches apart and for field cultivation two or three feet; drop the seed 3 to 4 inches apart in the row covering 1½ to 2 inches deep; to six beans in a hill. Limas will not thrive in over moist soils. Of the great number of varieties tested out we have selected two which we think best adapted.

Fordhook Bush Lima—The highest quality Bush Lima Bean, it is the old "Potato" or "Kummerle" improved. This new sort grows very erect, does not come in contact with the ground as did the older sort, named above; pods are twice the size of the "Kummerle" and contain 4 to 5 large, thick, beautiful green beans. In contrast with the old sort, which was dry and mealy, this new Fordhook is tender, sweet and juicy; a richly palatable bush lima bean. Pkt., 10c; ½ lb., 25c; lb., 40c, postpaid.

Burpee's Improved Bush Lima—Our trials show this to be the earliest maturing of all the large-seeded Limas, and it is the equal or better in all the other qualifications that go to make up a desirable bean, either for the home garden or for market. This variety is decidedly best for all purposes of the Large Limas. Pkt., 10c; ½ lb., 25c; lb., 40c, Postpaid.

Henderson's Bush (or Dwarf Sieva)—This variety is sometimes known as "Butter Bean." It is one of the earliest dwarf sorts, extremely hardy and productive. The plants grow without runners and continue to grow and set pods until killed by frost in the fall. Pkt., 10c; ½ lb., 20c; lb., 35c, postpaid.

SHELL BEANS

All of the sorts we list under this division are grown exclusively to use as shell beans for winter use. They are grown extensively as a field crop. For horse cultivation they should be sown in rows three to four feet apart, dropping about three seeds to the hill one foot apart in the row. Bean drills are used on large acreages. The quantity per acre sown varies with the sort and soil condition all the way from 10 lbs. to 40 lbs. per acre. For dry situations by all means use the Mexican Pinto, but where water is plentiful and you are growing for market, the White Navy is the best known commercially. The Pink Eye is a splendid variety for home use.

Great Northern—Very popular white shell bean, similar to **White Navy** being a little more elongated and a trifle larger. Pkt., 10c; lb., 20c, Postpaid.

Mexican Pinto—Decidedly rich in food value; extra heavy cropper. Pkt., 10c; lb., 25c, Postpaid.

Pink Eye—Large winter shell bean; white with pink spot at center. Pkt., 10c; lb., 25c, Postpaid.

White Navy—The well known small white Boston baking bean. Pkt., 10c; lb., 20c, Postpaid.

English or Broad Windsor—Immense size; known as the horse bean. Pkt., 10c; lb., 35c, Postpaid.

Mexican Red—Valuable red shell bean in demand for making "Chili." Pkt., 10c; lb., 20c, Postpaid.

Market Gardeners and Large Buyers See Page 101 for Quantity Prices on All Varieties of Beans.

Inoculate Beans. Helps make a bigger crop and improves the soil. See page 31.

Burpee's Improved Bush Lima.

BEETS—For Stock Feeding

The tremendous importance of stock beets to every stock and dairy farmer in America should be shouted from the housetops. The farmer who is not awake to the money making possibilities of this crop has overlooked one of the most profitable crops known to agriculture. Just think of it: **A yield of from 20 to 60 tons per acre and the feeding value, pound for pound, almost equal to grain;** conservatively figured, just the average yield, therefore, would be the equivalent to a 1,000 bushel yield of oats, as far as feed value is concerned.

Culture—Sow seed in drills 24 to 30 inches apart and thin to about nine inches in row. Requires 8 to 10 pounds of seed per acre.

P.-W.'s Giant Sludstrup Wonderful yield, and rich in food value. It grows cylindrical in shape and largely out of the ground; easily harvested, and its shape prevents it being broken in handling. Cross as high as fifty tons to the acre are not unusual. Color of skin reddish yellow above the ground and light rose tint underneath. Flesh firm, crisp and very rich in sugar. Extremely desirable for stock feeding.

Giant Half-Sugar White Mangel—This magnificent half-sugar beet, while giving nearly as large a yield of easily grown and harvested roots as a crop of Mammoth Long Red Mangels, supplies a food of very much higher nutritive value, the roots for feeding purposes being really more valuable, pound for pound, than those of the very best strains of sugar beet, and the yield under equally favorable conditions is more than double. The roots grow partly out of the ground and crop can be harvested and stored at less expense. We are certain that everyone who plants this variety and grows it with care will be much pleased.

Improved Mammoth Long Red

Mangel This is truly a mammoth, a single root often weighing twenty pounds. The extra large, long roots are blood red in color and very nutritious. Enormously productive, yielding under favorable conditions, as high as 70 tons per acre. Our stock of

improved Mammoth Long Red Mangel is a selection and the roots are very large, uniformly straight and well formed; color, deep red; roots straight, tops small.

Danish Red Giant Eckendorfer—Of cylindrical form growing above the surface; heavy cropper.

Golden Tankard—Flesh yellow, differing from others; sheep prefer it; a heavy yielder.

Royal Giant or Half-Sugar Rose—Similar to the Giant Sugar, except color of skin.

Sugar Beets

Usually planted for sugar making. On account of the amount of saccharine contained in the Sugar Beet, it is much relished by stock, and as a fattener it is very desirable, but does not yield the tonnage that is common with the regular Mangel Wurtzels and the Half-Sugar Stock Beets. Culture same as stock beets.

Klein Wanzleben—This variety is the best in cultivation, not largest, but richest in saccharine.

No dairy farmer or stockman can well afford to be without a liberal planting of Stock Beets. A most profitable Farm Crop.

Giant Half-Sugar Mangel

Any of the above, Pkt., 5c ¼ lb., 20c; 1 lb., 50c; 10 lbs., \$4.50. See page 101 for special prices on quantities.

Remember Our Prices are based on delivery to your Express or Post Office. You do not have to bother about transportation charges. WE ARE THEREFORE JUST AS NEAR TO YOU AS YOUR POST OFFICE. ALL charges are Prepaid and Safe Delivery Guaranteed.

Danish
Sludstrup

Mammoth
Long Red

Giant
Eckendorfer

Golden
Tankard

Giant
Half Sugar

Sugar Beet
Klein
Wanzleben

Showing relative sizes, shapes and relation to Ground line of various Stock and Sugar Beets.

CARROTS

The Carrot is one of the most wholesome and nutritious of our green roots, supplying those precious vitamins so necessary for a health diet. When half grown it is one of the most tender and delicious vegetables and deserves to be more extensively used.

Sow at any time in spring in deep, loose-soil, preferably sandy loam about one-half inch deep, in rows eighteen inches apart and thin to three inches apart. Water freely at all times. One ounce 150 feet of row, 4-6 lbs. per acre.

Table Varieties

P.-W.'s Chantenay (The Market Gardener's Favorite.) Tops medium sized, necks small, roots tapering slightly, but uniformly stump-rooted and smooth color, deep orange-red flesh, very crisp and tender. Although this is a medium early sort it furnishes roots of usable size as early as any; it is a heavy cropper and is undoubtedly one of the best for both the market and private garden, while its great productiveness makes it very desirable as a field sort. Pkt., 5c; oz., 10c; ¼ lb., 35c.

Danvers Half Long An old, popular variety and in the past the most largely used, not only for stock raising, but for table use as well. The perfect type is about eight inches long and about two and one-half inches wide at the shoulder, tapering to a sort of half-point at the bottom. Color is a bright orange scarlet; is very heavy cropper. Pkt., 5c; oz., 10c; ¼ lb., 35c.

P.-W.'s Coreless—see novelties page 48.

St. Valery—Much longer than Danvers Half-long, reddish orange color. Makes an excellent table carrot, and its heavy yields renders it valuable for field use. Pkt., 5c; oz., 10c; ¼ lb., 30c.

Early Scarlet Horn—Deep red flesh, tender and delicate. Pkt., 5c; oz., 10c; ¼ lb., 35c.

Nantes (Half-long Scarlet Stump Rooted)—This is a market garden favorite. The mature roots average about 6 inches in length, smooth, orange color flesh yellow center, very tender of finest quality. Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., \$1.00.

Oxheart (Guerand)—Very distinct and desirable, smooth and handsome, thick and blunt-rooted, about 6 inches long, a rapid grower and of fine quality; color, orange-red; a good all-season Carrot. Pkt., 5c; oz., 10c; ¼ lb., 30c.

See page 101 for prices on quantities.

Stock Carrots

Sow in drills far enough apart for horse cultivator and thin out in row to 5 to 6 inches. Requires about three pounds of seed per acre.

We consider the **Improved Short White** the best Stock Carrot, all things considered. If a yellow carrot is wanted **Improved Long Orange** will give good returns.

Improved Long Orange—A well-known standard sort, roots long, thickest near the crown, tapering regularly to a point; color deep orange. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Mastodon—Very productive, large white. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Improved Short White—This is the best and most productive for stock feeding. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

P.-W.'s Chantenay

Pe-Tsai (Chokurei)
(Chinese Cabbage)

A wonderful food for poultry.

to dry out. It produces 5 to 7 pound heads in sixty days. It has large outside leaves with a yellow striped color and the inside leaves grow round, more like the Cos-lettuce. The heart is pure white, tender, sweet, and crisp. The young leaves are very popular for use in salad. It is hardy and will keep until early spring if placed in the cellar. The tender leaves make it a desirable plant for poultry greens; cheaper and much more desirable than alfalfa, Swiss Chard or Lettuce, because it can be grown with less care and in any convenient place about the premises. Try it for your hens. One ounce will sow 100 feet of row. Pkt., 10c; oz., 25c; ¼ lb., 75c, postpaid.

CRESS

Splendid for salad, garnishing. Sow seed one foot apart in open ground. Sow often for succession, as it soon runs to seed. Water Cress requires a stream of running water, ditch or pond, in which it will grow without care, except at first keeping weeds from interfering with it.

Extra Curled or Pepper Grass—The leaves of this small salad are much frilled or curled, and are used for garnishing. Pkt., 5c; oz., 10c; ¼ lb., 35c, postpaid.

True 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. 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. Pkt., 10c; oz., 50c; ¼ lb., \$1.25, postpaid.

"PE-TSAI" CHINESE CABBAGE

The wonderful Green Feed for Poultry from China which has been known to yield 3 tons in a space 40 x 60 feet.

You can't beat this for **Cheap Green Feed**. A half pound Chinese Cabbage seed will furnish enough greens to feed about 1000 hens for 4 months and 3 pounds to an acre for 6,000 hens for 4 months. The cultivation is similar to that for winter cabbage, spinach or lettuce. Sow seed any time through the year in rows a half inch deep and 24 inches apart, allowing about 2 inches between the seeds. Cultivate and irrigate ground well. Do not allow ground to dry out. It has large outside leaves with a yellow striped color and the inside leaves grow round, more like the Cos-lettuce. The heart is pure white, tender, sweet, and crisp. The young leaves are very popular for use in salad. It is hardy and will keep until early spring if placed in the cellar. The tender leaves make it a desirable plant for poultry greens; cheaper and much more desirable than alfalfa, Swiss Chard or Lettuce, because it can be grown with less care and in any convenient place about the premises. Try it for your hens. One ounce will sow 100 feet of row. Pkt., 10c; oz., 25c; ¼ lb., 75c, postpaid.

CHINESE OR CELERY CABBAGE

This plant more nearly resembles a Giant Cos lettuce than it does Cabbage. It forms a tall blue head, often weighing four pounds; leaves are large, light green, crimped at edges, with broad white midrib. Has very little of the Cabbage flavor. May be eaten raw as a salad, or boiled like Cabbage. This vegetable has become very popular within the last few years. Sold in the markets under the name of Celery Cabbage. For early use, sow seeds in hotbed in March, and transplant outdoors April 15, in rows 24 inches apart, setting plants 15 inches apart in the row; for fall use, sow end of May in drills, and either transplant or thin out to 15 inches apart when plants are large enough. Pkt., 10c; oz., 30c; ¼ lb., 90c; lb., \$3.50.

See page 101 for quantity prices unless otherwise specified all prices on this page are postpaid.

CABBAGE FOR ALL SEASONS

As with all other seeds our selection of cabbage stocks are positively from the best sources of supply, and the best strains obtainable, as proven by our own test:

Culture—Cabbage does best in rich, moist, well prepared soil; extra care should be taken in working it deeply as most varieties of cabbage do not thrive in shallow soils. For the early varieties in the mountain states and similar climatic conditions sow in hotbeds in the late winter or very early in spring and transplant to the open ground as soon as ground can be worked. Don't neglect to "harden the plants off" before transplanting and see to it that they are not so thick in the beds as to make them spindly. In transplanting to the open ground set in rows 18 to 24 inches apart and 12 to 18 inches between plants in the row. For field cultivation three feet between rows would be better. The fall and winter varieties can be handled in the same way or if the seedbed is in good condition an easier and equally successful method is to sow the seed in hills or with a regular garden drill in the open ground using about one pound of seed per acre; when plants are well out of the ground thin out to proper distances in the row. One ounce 1500 plants; half-pound to transplant an acre.

About pests—If bothered with cabbage worms, use arsenate of lead and for cabbage louse or aphid, Black Leaf 40 is effective.

Vitamines in Cabbage Increase Consumption—Recent investigations have shown cabbage to be rich in vitamins and as a result of a national campaign to promote the eating of cabbage, cabbage sales are increasing by leaps and bounds. It has been proven that cabbage is a great aid to digestion and people are demanding cabbage as never before.

Copenhagen Market

Copenhagen Market We offered this for the first time in 1913 and it certainly has more than fulfilled our expectations. Repeated comparative tests show it to be as sure a header and as early as the famous old Early Jersey Wakefield. Market gardeners here are delighted with it. The plants are short stemmed, producing heads almost on the ground; uniformly large, round, solid and of excellent quality. The light green leaves are medium in size, saucer shaped and are always tightly folded; the plants may, therefore, be set closer than most other early varieties. It is a vigorous grower and yields, and an excellent keeper. Our stock of Copenhagen Market comes to us direct from the originator. (See cut.) Pkt., 10c; oz., 25c; ¼ lb., 75c.

P.-W.'s Baby Head (Earliest of All)

P.-W.'s Baby Head (Earliest of All)—This is a new forcing cabbage of exceptional merit developed by a Copenhagen specialist. It is of very compact growth forming very few outer leaves and small round solid heads extremely firm, and of excellent quality. As a first early variety it should surely find a place in every garden. It matures a week to 10 days earlier than Early Jersey Wakefield. Pks., 20c; oz., 40c; ¼ lb., \$1.25; ½ lb., \$2.00.

P.-W.'s Early Jersey Wakefield We assure our market gardener customers that our strain of Jersey Wakefield meets every requirement in points of earliness and even head, so that the entire crop can be marketed very early. It grows very compact with nearly oval, deep green leaves. Short stem, medium size, very solid, pointed heads of excellent quality. Undoubtedly the best extra early pointed headed cabbage, either for home or market. Pkt., 10c; oz., 30c; ¼ lb., 75c.

OTHER GOOD VARIETIES

Fall and Winter Varieties—

Danish Round Head—Pkt., 10c; oz., 25c; ¼ lb., 75c.

Premium Late Flat Dutch—Pkt., 10c; oz., 25c; ¼ lb., 75c.

Mammoth Red Rock—Pkt., 10c; oz., 30c; ¼ lb., \$1.00.

Marvin's Savoy, crumpled leaf—Pkt., 10c; oz., 30c; ¼ lb., \$1.00.

P.-W.'s Early Jersey Wakefield

Large Planters and Market Gardeners—See page 101 for quantity prices.

"Golden Acre." — See Novelties, page 55.

Extra Early Pointed Heads—

Charleston or large Wakefield—Pkt., 10c; oz., 25c; ¼ lb., 75c.

Early Winningstadt — Pkt., 10c; oz., 25c; ¼ lb., 75c.

Second Early or Summer—

Succession—Pkt., 10c; oz., 25c; ¼ lb., 75c.

P.-W.'s Summer Ballhead—Pkt., 15c; oz., 30c; ¼ lb., 90c.

Danish Ball Head (or Holland-er) (P.-W.'s)

Short Stemmed Strain—This selected stock is the most popular of all late varieties for winter use. Genuine seed grown on Amager Island, Denmark. Many trials have demonstrated the superiority of the Danish seed of this variety over that grown in other countries and localities. It is sure to head, being round, hard and extremely heavy, though not extra large. It can be grown in close quarters on account of its compact habit, and as to its keeping qualities, it comes out of the pit in March or April as fresh as when put in, with absolutely no waste. No cabbage has attained to so great a popularity as the true strain of P.-W.'s Short Stemmed Danish Ball Head, without doubt the leading fall and winter cabbage. Pkt., 10c; oz., 25c; ¼ lb., 75c.

No one can afford to risk seed of doubtful origin and quality when the prices of high grade Tested Stock are so reasonable. By means of our Trial Ground we select only the best.

Cabbage Plants

Strong, vigorous, well hardened transplanted plants of P.-W.'s Early Jersey Wakefield, P.-W.'s Baby Head, Danish Ball Head, Short-stemmed and Copenhagen Market are ready in April and May. Price 25c per doz; \$1.50 per 100, postpaid. Not postpaid, \$1.00 per 100; \$7.50 per 1000. Ask for quantity prices on field grown not transplanted plants for May and June delivery.

P.-W.'s Short-Stemmed Ball Head

P.-W.'s Perfection

(Improved Snowball)

P.-W.'s Perfection

(Improved Snowball)

CAULIFLOWER

Plant the seed in beds in May for fall crop, and transplant to garden or field the latter part of July. For early summer crop, plant the seed in hotbeds in January or early in February and the plants will be ready for the field as soon as danger of frost is over. Young plants should be thinned, since they become very spindly if allowed to grow too thick.

Transplant to the field, they should be set in rows two feet apart each way. If they are hardened before setting in the field and the growth is not checked, they will head well.

After plants are set in the field cultivate same as cabbage, the more often and thorough the cultivation the better.

If you want the best seeds of the best strains of cauliflower yet introduced, something true to name, type and description, and something you can depend upon, send us your order and you will get it. Our seed comes direct to us from Denmark from the world's best specialists, and is equal to any stock offered elsewhere regardless of price.

the crop will be. Cauliflower requires plenty of water, especially when heading. The plants should be kept constantly growing, as the crop may be injured if the growth is checked any time before maturity. Watch the plants closely, and when the head develops to about the size of a silver dollar, draw the leaves over it and tie them together to protect it from sun and light, causing it to develop uniform, white, solid heads. It matures very rapidly after beginning to head and is usually ready to cut six to eight weeks after being tied. One ounce of seed produces 2000 to 2500 plants. It requires about 10,000 plants for an acre.

Good Seeds are the Foundation of Good Crops. No guess work with our Tested Seeds.

P.-W.'s PERFECTION (Improved Snowball)—We obtained this grand new strain from a Danish specialist. Our tests show it to be the best peer of all yet developed. It is adapted for either early or late fall use. It possesses all the good qualities of the best Early Snowball strains. The leaves are longer than the Snowball varieties, and enfold closely over the heads, giving a particularly attractive appearance when displayed for sale. The inner leaves almost cover the snow white heads, bleaching them nicely, thus avoiding the necessity of early tying of the leaves, as is necessary with other early sorts. Another noted trait of distinction is its uniformity in maturing, enabling the grower to harvest practically all of the crop at one cutting. Its sure heading characteristics are remarkable and superior to any other strain that has come under our observation. It produces beautiful snow-white, compact, solid heads uniformly of good size and excellent quality. **Pkt., 10c; ¼ oz., 75c; oz., \$2.25.**

P.-W.'s DANISH GIANT (Dry Weather Cauliflower)
The merits of this first-class Cauliflower are recognized by increasing sale every year. Heads are pure white and of fine quality.

It is very similar in growth, size and other characteristics to the Early Snowball. Its main feature is the fact that it will stand an unusual amount of dry or warm weather and still produce large, solid heads. In some climates, where heretofore it has been impossible to grow good cauliflower, this fine variety has proven a success. It is ready for market or table about a week later than Extra Early Erfurt. **Pkt., 10c; ¼ oz., 75c; oz., \$2.25.**

Erfurt Earliest Dwarf—Very dwarf in habit, producing pure white heads, desirable for eating. **Pkt., 10c; ¼ oz., 60c; oz., \$2.00.**

Early Snowball—The well known stand by which it has been so long a favorite of home and market gardeners. It is just as good as ever. Suitable for either early or late planting. Under favorable conditions nearly every plant will make a fine, solid head of good size. **Pkt., 10c; ¼ oz. 75c; oz., \$2.25.**

(See Page 101 for Quantity Prices)

P.-W.'s Danish Giant (Dry Weather)

CAULIFLOWER PLANTS

Strong well hardened transplanted plants of Early Snowball and P.-W.'s Perfection will be ready in April and May. **Price 35c per doz; \$1.75 per 100 Postpaid. Not prepaid, \$1.00 per 100; \$8.50 per 1000.**

CELERY

For early summer celery sow seeds of the self-blanching sort in flats under glass during latter part of February or early March. In May to June 15th, set the plants in very rich and well prepared land, six inches apart in the rows, three to four feet apart. Cultivate thoroughly and blanch out by boards set up against rows. For later and winter celery start seed in flats as for early, or directly into open ground. Make the rows for plants one foot apart, sow seed shallow and firm well. The rows should be four to five feet apart. To blanch, earth up gradually to within a few inches of tips of leaves. For winter take up plants with roots, place upright on wet soil in a dark cellar or root house, and pack closely. One ounce will produce from 5,000 to 10,000 plants.

P.-W.'s Improved Golden Crisp The far-famed Utah Celery so much in demand. This strain was originally developed by the Chinese gardeners. Its superior qualities gave them exclusive control of the celery market while their supply lasted. We have finally succeeded in getting a reliable source of supply for the seed of this much sought after variety. It is much stouter, thicker and heavier, with double the amount of heart of any known celery. The plant is beautiful in appearance, of close habit and compact growth, and blanches to a beautiful creamy white. Ribs perfectly solid, crisp and of a delicious nutty flavor. Once sown, always grown. Pkt., 15c; oz., \$1.25; ¼ lb., \$3.50.

Golden Plume or Wonderful A new type of golden Self Blanching with wider leaves and thicker stems. Pkt., 25c; oz., \$1.50; ¼ lb., \$4.50. See page 48 for cut and description.

Golden Self Blanching—Of quick growth, easy self-blanching character, combined with handsome appearance and crisp, sweet flavor. It is a good early Celery for home gardens and local markets. Pkt., 15c; oz., \$1.00; ¼ lb., \$3.00.

Giant Pascal—Large, thick, solid, round stalks.

Winter Queen—Light green stalks, very solid, tender and crisp; blanches perfectly.

Exeupt where noted, any of the above, Pkt., 5c; oz., 25c; ¼ lb., 75c.

Celeriac—(Turnip Rooted Celery) **Large Smooth Prague**—An improved turnip-rooted celery. Roots large, round and smooth, free from side roots. Pkt., 5c; oz., 25c; ¼ lb., 75c.

CELERY PLANTS

Ready May to July—Golden Crisp and Golden Self Blanching—Strong transplanted plants, 35c per doz; \$1.50 per 100, postpaid. Not prepaid, doz., 25c; \$1.25 per 100; \$8.50 per 1000.

ENDIVE

A salad vegetable which is becoming very valuable for winter use. Should be sown in June or July, in rows, and thinned to about six inches apart. One ounce 300 feet, 4 to 5 pounds per acre.

Broad Leaved Batavian—Broad, more or less twisted and waved green leaves with thick white mid-ribs. Unsurpassed for salads. Pkt., 5c; oz., 20c; ¼ lb., 50c.

Green Curled—Very curly. The mid-ribs being wide and whitish, with the outer edges very much indented and curled, forming a very attractive plant. Pkt., 5c; oz., 15c; ¼ lb., h0c.

EGG PLANT

The seed germinates rather slowly, and it is well to start under glass, with moderately high temperature, in March. When all danger of frost is over, and the plants are strong, they should be transplanted carefully to the garden or field. Egg plant does not do as well where cool nights prevail, as in places where nights are warm. It needs a warm climate to insure quick and uninterrupted growth. One ounce, 1000 to 2000 plants.

Black Beauty Earliest and best of all large fruited Egg Plants. The grand large fruits are thick and most attractive, rich, lustrous, purplish-black, intensely brilliant coloring is uniform over the white fruit. Pkt., 5c; oz., 60c; 2 ozs., \$1.10; ¼ lb., \$1.50.

New York Improved Large Purple—Very large and of fine quality. Pkt., 5c; oz., 55c; 2 oz., \$1.00; ¼ lb., \$1.50, postpaid.

Plants—Transplanted well grown plants of Black Beauty ready in May and June; 60c per doz; \$4.00 per 100, postpaid. Not prepaid, 50c per doz; \$3.50 per 100; \$30.00 per 1000.

(See Page 101 for Quantity Prices)

P.-W.'s Golden Crisp

KALE or Borecole

A species of cabbage. The leaves are cooked as greens; not injured by frosts. Sow in September in the same manner as spinach. 1 pkt. for 100 feet, 2 pounds per acre.

Dwarf Curled Scotch—Grows very low and compact, with large, bright deep green leaves curled, cut and crimped, resembling somewhat a bunch of moss. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.60.

Tall Green Early Scotch—Very hardy, not injured by March frost. About 30 inches tall with many dark green leaves, intensely curled and cut, forming a very beautiful plant. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.60.

KOHL RABI

The bulb is edible and when cooked tastes very much like the turnip. If the seed is sown early the young bulbs will be ready for use in the spring, and a planting in July will secure vegetables for fall use. The seed should be planted in the open garden and the young plants thinned to four to six inches.

Early White Vienna—Very early, small tops, light green; bulbs medium size, best quality.

Early Purple Vienna—Bright purple bulb, leaves and stems green tinged with purple.

Any of above—Pkt., 5c; oz., 25c; ¼ lb., 70c; lb., \$2.25.

SWEET CORN

Plant about the middle of May, or as soon as the ground is dry (if planted too early corn is apt to rot) in hills three feet apart each way, seven or eight kernels to a hill; hoe often and draw dirt to the stems; thin to four stalks and break off side shoots. Use plenty of old, fine manure. For succession plant every two or three weeks until the last of July.

P.-W.'S NEW GOLDEN SUNSHINE—See Novelties, Page 48.

Golden Bantam Very early, deliciously sweet, finest quality; ears small, golden yellow; very productive. Pkt., 10c; lb., 30c; 3 lbs., 80c.

P.-W.'s Golden Rod (Bantam Evergreen)—This best of all yellow varieties is a cross between Stowell's Evergreen and Golden Bantam. The plants grow six to seven feet high, ears eight to ten inches in length, filled to the very tips with twelve rows of deep, succulent kernels of a rich transparent, cream-yellow, tender, deliciously melting and "sweet as honey." This luscious "milk" stage quality is maintained for an unusually long time. Pkt., 10c; lb., 30c; 3 lbs., 80c.

Country Gentleman Grand old "stand-by" for main crop for canning. It produces three to four ears to each stalk. The ears are seven to eight inches long, cob small and densely covered with long, slender white grains without row formation. Deliciously sweet and tender. Pkt., 10c; lb., 30c; 3 lbs., 80c.

Early Mayflower A splendid white sweet-corn; is earlier than Mam. White Cory and apparently less apt to worm. Ears are pure white, sugary and larger than most other extra early varieties. Should become one of the leading market gardener sort. Pkt., 10c; lb., 30c; 3 lbs., 80c.

Particular Planters Demand P.-W.'s Tested Mountain Grown Seeds and Reliable Trees. They're More Vigorous

P.-W.'s Golden Rod

Other Good Sorts

Davis County Excelsior—Ears large, cobs small, and grains almost white. A heavy yielder; very sweet.

Early Mammoth White Cory—Stalks short; ears set quite low, of fair size. Very early.

Early Minnesota—Ears about 2 inches long; early; kernels broad, sweet and tender.

Howling Mob—One of the finest early, large eared sorts; very productive, white. A market gardeners' favorite. Ears 9 to 10 inches long, 16-rowed.

P.-W.'s Narrow Grain Evergreen—It makes a handsome ear about 9 inches long with a small cob containing 18 to 20 rows of very deep, narrow white grains. Wonderful canning variety.

Price any of above, Pkt., 10c; lb., 30c; 3 lbs., 75c, postpaid.

Stowell's Evergreen

Field Corn—See page 45.

Garlic—See page 66.

Horse Radish

Grow it in your own garden and grate fresh. Plant the sets small end down in rows 2 feet apart, about 18 inches apart in the row. Set slanting and covered about two or three inches. Price 60c per doz.; \$3.50 per 100, postpaid.

Early Mayflower

P.-W.'s Portland Market This is a new leading early corn and is the largest of all early varieties. Its immense size, together with its large, sweet, plump grains of purest white, on well filled ears, make it a ready seller on any market. The large ears, often a foot in length, mature very even, and owing to the thin husks the marketable ears are easy to detect. The stalks grow strong and vigorous, but rather dwarf. Matures about 10 to 14 days after Early Mayflower. Pkt., 10c; lb., 35c; 3 lbs., 90c, postpaid.

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; lb., 30c; 3 lbs., 80c, postpaid.

Pop Corn

Same cultural direction as Sweet Corn.

Japanese Hulless Dwarf Rice

Very tender and almost hullless. Ears short and chunky. Heavy yielder. We regard this as the coming commercial variety, no husk when popped. Pkt., 10c; lb., 30c, postpaid.

White Pearl—Large, smooth white grains. Pkt., 10c; lb., 25c, postpaid.

White Rice—The best for home or market. Ears short, grains pointed, resembling rice. Sometimes called "Squirrel Tooth." Pkt., 10c; lb., 25c, postpaid.

Prices quoted on this page are all postpaid. Please refer to page 101 for prices on quantities.

P.-W.'s Klondike White Spine

CUCUMBERS FOR PICKLES AND SALADS

The soil best adapted for the culture of cucumbers is a rich warm moist loam. Seed should be sown in the open ground as soon as danger of frost is over. Plant in hills four or five feet each way. As the young plant has many enemies, seed should be sown quite

thickly, one-half inch in depth and when well out of the ground thinned to three or four plants to the hill. Cucumbers should be gathered by cutting, not tearing, every day or at least every other day. Leave none to ripen if you want a full crop. One ounce to 75 hills; 2 to 3 pounds per acre.

Early Fortune Comparative tests with all other strains of White Spine prove that this new type has all the "earmarks" of becoming the most popular market variety yet developed. A quick grower, very productive and disease-resistant; fruits nine inches long, slightly tapering; flesh white, very firm and crisp, with very few seeds; color rich, dark green, which does not fade when shipped a long distance. Pkt., 5c; oz., 15c; ¼ lb., 50c, postpaid.

Dais Perfect A splendid forcer and shipper.—It is a medium early, extra long dark green type; retains its color and good qualities long after being pickled; fruit is exceptionally long, smooth and tapering at both ends; flesh crisp, solid, with few seeds. Pkt., 5c; oz., 15c; ¼ lb., 50c, postpaid.

Boston Pickling This is a very productive variety that is extensively grown for pickles. The vines are vigorous. The fruits are bright green, of medium size, very smooth and symmetrical. The flesh is crisp and tender. Our seed is decidedly superior to much that is offered. Pkt., 5c; oz., 15c; ¼ lb., 50c, postpaid.

(See page 101 for Quantity Prices)

P.-W.'s Klondike White Spine

After years of experimenting we have found this to be a reliable, all-purpose variety for market garden as well as the home garden. It cannot fail to be profitable, whether grown for early slicing or late pickling. The fruit, when suitable to ship, is six or seven inches in length, green to the tip and ends, solid, crisp and of excellent flavor. Pkt., 5c; oz., 15c; ¼ lb., 50c, Postpaid.

Improved Long Green The vines are vigorous and productive. The fruits are very long, often twelve to fifteen inches when mature. They are uniformly slender and of beautiful dark green color. The large warts and spines are well distributed over the surface instead of being clustered at one end as in inferior stocks. The variety furnishes some fruits early but matures the bulk of its crop rather late. It is a standard sort for slicing and is very largely used for pickles. The fruits are often used for making sweet pickles. This is probably the most extensively used cucumber for the home garden and market. We have given this variety especial attention for many years and we be-

lieve the stock we offer has no equal. Pkt., 5c; oz., 15c; ¼ lb., 50c, postpaid.

Boston Pickling

Other Good Varieties

Early Cluster—Makes a rapid growth. Fruits are short and produced in clusters.

Early Frame, or Short Green—Fruits straight but smaller at ends, bright green.

Any of above price, Pkt., 5c; oz., 15c; ¼ lb., 4c, postpaid.

P.-W.'s Longfellow. See page 50.

Use Hot Caps For Earlier Cucumbers. See page 25.

Improved Long Green

LETTUCE—The "Salad Stand-by"

Lettuce has developed into an absolute necessity on most tables in America. It is now considered as indispensable as bread or potatoes. This is rightly so as lettuce supplies the Vitamines that are so essential to a well balanced diet. With the aid of a cold frame and just a little thought in planning a succession of plantings this crisp, palatable Salad vegetable can be cut fresh from your own garden from May until December.

Head lettuces are becoming more popular than the loose leaf types; but it is certainly worth while to grow both, making several plantings to insure continuous succession. The "New York" or "Los Angeles Market" is the favorite for market growing in the Mountain States and of course is equally valuable for the home garden. The "leaf" varieties are more easily grown and many consider the "Romaine" or "Cos" type to be the best of all in flavor.

There is so great difference in localities in regard to culture of lettuce that it is hard to get a uniform rule. For the ordinary house garden, it is desirable to use one variety of each type, and several plantings should be made to secure succession. The seed should be planted in rows eighteen inches apart, as early as possible, and the young plants of cabbage head variety should be thinned until four inches apart. Varieties that do not head may be left quite thick, and when fairly well grown, those thinned out may be used. Nitrate of soda, or some nitrogenous Fertilizer will pay if used after plants are set. A light, warm, rich, well watered soil is ideal as quick, rapid growth is essential to crispness and flavor. One ounce produces three thousand plants; for Head lettuce sow $1\frac{1}{2}$ to 2 pounds per acre; Loose leaf varieties 3 to 4 pounds per acre.

P.-W.'s Mountain Grown Tested Seeds are Standards of Reliability
Wherever Used
See Page 101 For Prices On Quantities

Iceberg

Heading or Cabbage Types

New York (Los Angeles Market)—The leading summer curly head lettuce—Immense heads, often 13 to 16 inches across, weighing enormously. Blanches creamy-white; crisp, tender and absolutely free from bitterness. Robust growing, rooting deeply, resisting hot, dry weather; very slow to run to seed and a sure header under trying conditions. The outer is a distinct apple-green. Has no equal as a hot weather summer lettuce; not recommended for forcing. **Pkt., 10c; oz., 25c; ¼ lb., 75c, postpaid.**

P.-W.'s Extra Early—Quickest growing head lettuce, best for forcing. This variety forms fine, hard, medium sized heads a few weeks after planting. It is light green with a slight browning tint on the head; leaves are smooth, crisp, rich and delicious. The best smooth leaved butter head lettuce. **Pkt., 5c; oz., 20c; ¼ lb., 60c, postpaid.**

Big Boston—Highly recommended for outside, similar to old Boston Market but much larger.

Deacon—Has very few waste outside leaves, grows very solid and of delicious buttery flavor.

Hanson—It is wholly free from bitter taste, having a sweet and rich flavor. A perfect open air lettuce in all respects, hardy and may be set out in the early spring or grown late in the fall. One of the most popular now grown.

May King—Fine for forcing and outside, medium size yellowish-green heads, very early.

Iceberg—Large, crisp, tender head. Outside leaves light green, tinged with brown. Stands hot weather wonderfully well.

Prices on any of above, **Pkt., 5c; oz., 20c; ¼ lb., 60c, postpaid.**

Cos or Romaine

Cos or Romaine

(Romaine)—This kind of lettuce is distinguished by its long, narrow, spoon-shaped leaves, folding into loose, sugar-loaf heads which blanch better by having the outer leaves drawn about them and tied. The quality is distinct from that of the Cabbage Lettuce and by many is considered very superior.

Sow seed early in spring in rich, well-prepared soil in rows eighteen inches apart, covering one-half inch deep. When plants have two or three leaves thin to three or four inches apart. As the plants begin to crowd, thin and use as required.

Trianon—The best of this type. Forms large, light green plant with head well folded, quite solid. The flavor is different from ordinary and esteemed by many. Tie plants to blanch them or plant closely, 5 inches apart. **Pkt., 10c; oz., 20c; ¼ lb., 60c, postpaid.**

Curled or Loose Leaved

Black Seeded Simpson—This is one of the best; leaves large, thin and exceedingly tender.

Early Curled Simpson—A popular early sort, forming a large, loose head.

Prices on any of above, **Pkt., 5c; oz., 20c; ¼ lb., 55c, postpaid.**

Grand Rapids—The most popular variety of greenhouse planting.

Prizehead—Large, loose headed sort; leaves tinged with brown, very heavy.

New York or Los Angeles Market

(See Page 101 for Quantity Prices)

MUSK MELONS

Melons thrive best in a light, rich soil. Plant early in May when the ground has become warm, in hills five to six feet apart each way for muskmelons, eight feet for Casabas, and plant in each twelve to fifteen seeds; after all danger of bugs is over, thin out to three or four plants per hill. A few hills for early use may be had by sowing on pieces of sod in a hotbed, and when warm enough transplant to open ground. Melon vines are subject to the same destructive insect and fungus foes as are cucumbers and squash vines. Early and repeated spraying with arsenate of lead mixture is always advisable for these crops. See pages 28 and 29. Seed required one ounce 50 hills, two to three pounds per acre.

Rocky Ford Pollock 10-25 A decided improvement on popular old Rocky Ford. Market growers are demanding this strain to the exclusion of all others. The melons are extremely uniform in size, shape, netting, flavor and have good shipping qualities. Pkt., 10c; oz., 15c; ¼ lb., 50c postpaid.

Hearts of Gold

Heart of Gold (Improved Hoodoo)—Carefully selected to an oblong type, a little larger than the standard Rocky Ford, very uniform in size. While it is a ribbed melon the ribs are not prominent and the melon is very heavily netted. The flesh is a rich orange color, fine grained and of excellent flavor. The seed cavity is small. It does not turn yellow when ripe but retains its natural green color and remains solid and firm for days after it is picked from the vine. The vines are very strong growers and are rarely affected by rust. Excellent records were made with this variety for market. Pkt., 10c; oz., 15c; ¼ lb., 45c, postpaid.

Burrel's Gem (Salmon fleshed cantaloupe, extensively Grown for Market)—Equally good for the home garden. Similar in appearance to its parent, "Defendant." It is easily crated, medium size, oval in shape, slightly ribbed, covered close with net. The flesh is firm, fine grained, rich, deep yellow; vigorous and productive.

Regular Stock—Pkt., 5c; oz., 10c; ¼ lb., 40c, postpaid.

Growers Stock—Seed in sealed 1 lb. bags, \$1.35, postpaid.

Persian—See novelties page 50.

Honeyball—See novelties page 50.

Hales Early—See page 50.

P.-W.'s New Orange Flesh—See page 50.

(See Page 101 for Quantity Prices)

(Use Hotcaps for Earlier Melons. See Page 25).

P.-W.'s Gold Lined Rocky Ford

P.-W.'s Delicious Gold Lined Rocky Ford—(Improved Netted Gem)—This ideal type is of medium oval shape about five inches long, thickly netted skin without ribs (see cut). Contains a small seed cavity, rind thin, leaving a thick lining of flesh which is a most delicious juicy flavor and fairly melts in the mouth. Flesh green, tinge of yellow at center. Pkt., 10c; oz., 15c; ¼ lb., 50c, postpaid.

Pollock's 25—Salmon tint, solid net, a good early shipper; special stock direct from Rocky Ford. Pkt., 10c; oz., 15c; ¼ lb., 50c; 1 lb., \$1.50.

Extra Early Hackensack—Hardy, prolific, large and round; deeply ribbed, coarsely netted; green flesh, very delicious. Pkt., 5c; oz., 10c; ¼ lb., 35c, postpaid.

CASSABA MELON

The Cassabas are primarily for winter use. They require a long season for maturing but the fruits are exceptionally good keepers. Cultivate same as other musk melons but do not water too freely after first setting of fruit is fully grown. Pick when the light streaks have become quite yellow and store so they do not touch each other, in a cool dark place. When the rind becomes slightly softened and moist, they are ready to cut.

Honey Dew (Improved Casaba)—The outer skin is smooth and hard, nearly white, turning to a lemon tint when fully ripe. Melons weigh from six to ten pounds each, oval in shape, thick meated, very small seed cavity, flesh is light green, solid, honey-like flavor, luscious and juicy. Fruits may be laid away for use late in the fall. Pkt., 10c; oz., 20c; ¼ lb., 60c, postpaid.

Golden Beauty—One of the best casabas. Fruits globular, bright yellow with golden tint, with wrinkled skin, six to eight inches in diameter. Flesh is white, very thick, juicy and sweet. Pkt., 10c; oz., 20c; ¼ lb., 60c, postpaid.

When better cantaloupes are grown than the varieties we offer you may depend on it we'll have them.

By means of our Center-ville Trial Grounds we select the "Best."

Golden Beauty Casaba

Leek

Mushrooms

Mushrooms may be grown by anyone having a supply of fresh manure and a shed or cellar, or under a greenhouse bench where a temperature of 50 to 60 degrees is evenly maintained. They make a most profitable crop when successfully grown, and the American market is the best in the world for this most delicious of foods. Full cultural directions with every order.

Pure Culture Spawn—Requires one brick, 45c; two bricks, 80c; five bricks, \$1.75, postpaid.

Seed should be planted in June for good plants in the fall or winter.

Giant Musselburgh—This is the best variety, having good thick stems which are also long, very vigorous and of a sweet mild flavor. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50, postpaid.

P.-W.'s Kleckley Sweet Watermelon

WATERMELONS

4 ounces or 100 hills. 2-4 lbs. per acre

Plant the seed the middle of May in hills about 9 feet apart. Use five or six seeds to a hill and thin out to three plants as the second or third leaf shows. A farm crop two to four pounds per acre. A good Watermelon is one of the finest fruits on earth. On a hot day there is nothing like a fresh juicy sweet Watermelon. Some Watermelons are much sweeter than others.

P.-W.'s Kleckley Sweet The best melon for home or near-by markets. There is no melon superior in quality to this strain of Kleckley Sweet. The bright scarlet flesh is the ideal of watermelon quality; firm, crisp, entirely free from stringiness or cotton and "sweet as sugar." The melon is oblong in shape, about twenty inches in length by ten or twelve inches in diameter. The skin is a rich, dark green. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c.

Chilian or Cannon Ball This is a great favorite in California, both with home and market gardeners. It is nearly round, medium size, skin very dark, rich green, rind thin; flesh bright red and exceedingly crisp and sugary. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c.

Winter Watermelon (King and Queen) As the name indicates, this is a winter variety. The firmness of the flesh causes it to be the longest keeper of the watermelon family. Put into a cool place it will keep long into the winter without losing its delicious sweetness or exquisite flavor. The flesh is red and extremely firm, almost as hard as citron—very brittle and deliciously sweet. This melon is round shaped and the skin is very light green, almost white. It is a good drought resister and does well in almost any section of the west where melons of any sort can be grown. No garden should be without this exceptional variety. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c, postpaid.

(For Quantity Prices See Page 101)

Angelino Watermelon

Halbert Honey—In quality usually as good as Kleckley's Sweet and by some claimed to be better. Melons average 18 to 20 inches long and are full at both blossom and stem end. Skin is glossy green. Flesh is a beautiful red of rich and luscious quality. For nearby markets there is no variety equal to it. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c, postpaid.

Tom Watson—Good melon for shipping to distant markets. It grows to a very large size, long in shape, colored a medium green with a light tracing of a darker shade; flesh rich red and of good quality; seeds white. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c, postpaid.

Irish Grey—A new heat resistant grey melon; deep red flesh, hard and sweet, without hard center. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c, postpaid.

Excel—A new, very large black-seeded shipping melon; it is a little smaller than Tom Watson, but can be shipped anywhere. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c, postpaid.

Citron—Small round fruits; for preserves only.

Price any of above varieties—except where otherwise noted—Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c, postpaid.

P.-W.'s Angelino We have the black seeded strain which is preferred for market as the melons are not too large which is sometimes the case with white seeded Angelino. The black seeded type is always a better seller. Flavor, habits of growth, and other ways are identical. It is a very attractive melon, nearly round, medium size with dark green skin, irregularly striped a deeper shade. The flesh is a sparkling scarlet, and its edible qualities are unexcelled. We believe this variety, on account of its shipping qualities, earliness and productiveness, to be one of the best we grow. It has been used extensively in the Southwest and is fast becoming the most popular melon in this district. The average weight of the melons is 20 pounds. The veining on the Angelino stands out when they are ripe, hence there is no difficulty in telling when they are ready for market. Edible in 90 days. Size 12x10 in. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Klondike—See Specialties page 48.

Klondike

ONIONS

"An
Onion
a Day
Keeps
the
Doctor
Away"

P.-W.'s Sweet Spanish Onions
Grown at Centerville

The Onion is one of the most extensively used of all vegetables. It not only contains considerable nutriment and has valuable medicinal properties, but is most useful in counteracting the bad effects of sedentary life. The disagreeable odor it imparts to the breath may be avoided in a great measure by thorough cooking, or by eating a few leaves of parsley.

Sow in drills twelve to sixteen inches apart, sowing the seed thinly and cover thinly. If desired for transplanting, seeds may be sown broadcast, covering a quarter of an inch deep and transplanted when size of straws. Onions prefer a deep, friable loam, very heavily enriched, but no fresh manure; therefore, fertilize the year previous to sowing. Thin three to six inches apart in rows. While moisture-loving, much water is fatal and should never touch the plants after too old to pull for eating green. For keeping quality, always irrigate between the rows. One ounce 100 feet, 4-6 pounds per acre.

It will not do to store onions in large piles or masses, particularly in warm weather, or if they are the least moist, but if perfectly dry when gathered and stored in crates, they can be kept in fine condition till spring. The best way is to keep them dry, giving bottom ventilation if possible, and at a uniform temperature of about 32° to 34° Fr.

P.-W.'s Sweet Spanish Genuine Imported Valencia Type—Riverside Strain. See Novelties page 49.

P.-W.'s White Sweet Spanish Genuine Type—See Novelties page 49.

P.-W.'s Mountain Danvers This is an exceptional strain of the Yellow Globe Type, originally developed in the high valleys of the Rocky Mountains. It is most probably a cross between the Early Flat Danver and Giant Gibraltar, producing a large, semi-globe shaped onion so well adapted to high altitudes and short season. In sections where the season is too short to produce Sweet Spanish Onions, this is surely a most profitable variety to grow. Yields of 600 bags per acre are very common. Bulb is large, slightly flattened, of a beautiful bronze color, splendid keeper. Price—Pkt., 5c; oz., 25c; ¼ lb., 75c, postpaid.

P.-W.'s Yellow Globe Onion Medium size, solid and heavy. The skin is a beautiful yellow, tops ripen down close, necks small. One of the surest keepers grown. Flesh white, of mild and pleasant flavor. Pkt., 5c; oz., 20c; ¼ lb., 65c; postpaid.

Ailsa Craig—Color light straw yellow, fine grained, very mild flavor, mammoth size, often weighs two pounds, ripens early. Pkt., 10c; oz., 25c; ¼ lb., 80c; postpaid.

American Grown Prizetaker—Very large, nearly round, skin light yellow. Flesh pure white in color, crisp and mild flavor. Pkt., 5c; oz., 25c; ¼ lb., 80c, postpaid.

Gigantic Gibraltar—An immense, light yellow onion, fine grained, crisp, mild flavored and early. They not infrequently measure 18 inches around, and weigh two pounds. We recommend it highly on account of its mild and acceptable flavor. Pkt., 10c; oz., 25c; ¼ lb., 80c, postpaid.

Southport Yellow Globe—The flesh is snow-white, firm, mild and juicy, skin light golden yellow. Popular for family use or market. Pkt., 5c; oz., 20c; ¼ lbs., 60c.

Yellow Flat Danvers—Largely planted. Flesh fine grained; mild. Pkt., 5c; oz., 20c; ¼ lb., 55c.

Red Wethersfield—Though well flattened, the solid onions are thick through, skin is a deep glossy, purplish red. Flesh white. Pkt., 5c; oz., 20c; ¼ lb., 65c.

Southport Large Red Globe—Distinctly globe-shaped, small neck, excellent keeper; deep purplish red. Pkt., 5c; oz., 25c; ¼ lb., 70c.

(See Page 101 for Quantity Prices)

ONION PLANTS

This is rather a new method of growing large onions, but our experience the last two or three years proves it to be very successful. Our growers in Texas can plant the seed earlier than we can in this section and they are able to develop good sturdy plants which stand shipment remarkably well and transplant with little loss.

For those desiring a large number we quote f.o.b. our shipping point in Texas in crate lots or more. These plants are put in bunches of 100 and 6,000 to the crate.

Prices F.O.B. Salt Lake City:

	100	1,000	6,000
Crystal White Wax.....	\$.40	\$2.00	\$8.00
Yellow Bermuda.....	.35	1.95	7.75
Prices F.O.B. Shipping Point, Texas:			
Crystal White Wax at \$5.00 per crate			
Yellow Bermuda at.....	\$4.75	per crate

Bermuda
Onion
Plants

ONIONS—Continued

WHITE VARIETIES

CRYSTAL WHITE WAX—Popular Market Onion for the South and Southwest.—Selected stock direct from the most critical grower on the island of Teneriffe. Very large white onion of the Bermuda type, a remarkably good shipper and an excellent keeper. The sweet, mild flavor and large size makes it a ready seller on any market. Pkt., 10c; oz., 60c; $\frac{1}{4}$ lb., \$1.75. Teneriffe Grown Seed.

CRYSTAL WHITE WAX—Same as above. Italian grown seed. Pkt., 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25.

P.-W.'s Southport White Globe True globe form, pure white, hard and small neck, ripening very early and evenly. A splendid keeper. It grows to a large size, very solid and heavy, flesh purest white and fine grained, mild, delicate flavor, heavy yielder. Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 80c.

Silver Skin (White Portugal)

P.-W.'s Peerless White Onion (Seed Fied)

P.-W.'s Peerless White—See Novelties Page 56.

Extra Early Barletta Old-time favorite. From one inch to one and one-half inches in diameter. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Extra Early Pearl—One of the earliest; mild flavor, good keeper. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Early White Queen—An extra early; valuable for pickling. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c.

Mammoth Silver King—Large, attractive form; flattened out quite thick through. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c.

Round Silver Skin (White Portugal)—Very early, round; fresh, crisp and tender; excellent hunching or pickles. Pkt., 10c; oz., 30c; $\frac{1}{4}$ lb., 85c.

White Welch Multiplier—Does not form bulb but produces very early bunch onions. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., 85c.

Unless otherwise specified all prices are postpaid.

(See Page 101 For Quantity Prices).

Particular Planters Demand Porter-Walton's Tested Seeds and Reliable Trees—They're More Vigorous.

ONION SETS

A great specialty with us. We produce several carloads at our own farm in Centerville. The remarkable firmness, soundness and regularity in size of our Mountain Grown sets has been a matter of comment wherever they have been compared with those from other sections. Having been grown in this high altitude, they will produce a crop earlier than sets from east or south and in half the time that it could be produced from seed.

Culture—Soil requirements are the same as with onion seed. Plant the sets three to four inches apart in the row, depending on the variety and twelve inches apart between the rows and two to three inches deep. It requires from 250 to 350 pounds for an acre.

Brown Bottom Sets—Lb., 25c; 3 lbs., 65c; 10 lbs., \$2.00, postpaid.

Yellow Bottom Sets—Lb., 25c; 3 lbs., 65c; 10 lbs., \$2.00, postpaid.

White Bottom Sets—Lb., 30c; 3 lbs., 80c; 10 lbs., \$2.50. Postpaid.

(See Page 101 for Quantity Prices)

Onion Sets

Carlic Sets—Most pungent of onion family. Lb., 45c; 3 lbs., \$1.30, postpaid.

OKRA OR GUMBO

One ounce fifty feet of drill

Sow late in the spring after the ground has become warm, in drills three feet apart, and when plants are three inches high, thin out to from ten to twelve inches. They should be well manured. They can also be started in a hotbed and transplanted afterward. The young green seed pods of this plant are used in soups, stews and served like asparagus.

Dwarf Green—Prolific and productive.

White Velvet—Pods are large, perfectly round and smooth and attractive; of superior flavor and tenderness. Plants comparatively dwarf, of compact branching growth. Best for all purposes.

Either of above. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; 1 lb., \$1.50, postpaid.

MUSTARD

One ounce to fifty-foot row.

Excellent greens, of sharp, pungent flavor; cooked the same as spinach. Sow in drills early in the spring, and at frequent intervals throughout the summer.

Giant Southern Curled—Curled leaf, large.

Ford Hook Fancy—Beautiful dark green leaves.

Any of above, Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 90c, postpaid.

White English Leaves comparatively small and smooth, deeply cut or divided and of medium dark color. Plant upright, of rapid growth, and soon bolts to seed. Leaves when young are mild and tender; seed light yellow and larger than other varieties. Postpaid. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 85c.

Guernsey or Hollow Crown Parsnip

PARSNIPS

Parsnips are one of the most delicious of vegetables and have the great merit of being at their best after a freeze. It takes cold weather to bring out their sweetness. They may thus be harvested when the garden has little else to offer. Another great advantage is that they may be left in the ground all winter, and dug during thaws of in the spring before they sprout, when they furnish the first crop of the new year. Do not use fresh manure in soil where parsnips are to be grown. It will cause the roots to divide. A deep, rich soil is best for them, and they must be thinned out and given plenty of room to develop. 1 oz. for 100 feet of row, 5 to 8 pounds per acre.

Guernsey or Hollow Crown—A variety with a hollow or cup-shaped top, where the leaf stem begins. The most popular and best variety for all purposes. Skin smooth and white and flesh tender, while the root grows eighteen to twenty inches long, the best part of it is contained in the first eight inches from the top. Our strain of Hollow Crown is the thick shouldered type particularly fine smooth and regular. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 40c, postpaid.

PARSLEY

It is used for garnishing dishes of meat or cooked in soups. A few plants in a garden will yield sufficient for a family, providing the leaves are cut often and the plant not allowed to seed. Sow in drills as early in the spring as the soil can be dug in a fine, loose condition. It germinates best during cool moist weather.

One Ounce 500 Plants

Champion Moss Curled—A very finely curled bright green and very ornamental variety.

Double Curled—A curled variety very hardy and easy to grow deep rich green and by many preferred to the extremely curled varieties.

Triple Curled—Extra curled very hard, deep rich green; very decorative.

Any of above, Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c, postpaid.

No one can afford to risk seed of doubtful origin and quality when the prices of high grade Tested Stocks are so reasonable. By means of our Trell Ground we select only the best. Poor seeds would be costly even if they were given to you.

PEPPERS

Peppers do best in hot climates, but can be grown successfully in most places. They require very rich soil or the seed germinates slowly. They should be sown in hotbeds in March or April and in a warm, sheltered border in May. And when all danger of frost is over the young plants should be transplanted in rows two feet apart and eighteen inches in the row in good, rich ground. One Ounce 500 Plants, Half Pound per Acre.

P.-W.'s New Wonder Bell Pepper. (See page 47.)

Anaheim Chili—It will supplant entirely Old Mexican Chili. Very desirable for canning because of fleshiness and pungency. Pkt., 10c; $\frac{1}{2}$ oz., 30c; oz., 50c; $\frac{1}{4}$ lb., \$1.50.

P.-W.'s Chinese Giant Red—This is a very large, deep red variety, almost twice the size of either Ruby King or Bull Nose. It is four or five inches thick at the top and about six inches long. Fruits mature only slightly later than the Ruby King, flesh sweet and extremely mild. Pkt., 10c; $\frac{1}{2}$ oz., 35c; oz., 60c; $\frac{1}{4}$ lb., \$1.75.

Giant Crimson—About the size of Chinese Giant, similar in appearance; ripens earlier.

Large Bell or Bull Nose—Large, bright red.

Long Red Cayenne—Small, a bright scarlet, cone-shaped, pungent pods.

Neapolitan—Unusually mild and sweet, a bright red.

Pimento—The sweetest Pepper grown, as it does not contain the slightest trace of firmness, medium size and of a shape which is desirable for filling. It may be used in salads and for flavoring.

Red Chili—Small bright red, hot and pungent.

Ruby Giant—A cross between Ruby King and Chinese Giant, ripens earlier, very fine.

Ruby King—Fruits large, glossy red, very mild, sweet flavor and can be sliced and eaten like tomatoes. Best for making mangoes and most widely planted in the mountain states.

Any of the above not specially priced—Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.10.

PEPPER PLANTS

Strong, healthy transplanted plants ready in May and June of Chinese Giant and Ruby King varieties. Price 35c per doz.; \$2.00 per 100, postpaid. By express, not prepaid, \$9.00 per 1000.

(See page 101 For Quantity Prices).

P.-W.'s Chinese Giant Pepper

(For Early Plants Use Hotcaps. See page 25).

POTATOES

The Seed Potatoes we send out will be not only strictly true to name, but hand-sorted, clean, healthy and vigorous.

For early potatoes, which mature in eight to ten weeks from planting, the soil must be particularly rich. A rich clover bed, manured and broken the year before and planted to corn, beans, peas, oats, etc., is in the best shape for giving a good yield of nice, clean potatoes. Stable manure had better be applied to the land the year before. Plant good sized pieces each containing no less than two or three eyes, fifteen inches apart in the furrows, for early potatoes, and eighteen inches apart for late ones. Requires 700 to 1200 pounds seed per acre.

Change Your Seed—There is a profit as well as satisfaction in planting our seed, for, not only it is pure, but the additional yield to be secured from a change of seed fully pays for the seed, so that the investment itself is nothing.

Early Ohio—An old time favorite; matures early, and the potatoes are fit for use before fully ripe. Most growers here consider it the most profitable early market variety. Red River Strain, grown on virgin soil, 10 lbs., \$1.00, not prepaid. 100 lbs., market price.

Idaho Russet—This splendid variety has become the leading main crop potato in this region. The tubers are elongated, shallow eyes, and covered uniformly with a thickly netted skin. Good yield and excellent keeper; always commands the top price in the market. 10 lbs., \$1.00, not prepaid.

Idaho Russet

spring trade. There is a good reason why the Triumph should be popular. It is ten days earlier than the Early Ohio, and that is a big feature in favor of the farmer. It is not so liable to rot or scab. The tubers are nearly round with red smooth skin, and have shallow eyes. 10 lbs., \$1.00, not prepaid.

Early Rose (not prepaid) 10 lbs. \$1.00

Irish Cobbler (not prepaid) 10 lbs. \$1.00

Rural New Yorker (not prepaid) 10 lbs. 75c

Write for Quantity Prices—Market Fluctuates Rapidly.

HOW TO TREAT POTATOES WITH SEMESAN

One pound of Semesan Bel, when treating a fairly large quantity of seed potatoes, is sufficient for 16 to 20 bushels. If the potatoes are very dirty they should be washed thoroughly, drained and surface dried before treating to secure the most economical and effective disinfection.

For each 10 quarts or 2½ gallons of water in the treating tub have ready one pound of Semesan Bel. Sprinkle enough onto the water to cover its surface and stir it constantly until the disinfectant forms a whitewash-like mixture or dip. Keep stirring and adding the Semesan Bel little by little until the required quantity is mixed into the water. The mixture is then ready for the dipping of the potatoes.

If properly mixed, it requires no further stirring during the treatment and retains its proper antiseptic strength to the last drop. Never commence dipping potatoes until the Semesan Bel is in complete suspension.

The grower requiring only a small lot of seed may utilize the same effective treatment by mixing, in the manner already described, smaller proportionate quantities of the Semesan Bel solution. Free booklet giving full details mailed on request; ask for it. See also page 30 of this catalog.

Comparative Yields Prove Semesan's Value

The left-hand pile represents the yield from three average hills of untreated seed potatoes; the center pile from three hills treated with formaldehyde; and the right from three hills of Semesan disinfected seeds. (See page 30 for further information and prices on Semesan.)

Early Bliss Triumph—The leading early potato of today, and is now supplying two-thirds of the markets with new potatoes for the early

PUMPKINS

Plant in April or May, among corn or in the garden, in hills eight or ten feet apart, and otherwise treat in the same manner as melons. Three to four pounds per acre. One ounce to fifty hills.

Common or Connecticut Field—A productive, large, orange-colored field pumpkin, usually grown for stock feeding, but it also makes good pies. Pkt., 5c; oz., 10c; ¼ lb., 30c.

Kentucky Field—Large, round-flat creamy yellow skin and flesh. Pkt., 5c; oz., 10c; ¼ lb., 30c.

King of Mammoth or Jumbo

This strain produces the biggest pumpkins grown, sometimes measuring six feet in circumference and weighing 200 to 250 pounds. Outside color deep orange-yellow, flesh very thick, fine grained, tender, of bright yellow color and excellent quality for pies and other uses. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Sugar Pie Pumpkin

(See Page 101 For Quantity Prices)

Green Striped Cushaw—Mammoth heavy-yielding eating Pumpkin, used largely in the San Joaquin Valley. Pkt., 5c; oz., 10c; ¼ lb., 30c.

Sugar Pie—A handsome and productive small pumpkin, ten to twelve inches in diameter; flat-round, skin orange. Flesh deep yellow of fine grain and very sweet. Pkt., 5c; oz., 10c; ¼ lb., 30c.

By means of our Centerville Trial Grounds, we know our Seeds. It costs more to make soil tests, but we are repaid handsomely in the good will of our customers.

DELICIOUS GREEN PEAS

Peas share with sweet corn, parsnips and squash the honor of being the sweetest of vegetables. Their sweetness is in proportion to the wrinkles in the seed, we are told. Smooth seeded varieties are little used except for very early sowing. They will stand cold weather in which the wrinkled sorts will rot.

Our seed peas are raised in high valleys in the Mountain States, by our most critical contract growers, from selected stock strains. The growing crops have been carefully inspected and "rogued," and the resulting seed crop thoroughly cleaned and "hand picked." Truly there can be no better stock found anywhere.

Culture—Peas thrive best in rather light, sandy soil which is not too rich or they will run too much to vines and not bear heavily. Sow as soon as the ground can be worked, in single or double rows from one and one-half to three feet apart. The dwarf varieties can be planted in rows twelve to eighteen inches apart. By using the various classes of peas and by making several sowings of each, good peas may be had for a long season. In the garden, the pods should be kept picked as the vine will then continue to bear longer. One pound 100 feet of row, 100 pounds per acre.

P.-W.'s Laxtonian or Dwarf Gradus Pea—This is the largest podded of all early dwarf peas. A new sort of decided merit. The vines are vigorous, growing about 10 inches high and producing a large crop of good-sized pods, averaging from nine to ten peas to the pod, exquisite flavor and mature early. All the planters who have tried Dwarf Gradus consider it superior to either of the old Gradus or Thomas Laxton, and consider it to be the best of all the early dwarf peas.

From our own observations, at our trial grounds and the combined experiences of market gardeners in different sections, we have no hesitancy in pronouncing this excellent variety to be the Best Extra Early Pea in the West for Market Growers. Pkt., 10c; lb., 35c; 2 lbs., 65c, postpaid.

P.-W.'s Early Superb. (See Novelties Page 47.)

P.-W.'s Laxton Progress — See Novelties page 47—New English introduction.

P.-W.'s Alderman—In our estimation, the best of the tall growing sorts for main crop.

This most valuable variety of recent introduction belongs to the old Telephone type.

The vines are tall, growing about four feet high, dark green, vigorous and exceedingly productive. The pods are of larger size, often five to five and one-half inches long, filled with large sweet tender peas of most delicious flavor. It answers every requirement of the market grower who wishes a pea that will stand shipping a long distance and still retain its dark green color. For the home garden it is equally desirable. Pkt., 10c; lb., 35c; 2 lbs., 65c, postpaid.

Inoculate Peas with McQueens Inoculator for Increase Yield. See page 30.

See Page 101 For Quantity Prices

P.-W.'s Dwarf Gradus

Alderman

P.-W.'s New Worlds Record Pea—See page 47.

P.-W.'s Dwarf Prize Pea—This handsome new wrinkled pea is so hardy that it may safely be planted as early as the hard-seeded "Extra Early's." The plants are dwarf, growing about 14 inches high, very stout and exceedingly productive, and quality is all that could be desired, exceptionally sweet and tender. It is the ideal variety for the home garden for early planting; in our estimation, no other plant can match it for this purpose. Try it this year; we are sure you cannot select anything in the pea family that will please you more. Pkt., 10c; lb., 35c; 2 lbs., 55c, postpaid.

Little Marvel The most satisfactory pea in the average home garden. In season it is the same as Nott's Excelsior and American Wonder. The big point in its favor is that it remains in prime picking condition a week longer than the older sorts. Very productive, hardy, luscious and sugary. Vine 18 inches, pod dark green, well filled. Pkt., 10c; lb., 30c; 2 lbs., 55c.

Other Goods Peas

Extra Early Varieties—Postpaid Prices

	Pkt.	Lb.	2 Lb.
Alaska Extra Early—(Smooth)	10c	30c	55c
Gradus or Prosperity—(Wrinkled)	10c	30c	55c
Thomas Laxton—(Wrinkled)	10c	30c	55c
Early Varieties—Postpaid Prices	Pkt.	Lb.	2 Lb.
American Wonder—(Wrinkled)	10c	30c	55c
Nott's Excelsior—(Wrinkled)	10c	30c	55c
Main Crop Varieties—Postpaid Prices	Pkt.	Lb.	2 Lb.
Bliss Everbearing—(Wrinkled)	10c	30c	55c
Dwarf Telephone (Carter Daisy)	10c	30c	55c
Wrinkled	10c	35c	65c
P.-W.'s Dwarf—Bellance	10c	30c	55c
Yorkshire Hero—Wrinkled	10c	30c	55c
Strategem—Wrinkled	10c	30c	55c
Mammoth Melting Sugar Edible Pod	10c	30c	55c

RHUBARB

Sow the seed early one inch deep and when the plants are large enough, thin them to four or five inches apart. The next spring or fall transplant them three feet apart each way in deep, rich soil. For forcing, take up some large roots and place them in a dark corner of the cellar or greenhouse.

One ounce for 50 feet of drill, 8 to 10 pounds per acre.

Victoria—Very large and tender. The best variety to plant and the one most generally used. Pkt., 5c; oz., 20c; 1/4 lb., 60c; lb., \$2.00, postpaid.

Roots—Mailing size, 2 or 3 eyes to each clump.

Each, 40c; \$4.00 per dozen, postpaid. By express or freight 25c each; \$2.50 per dozen; \$18.00 per 100.

SALSIFY

Used the same as carrots; sometimes made into cakes and fried like oysters, which they resemble in flavor. Cultivate the same as carrots; can remain in the ground all winter for early spring use, but should be taken up before it starts growing. Succeeds best in light, well enriched mellow soil. Sow early in the spring in drills 12 to 15 inches apart, 1 inch deep; thin to 6 inches.

Mammoth Sandwich Island—Grows to a very large size and resembles a good-sized parsnip. Mild and delicately flavored; very popular. Pkt., 5c; oz., 20c; 1/4 lb., 65c.

Swiss Chard—See page 52.

CRISP RADISHES

For the best results the soil should be light, well pulverized, rich and mellow to insure quick growing, supplying plenty of water. Radishes permitted to grow slowly become tough and pithy, light frosts will not kill young plants, but will check the growth and they do best when kept growing right along. For a succession sow every ten days. During the hot months for summer, winter radishes will do better than the early sorts. Winter radishes can be stored, same as potatoes furnishing an acceptable relish through the winter months.

There is no crop that will bring quicker returns for the market gardener. The leading variety is "P.-W.'s Sparkler;" or if you wish an all scarlet, use "P.-W.'s Earliest." Our recommendations are P.-W.'s Sparkler for early or succession; Icicle for second early; and Celestial for winter use.

For Quantity Prices See Page 101

P.-W.'s Sparkler

P.-W.'s Sparkler Radish The Leader for Market—Color is scarlet and white, extremely quick to mature, being ready for the table in 20 days from plan ing. Valuable for forcing under grass, as well as for the open. Skin very smooth, and its color gives it an appetizing appearance. Selected stock seed. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Long Varieties

Icicle White, slender and tapering in shape. It quickly grows to market size; is crisp, brittle, mild and sweet.

Long Scarlet Short Top—Bright carmine.

White Vienna—Snow white; flesh crisp.

Prices, any of above, Pkt., 5c; oz., 10c; ¼ lb., 25c.

ALL PRICES ON THIS PAGE POSTPAID

See Page 101 For Quantity Prices

For spring and summer use, sow early in drills, one foot apart and one inch deep, as soon as the ground can be worked; and every two weeks thereafter for a succession. For winter or early spring use, sow in September in well-manured ground, covering with straw on

King of Denmark This new variety is undoubtedly the most valuable introduction of spinach in years. Although the plants are ready for use almost as soon as the medium early sorts they remain in good condition from a week to two weeks after all other varieties have gone to seed. The plants are of rapid growth, resemble the Long Season in type but leaves are more crumpled or blistered and are of darker green color. The leaves are thick, stand well after cutting and are of good quality. This variety will in a few years be one of the leading sorts as its distinctive qualities are sure to win favor for it from both the home and market gardener. Pkt., 5c; oz., 10c; ¼ lb., 25c, postpaid.

Long Standing Bloomsdale Savoy-Leaved—Best for fall, but is sown very early in the spring will produce a good crop. This early, productive variety produces large glossy, dark green leaves, crumpled or blistered, very thick and of great substance. The most largely grown spinach on the market. Has a tendency to bolt to seed in warm weather. Pkt., 5c; oz., 10c; ¼ lb., 30c, postpaid.

Long Season—An excellent second-early variety with small plants growing close to the ground, very dark green, thick, somewhat crumpled leaves—almost as crumpled as the Savoy-leaved—and short, fleshy stems. Does not readily crush. Will keep in the field in condition for a remarkable long time. Pkt., 5c; oz., 10c; ¼ lb., 20c, postpaid.

Market Gardeners and Large Buyers, See Page 101. For Quantity Prices on All Varieties of Garden Seeds.

Early Round Varieties

French Breakfast

P.-W.'s Earliest—Attains a good size without getting pithy. Week earlier than White Tipped, color scarlet.

P.-W.'s Scarlet Turnip White Tipped—Well known market variety.

French Breakfast—Oval form, bright scarlet color, tipped with white.

Price, except where noted, any of above: Pkt., 5c; oz., 10c; ¼ lb., 25c.

Winter Varieties

Seed for winter radishes should be sown about the first of August in rich, warm, sandy loam, in rows about twenty inches apart, covering half an inch deep. When well up thin to three inches apart in the row and give frequent cultivation. For winter use, the roots should be pulled and packed in damp sand and stored in a cool cellar.

Chinese Rose—Half-long, flesh pink, solid.

Long Black Spanish—Roots black. Round Black Spanish—Globe shaped.

Celestial or White Chinese—Pure white, firm.

Prices, any of above, Pkt., 5c; oz., 10c; ¼ lb., 30c.

White Icicle Radishes

SPINACH

the approach of severe weather. It is hard to get the ground too rich. The stronger the ground the larger and more succulent will be the leaves. One ounce 100 feet, 10 to 12 pounds per acre.

King of Denmark Spinach

SQUASH

Squash should be planted in warm, light, rich soil, after the weather has become thoroughly settled and warm, as they are very sensitive to frost and cannot be sown until all danger of frost is over. Plant in well manured

hills in the same manner as cucumbers or melons. The bushy varieties two to three feet apart each way and the running kinds six to eight feet. One ounce 100 feet 2 to 3 pounds per acre.

Cocozelle (Italian Veg. Marrow)

SUMMER VARIETIES

Cocozelle (Italian Vegetable Marrow)—Fruits large, oblong shaped, dark green at first but as they mature become marbled with yellow and lighter green stripes. Fine grained, tender and of excellent flavor. Pkt., 5c; oz., 20c; ¼ lb., 45c.

Long White Vegetable Marrow—Skin greenish-white; flesh white, soft and of rich flavor. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Yellow Summer Crookneck—Golden yellow thickly variegated; brittle and tender. Pkt., 5c; oz., 15c; ¼ lb., 40c.

For Prices on Quantities See Page 101

WINTER VARIETIES

Banana—Splendid new variety for fall and winter, dark green banana shape 20 to 25 inches long; Pkt., 5c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

Chicago Warty Hubbard

Chicago Warty Hubbard Attractive dark green, flesh dry and sweet. Very hard shell insures long keeping qualities. Considered by many an improvement on the old Hubbard. Pkt., 5c; oz., 15c; ¼ lb., 45c.

Delicious—In shape resembles the Hubbard; flesh very thick, deep orange color. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Pike's Peak or Sibley—Large oval fruits, skin in color; flesh golden-yellow, very best quality. Pkt., 5c; oz., 15c; ¼ lb., 40c.

Hubbard—Pkt., 5c; oz., 15c; ¼ lb., 40c.

Utah Giant Field—Pkt., 5c; oz., 15c; ¼ lb., 35c.

Banana Squash

Swedes or Rutabaga

One ounce 100 feet, 2-3 pounds per acre

Rows should be at least two and one-half feet apart and the plants thinned to eight to twelve inches. Roots frequently grow to be an enormous size. The roots should be taken up before severe frost. Cut off tops within an inch of the crown. Store in a cool cellar or pit.

Improved Purple Top—Remarkable for uniform shape and fine quality; a splendid keeper. Skin smooth; a beautiful yellow color, fine grained. Very sweet and tender. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Purple Top Globe Turnip

TURNIPS

For early use, sow as soon as the ground can be worked in the spring, in drills twelve to fifteen inches apart, and thin out to six to nine inches in the row. For succession, continue to sow every two weeks until June. For fall or winter crops sow in July or August. One ounce 100 feet, 2 pounds per acre.

Purple Top White Globe The Best Flavored and Largest Yields Grown. Without an Equal for All Purposes. The flesh is firm, fine grained, white and of most excellent flavor. It is a fine keeper, extensively grown and pitted for fall and winter, and produces enormous crops. In our estimation it cannot be beat either for home or market planting. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Extra Purple Top Milan—Earliest turnip in cultivation; flat, smooth, of medium size, with bright purple top and few leaves. Adapted to spring or fall. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.15.

Other Good Varieties

	Pkt.	Oz.	¼ lb.	lb.		Pkt.	Oz.	¼ lb.	lb.
Extra Early White Milan.....	5c	15c	40c	\$1.15	Snowball	5c	10c	25c	.75
Early Purple Top Strap Leaf.....	5c	10c	25c	.75	White Egg	5c	10c	25c	.75
					White Flat Dutch.....	5c	10c	25c	.75

Market Gardeners and Quantity Buyers refer to page 101 for prices

TOMATOES

Culture

For early plants sow in hot beds or boxes early in March, in drills five inches apart, one-half inch deep. When the plants are about two inches high, transplant into another four inches apart each way. Plant out in the open ground as soon as danger from frost is over, four feet apart each way, in hills. Water freely at the time of transplanting. When the first fruit is set, pinch off the ends of the branches to attain early fruit. For late use sow in sheltered border in May and set out the plants in July. The green fruits can be picked off before late frost and ripened under glass. One ounce 1,000 plants, two ounces per acre.

P.-W.'s "King of Earlies"

(T. L. E. Strain)—A new blood red tomato, ripening in 95 days. Very distinct. Not quite as large as the Red Rock but two weeks earlier, ripening about two days after the earliana, and very much more productive. Twenty days ahead of either Stone or Greater Baltimore. The vine is short-stemmed, unusually healthy and produces very solid, smooth, meaty and most attractive fruit which is round at the bottom, quite free from cracks, with very little cavity at the stem end. It is similar in appearance to Chalk's Jewel but is five days earlier, considerably larger fruited, far more productive, picking over a longer period, better color and more solid. It will prove a leader in every section where an early tomato is desired. Pkt., 10c; oz., 50c; ¼ lb., \$1.50.

Avon

This is a very distinctive type of a selected strain of "Earliana" which has been selected with respect to earliness, uniformity to type, and carrying qualities. Our tests last year showed it to be at least a week earlier than the old strain of "Earliana," more solid and meaty, insuring better carrying qualities. Market Gardeners especially will be interested in this new strain. Price: Pkt., 10c; oz., 40c; ¼ lb., \$1.25.

Marglobe

This was primarily bred to produce a wilt resistant, globe-shaped red tomato. The results have exceeded expectations. It is hardy, wilt resistant and appears to be destined to command a leading place in districts where wilt is prevalent. In addition it undoubtedly will prove equally desirable wherever a red tomato of superior quality is desired. It is a midseason variety, ripening its first fruits in from ninety to ninety-five days.

The plant is vigorous without being spreading or coarse, with a strong, hardy stalk and abundant foliage. The foliage is medium dark green, slightly crimped or savoyed and furnishes adequate cover for the fruits without too much shade. The plant produces fruit abundantly, the heaviest setting being in the center of the plant.

The fruits are quite large, averaging 7½ ounces in weight, and are nearly perfect globe-shaped with but little depression at the stem end. They show very little tendency to crack but ripen up perfectly. They are a deep scarlet in color and present a very attractive appearance. The flesh is firm, thick, of first quality, and is only mildly acid. This is a superior sort for table use and a very desirable canning tomato. Pkt., 10c; oz., \$1.00; ¼ lb., \$3.00.

P.-W.'s Sunnybrook Tomato

This is a selection from Burpee's Sunnybrook Earliana, which has been recognized as one of the earliest of the red tomatoes. Trial Ground tests show it to be very close to Avon in general appearance and earliness. All of the fruits on the entire crop are ripe about the same time and entire crop can be gathered within a period of two to three weeks. This is a decided advantage for the early Market Gardener as advantage can be taken on higher prices before the second earlies are on the market. Pkt., 10c; ½ oz., 25c; oz., 45c; ¼ lb., \$1.50.

Recollection of quality remains long after a slight difference in price has been forgotten.

P.-W.'s Sunnybrook Tomato

See Page 101
for Quantity
prices.

OTHER EARLY VARIETIES

	Pkt.	Oz.	¼ lb.
Bonny Best	5c	30c	.90
Chalk's Early Jewel.....	5c	30c	1.00
P.-W.'s Extra Early Earliana	5c	30c	1.00
Jno. Baer	5c	30c	1.00
San Jose Canner	5c	30c	1.00

Small Fruited Varieties

	Pkt.	Oz.	¼ lb.
Red Cherry	5c	40c	1.25
Strawberry Ground Cherry or Husk	5c	40c	1.25
Yellow Pear	5c	40c	1.25

MAIN CROP VARIETIES

	Pkt.	Oz.	¼ lb.
Dwarf Champion	5c	30c	1.00
Greater Baltimore	5c	30c	1.00
June Pink	5c	30c	1.00
Landreth's Red Rock.....	5c	30c	.90
Matchless	5c	30c	.90
New Stone	5c	30c	1.00
Ponderosa	5c	30c	1.50

Tomato Plants

Strong, sturdy transplanted stock of King of Earlies, New Stone and Marglobe varieties ready in May and June. Doz., 40c; 100 at \$2.30, postpaid. Not prepaid, 30c per doz; \$2.00 per 100; \$17.50 per 1000.

Aromatic, Medicinal and Pot Herbs

Most of the varieties of herbs thrive best on sandy soil and some are 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 of the most part delicate and easily choked out by weeds.

Sow as early as the ground can be made ready, in drills sixteen to eighteen 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.

	Pkt.	Oz.
Anise (Pimpinella anisum). Seeds aromatic and carminative.....	5c	20c
Caraway (Carum Carui). Used in flavoring liquors and bread.....	5c	20c
Catnip (Nepeta cataria). Has medicinal qualities.....	5c	70c
Coriander (Coriandrum sativum). Seeds aromatic.....	5c	20c
Dill (Anethum graveolens). Seeds used for flavoring vinegars.....	5c	20c
Horehound (Marrubium vulgare). Has medicinal qualities.....	5c	40c
Lavender (Lavandula vera). True. For oil and distillation of lavender water	5c	50c
Marjoram (Origanum Majorana). Sweet. Used in seasoning.....	5c	30c
Rosemary (Rosmarinus officinalis). Yields an aromatic oil and water	5c	80c
Sage (Salvia officinalis). Common. A culinary herb; also used in medicine	5c	20c
Savory (Satureja montana). Winter. Used as a culinary herb.....	5c	25c
Thyme (Thymus vulgaris). Broad-leaved English. Used as a seasoning	5c	50c

FLOWERING PLANTS

FOR BEDDING (Seedling Plants—Flat Grown)

The following plants are raised from the choicest grade of seeds, and will surely please the most particular. We will be able to supply them fresh from our greenhouse, from April 25 to June 15. They are extra strong, transplanted, flat grown stock. If wanted by mail, add 10c per dozen for postage. Price: 75c per dozen; \$4.00 per 100.

***Asters**—Mixed. **Petunia**—Mixed. **Stocks**—Mixed.
Cosmos—Mixed. **Phlox Drummondii** ***Verbena**—Mixed.
Double Daisy— **Salvia**—Mixed. ***Zinnias**—Mixed.
Lobelia—Blue. ***Snapdragon**—

(*) Marked varieties can be furnished in separate colors at same price.

POT GROWN PLANTS (From Cuttings)

Ready from April 15 to June 15. Priced by Express. If wanted by mail, add 5c each or 40c a dozen.

	Size	Each	Doz.
Begonia Vernon	2 1/2 in.	25c	\$2.00
Coleus	2 1/2 in.	25c	2.00
Geraniums, Double	3 in.	30c	3.00
Geraniums, Variegated	2 1/2 in.	25c	2.00
Geraniums, Ivy-leaved	3 in.	30c	3.00
Geraniums, Martha Washington	3 in.	35c	3.50
Petunia, Giant Double-Fringed	2 1/4 in.	25c	2.00
Petunia, Single Fringed	2 1/2 in.	25c	2.00
Variegated Vinca	2 1/2 in.	25c	2.00

Summer Flowering Bedding Plants, Liberty Park, Salt Lake

P.-W.'s PANSY PLANTS

Without qualification these plants are excelled by none for beauty, variety of color and markings. Grown with the utmost care from the world's best mixture of Pansy seed, it is not putting it too strong when we say, "Positively there are none better." First bloom about April 1. Prices: Large plants in bloom, per dozen, 60c; 100 plants, \$3.75—add 15c per dozen postage.

Important—Plants sent by mail have but little soil left on roots, and should receive careful attention upon arrival. If they appear withered, place in lukewarm water for an interval of ten to fifteen minutes. This will revive them.

CANNAS

The Canna is one of the most beautiful of all bulbous plants. Plant out-of-doors in the middle of May when weather is warm and settled. Do not water too freely until well started, then they should have an abundance. Plant 18 in. apart. **We list below four of the best Cannas in cultivation:**

King Humbert 4 feet. Scarlet flowers, bronze leaves; greatest favorite today. This remarkable "Gold Medal" Canna has been the sensation of the past twelve years. It is a cross between the orchid-flowering and the French or Crozy type, combining the best features of both, the large flowers of one with the free-blooming character of the other, and the handsome broad, tropical foliage.

Yellow King Humbert 4 feet. Foliage a very dark green, flowers a deep rich yellow, softly spotted and blotched with bright red; measuring 5 to 7 inches across, individual petals 3 to 3 1/2 inches in diameter. An orchid flowering sport of the well-known variety King Humbert. Some plants will occasionally give a scarlet or scarlet-striped flower, which we consider an improvement rather than a defect.

Hungaria 3 1/2 feet. The best pink Canna. Leaves bluish green, never burn. Flowers very large, with immense petals. Trusses of enormous size borne well above the foliage. Very compact, almost dwarf and of a very luxuriant growth.

The President 4 feet. In color a rich glowing scarlet with immense rounded flowers, seven inches across when fully open, are produced on strong erect stalks well above the heavy foliage. Free-bloomer and strong grower.

Price: Dormant Roots—Extra large size any of above, each 30c; 2 for 50c; dozen, \$2.50, postpaid.

Canna Plants Strong, well established pot grown plants, ready in May. All of the above named varieties, each, 45c; dozen, \$4.50; 100, \$32.50. Shipped by express only.

MISCELLANEOUS SPRING BULBS

Caladium or Elephant Ear

Plant in rich soil and give plenty of water. With such treatment a selected size bulb will make a plant about four feet high, with leaves three feet long and 20 inches wide. First size large bulbs, each, 30c; dozen, \$2.75, postpaid.

Cinnamon Vine (Dioscorea Batatas)

A rapid-growing climber, taking its name from the peculiar fragrance of the delicate white flowers. Leaves heart-shaped, bright glossy green, growth rapid. Each, 15c; dozen, \$1.50, postpaid.

Lily of the Valley (Convallaria Majalis)

American Pips (For outside planting)—Extra strong clumps, 50c each; \$5.00 per doz. Pips 25 for \$1.00; 100 for \$3.50.

Maderia Vine

One of the most popular climbers, succeeds in any location, doing best, however, in a sunny, sheltered place; foliage very dense. Strong thurs. Each, 10c; dozen, \$1.00, postpaid.

Montbretias

One of the brightest of our summer flowering bulbs and should be set out during April or May. They should be protected during the winter with a heavy covering of leaves or litter. We have colors as follows: **Red, Pink, Yellow, Orange, Variegated Red and Yellow.** Each, 11c; dozen, \$1.10; per 100, \$8.00. All colors mixed, 9c each; dozen, 85c; per 100, \$6.00.

Hardy Lilies

Plant very early in spring.

Auratum (Gold Banded)—Flowers white, dotted crimson, with a clear golden band running through the center of each petal, very fragrant. Each, 45c; 3, \$1.20, postpaid.

Regale—A new hardy Lily with remarkably beautiful blooms. Color, white, shaded pink; canary-yellow center. May be used for forcing. Each, 60c; dozen, \$6.00.

Superbum—One of the most satisfactory Lilies that can be planted either in the garden or in meadows. Often grows over eight feet high and produces twenty to thirty orange-red flowers in July when flowers are apt to be rather scarce. Each, 25c; dozen, \$2.50.

Speciosum Rubrum (Crimson Banded)—White, with a deep rosy crimson band on each petal, with deeper colored spots between. Each, 40c; 3 for \$1.10, postpaid.

Tigrinum (Single Tiger Lily)—Very pretty. Extra large bulbs, each, 30c; dozen, \$3.00, postpaid.

Tigrinum (Double Tiger Lily)—Very popular. Extra large bulbs, each, 30c; dozen, \$3.00, postpaid.

Tuberose

The lovely waxy flowers are so fragrant that a few tips will perfume a room. The tips may be taken off as they expand, and if you do this gradually a few plants will provide for a long period. For open ground culture, plant in May or June in a warm location.

Double Dwarf Pearl—This is an improved strain of the Dwarf Pearl, bearing very heavy spikes of double flowers. Each, 10c; dozen, 75c; postpaid.

GLADIOLUS (Sword Lily)

A succession of bloom may be had from July to October by making plantings two weeks apart to the end of June. To make a good show they should be planted from three to four inches apart each way, the large bulbs being covered about six inches deep, small ones from three to four inches. Six and over furnished at dozen rates; 25 and over 100 rates. **Delivery Charges on all Gladiolus Are Prepaid at Catalogue Prices.**

America—A beautiful soft pink. Each, 6c; dozen, 60c; 100, \$1.00.

Anna Eberius—Dark velvety purple, throat deeper. Each, 10c; doz., \$1.00; 100, \$7.00.

Baron Hulot—The only real blue Gladiolus on the market. Each, 10c; dozen, \$1.00; 100, \$7.50.

Dr. F. E. Bennett—Peach-red, overlaid, with flame-scarlet, throat stippled with ruby and white. A very large, attractive red with plenty of vigor. The flowers have good substance and good arrangement. This is one of those reds that stand out in a class by themselves. It is sure to be the one you will see if you go into the garden when it is in bloom. Each, 45c; dozen, \$4.75.

Evelyn Kirkland—Rose pink shading to pale pink, scarlet blotches on lower petals. Each, 10c; dozen, 90c; 100, \$6.00.

Gretchen Zang—Pink, shading to scarlet on lower petals. Each, 8c; dozen, 80c; 100, \$5.50.

Halley—Large open flowers of a delicate salmon pink; very early. Each, 6c; dozen, 60c; 100, \$4.00.

L. Immaculee—Pure waxy white. Each, 9c; dozen, 90c; 100, \$6.50.

Mrs. Frances King—A striking shade of scarlet. Each, 6c; dozen, 60c; 100, \$4.00.

Fay Lamphier—Large flowers with coral lustre and cerise blending. Flowers well distributed on its graceful spike rendering it very useful for artistic vase arrangement. Price, each, 18c; doz., \$1.75; 100, \$19.00.

Los Angeles—Shrimp pink with orange-carmine throat. The color tone is one of unusual delicacy and so pleasing as to be greatly admired. It is a favorite cut flower of individuality and distinction. Each, 25c; doz., \$2.15; 100, \$15.00.

Mary Pickford—Creamy white throat soft sulphur-yellow. Each, 11c; doz., \$1.10; 100, \$8.00.

Le Marechal Foch—Ros-pink, resembling America in color but deeper. Blooms same time as the Halley. Each, 10c; doz., 70c; 100, \$4.50.

Mrs. Frank Pendleton—A lovely salmon pink with brilliant deep red blotches in the throat. Each, 10c; dozen, 75c; 100, \$5.00.

Mrs. Frederick C. Peters—Beautiful shade of rose-lilac, with crimson blotch bordered white on lower segment; resembling an orchid in color. Flowers of large size and many open at one time on a strong stem. Healthy plant with good green foliage. Each, 20c; dozen, \$2.00; 100, \$12.50.

Panama—Solid deep pink. Each, 10c; dozen, 75c; 100, \$5.00.

Prince of Wales—Beautiful light salmon shaded orange. Each, 8c; dozen, 80c; 100, \$5.00.

Red Emperor—One of the best scarlet-reds. Each, 14c; dozen, \$1.35; 100, \$9.50.

Schwaben—A clear canary-yellow with a small blotch of deep garnet in the throat. Each, 7c; dozen, 70c; 100, \$5.00.

War—A magnificent rich blood-red shaded crimson-black. Each, 11c; dozen, \$1.10; 100, \$7.50.

Prince of Wales

Rose Ash—Peculiar soft, old-rose tones, fading to ashes of roses on the outer edges of petals. Very unique in coloring and greatly admired. Each, 12c; dozen, \$1.20; 100, \$8.50.

Wilbrink—Pale livid pink, upper petals tinted slightly darker. Each, 7c; dozen, 70c; 100, \$4.50.

Yellow Hammer—Pure yellow, lightly marked with red in the throat. Each, 9c; dozen, 90c; 100, \$6.50.

Marshall Foch—Finest warm salmon pink with small red blotch in throat; giant flowers and stem, slightly ruffled. Each, 17c; dozen, \$1.70; 100, \$12.00.

Golden Measure—A deeper shade of yellow, heretofore unknown in the large-flowering Gladiolus. This is a real gem. Several of these gorgeous flowers in bloom at once on a tall stem give a most magnificent effect. Each, 15c; dozen, \$1.50; 100, \$10.00.

Mrs. Dr. Norton—Delicate cream and pink, deepening towards the edges; sulphur-yellow center. Flowers widely expanded. A very beautiful variety and much admired at Gladiolus exhibitions. Each, 10c; dozen, \$1.00; 100, \$7.00.

W. H. Phinns—La France-pink overlaid with light rose-salmon, lighter toward the center. Lower petals very faintly striped and more speckled with ruby. Flowers enormous. A masterpiece in Gladiolus. Each, 45c; dozen, \$4.75.

Ruffled Varieties

A. B. Kunderd—Tall, large, deeply ruffled flower of delicate cream color. Flushed with finest bluish pink. Lower petals primrose cream with pink edges. Grand. Each, 17c; dozen, \$1.70; 100, \$12.00.

Fern Kyle—A large ruffled flower of creamy white color. Vigorous grower. Creates a sensation wherever shown. Introduced at \$25.00 per bulb. Each, 25c; per doz., \$2.50.

E. J. Shaylor—Splendid new pure deep pink, ruffled. Each, 8c; dozen, 80c; 100, \$5.50.

Kunderd Glory—Large, ruffled, beautiful creamy apricot with light tint of pink and blue markings of red on lower petals. Each, 11c; dozen, \$1.10; 100, \$8.00.

Orange Glory—Large ruffled, grand orange colored, with beautiful lighter throat. Very rich and striking color. Each, 11c; dozen, \$1.10; 100, \$8.00.

Purple Glory—A giant gladiolus of remarkable color, deepest velvety maroon red, faint shading of purple with almost black throat. Beautifully ruffled, with many open at a time. A giant in size. Truly wonderful. Each, 20c; dozen, \$2.00; 100, \$13.00.

Rose Glory—A very large and beautiful ruffled variety. Purest rose-pink color, deeper throat, extra fine. Each, 11c; dozen, \$1.10; 100, \$8.00.

White Glory—A gorgeous pure white of extra size. Nicely ruffled with beautiful iris blue throat. Grand. Each, 11c; dozen, \$1.10; 100, \$8.00.

Primulinus Type

Alice Tiplady—Orange-saffron. Each, 9c; doz., 90c; 100, \$6.50.

Maiden Blush—An exquisite pink with lighter throat. Very dainty flower on graceful spike. Each, 10c; doz., 75c; 100, \$5.00.

Souvenir—One of the best yellow Primis. Large flowers of purest color. Each, 10c; doz., \$1.00; 100, \$7.00.

Primulinus Hybrids—Orchid-like flowers, slender, strong spikes. Colors brilliant and beautiful. Mixed colors. Each, 7c; dozen, 70c; 100, \$1.00.

A COLORFUL GARDEN OF GLADIOLI FOR \$1.00

A dollar never bought more of beauty than our **Special Offer of 30 Flowering Size Bulbs of P.-W.'s Glorious Gladioli**, including not less than **Five Varieties for \$1.00**. Rarely are flowers of the highest merit the most easily grown and surest of success. But such is the case with Gladioli. If there is room for a single flower in the garden it should be this.

30 BULBS, Flowering Size, not less than 5 Varieties, postpaid, for \$1.00.

P.-W.'s Superb Mixed—Our special mixture from the best named and hybrid Grandavenis, Childs and European types. A well blended combination of all colors, shades and combinations. Dozen, 50c; 100, \$3.50.

DAHLIAS

Plant when danger of frost is over. If possible plant in an open, sunny situation. Prepare the soil thoroughly by deep digging. Be moderate in the use of both manure and water. Never plant when soil is wet. Lay the tuber on its side and cover it four inches deep, pressing the soil firmly on the tuber. Keep the soil loose and mellow by frequent hoeing, drawing the soil to a slight hillock around the plant.

P.-W.'s Special Merit Dahlias

Amun Ra or The Sun God Wonderfully distinct both in color and formation, giant in size, and perfect in shape. The outer petals are of gorgeous copper and orange tones shading to gold and amber, deepening in the centre to a dark reddish brown, the effect as a whole being that of a gorgeous sunset. The stems are stout and hold the immense flowers well above the strong vigorous plants; the flowers keep for many days when cut. Each, \$1.00.

Avalon (Decorative)—Pure clear yellow, the large flowers are very distinct and pleasing in shape, always full to the center, and produced in great abundance on strong stems. This is a flower with every good quality. A remarkably good keeper when cut; in fact, I regard it as the best yellow decorative for cutting. Each, \$1.50.

Billionaire (Peony Flowered)—One of the largest in this class. Color is beautiful shade of old gold. Unexcelled for exhibition. Each, 50c.

Blue Bird (Peony Flowered)—Quite an exceptional color of the deepest tone of mauve or lilac which in certain lights has a bluish sheen. Each, 50c.

Champagne (Decorative)—Aside of being one of the largest Dahlias it is a model for shape, habit of growth, stem, freedom of flowering, its remarkable and distinct color; very aptly described by its introducer as golden champagne with chamoise shadings, which color combination no doubt suggested its appropriate name. Each, 50c.

Eleanor Vanderveer (Decorative)—Rose pink, very large with excellent stem. A strong grower and free bloomer. Highly recommended for all purposes. Each, \$1.75.

George Walters (Hybrid Cactus)—One of the largest of all Dahlias; measures from 7 to 9 inches without budding. Stems very long and wiry. Color, salmon pink, shaded to old gold. Each, 75c, postpaid.

Insulinde (Decorative)—The finest Dahlia of distinct form with petals twisted and curled. Stems are 2 to 3 feet long and flowers 9 to 10 inches across. Color, rich saffron-yellow, shaded russet-orange. Price, each, \$1.00.

Jessie Seal (Peony Flowered)—A unique color in the Dahlia family, clear old rose. A pleasing and popular shade, very large. Each, \$1.00.

Jersey's Beauty (Decorative)—The most distinctive new dahlia shown in the East and the finest pink dahlia in existence, a real rose pink of excellent conformation and borne on a wonderful stem. Each, \$1.00.

Kittie Dunlap (Decorative)—Color is that of the American Beauty rose. Stems long and strong. Flowers are of large size, petals are broad and have a slight tendency to roll. Each, \$1.

Lewis, Jr. (Cactus Hybrid)—Large gorgeous velvet red, shading deeper to the center; outer petals curved and twisted, showing a violet blue on back. Perfectly formed, excellent bloomer. The stems are long and stout, making it a fine cut flower. A blue dahlia. Each, \$1.50.

Lucy Davis The form is that of the perfect decorative type. Stems are long—often 18 inches, yet strong and wiry. The golden apricot, clear and without shading. Each, 50c.

LeGrande Lilac (Peony Flowered)—An immense royal purple holding its slightly twisted broad petals erect on strong stems often measuring 20 inches long. Each, 50c.

Amun-Ra Dahlia

Mariposa (Hybrid Cactus)—A delightful shade of true pink which is intensified by a deeper center; a faint violet suffusion adds to the effect. The veining of the petals heightens the beauty and increases the novelty of the coloring. An absolutely stiff stem rises nearly 3 feet above the foliage. Blooms early and continues in good shape to the end of the season. Price, each, \$1.00.

Millionaire (Decorative type)—Gold Medal Dahlia. Most delicate lavender with faint pink cast overshadowing it, the whole having a blend of white. Each, 50c.

Mrs. Carl Salbach (Decorative)—Stems are exceptionally long, holding the flower erect. Color, soft lavender-pink. Among the very best of recent introductions. Each, 50c.

Mrs. I. De Ver Warner (Decorative)—One of the finest dahlias ever introduced. A charming, deep mauve pink strong grower, producing its gigantic or cattleya (orchid) color. Extra blossoms freely and rigidly erect on long, cane-like stems. Each, 50c.

Ophir (Decorative)—One of the most beautiful dahlias yet introduced. Plants strong and sturdy, with many side branches. The flowers are of good size and of fine form, the petals are slightly reflexed giving a very pleasing appearance. In color a rich old gold, shading to amber. Each, \$1.50.

Radio (Decorative)—Without a doubt one of the greatest dahlias ever originated. Can be grown 11 to 12 inches in diameter. Color, blood red, edged and tipped with yellow. Must be seen to all appreciate its beauty. Each, \$1.25.

Rosa Nell A grand decorative that has proven its worth as the best for all purposes. The color is a pure bright rose, so rich, strong and rare, that in color it stands alone. Its keeping qualities, the best. Habit, constitution, foliage and stem, perfect. Each, \$1.00.

Sweetheart's Boquet (Peony Flowered)—In color an unique shading of salmon rose, shaded with fawn; pleasing alike in both day and artificial light. Flowers large, stems extra long and wiry. Price, each, 50c.

Tommv Atkins (Decorative)—Well, here we have the richest gold scarlet, a color that glistens in the sunshine, an exhibition flower that always attracts attention, a giant in size. Each, \$1.00.

POMPON DAHLIAS

These miniatures are very attractive for cut flowers. The plants produce a wealth of bloom during the entire season.

Achilles—Beautiful lavender.
Amber Queen—Amber, shaded apricot.

Catherine—Bright yellow.
Joe Fette—A splendid new white.

Prince Charming—Cream tipped purple.

Snowclad—Fine white.
Nelly Frazer—Blush ground, tipped rose.

Vivid—Bright red.
Any of above, each, 25c; doz., \$2.50.

Discount Offer on P.-W.'s Special Merit Dahlias—10% Discount from above prices on your selection of any six or more, and 15% Discount on any twelve or more.

Cactus Dahlias

Typical Cactus Dahlia

Countess of Lonsdale—The freest-flowering cactus dahlia. Color, an exquisite shade of rich salmon. Each, 25c; dozen, \$2.50.

Emily Russel—Flowers very freely on excellent stems. Color, American Beauty red. Each, 25c; dozen, \$2.50.

Estandar De Lyon—Immense flowers with curled wavy petals. Color, rich carmine rose. Ea. 25c; dz. \$2.50

Golden West—Often 7 inches across. Stems long and rigid. Color, golden yellow, shaded to pure yellow in center. Has no superior. Each, 50c; dozen, \$5.00.

John Riding—Perfect form, great depth and deep rich crimson color. Each, 50c; dozen, \$5.00.

Mrs. H. J. Jones—Large, with long, claw-like petals, curving for-

ward. Color, bright, vivid red, tipped and edged with pure white. Sometimes solid red, at others, bluish white. Each, 25c; dozen, \$2.50.

Beloit—Deep rich, garnet purple; the longest and strongest stems; free bloomer. Each, 50c; dozen, \$5.00.

Betty Austin—Yellow at base of petal, blending to rosy carmine and rose yellow at tips. Each, 50c; doz., \$5.00.

Rheinkönig—Immense pure snowy white, on long stiff stems. Each, 25c; dozen, \$2.50.

Dorothy Durnbaugh—Immense flowers of an attractive shade of rich pink. The blooms of fine form with good stems. It is considered one of the best cactus dahlias. Each, 50c; dozen, \$5.00.

P.-W.'s Dahlia Collection Offer No. 2—Your selection of one each of any six of above named Cactus Dahlias for \$2.00, postpaid.

Decorative Dahlias

Delice—Its beautiful soft, yet lively color, a glowing rose pink. Each, 25c; dozen, \$2.50.

Eldorado—Size, stem and color of this variety are of the best. Immense golden-yellow blooms which stand up and look you in the face. Each, 50c; dozen, \$5.00.

Giant Ruby—Deep scarlet; an enormous flower with great depth. Extra good for exhibition. Each, 50c; doz., \$5.00.

J. D. Long—Flowers are always full and well formed stems are long, flower erect. Color, a blending of autumn tints of salmon, pink, amber and bronze. Each, 50c; dozen, \$5.00.

Princess Juliana—Splendid pure white. Each, 25c; dozen, \$2.50.

P.-W.'s Dahlia Collection No. 3—Your selection of one each of any six of the above named Decorative Dahlias, \$2.00, postpaid.

La Grosse Bête—An enormous flower held straight upon strong stems and of a cerise self color. Each, 25c; dozen, \$2.50.

Mina Burgle—Flowers extra large, clear, dark vivid red, produced on good stems. Each, 25c; dozen, \$2.50.

Mabel Thatcher (Marean)—Large flowers of a pale yellow shade which are borne on stiff strong stems. Each, 50c; dozen, \$5.00.

Mrs. Thos. Burch—Rich old gold, sometimes marked with pink, shading to fawn. One of the very best for cutting. Each, 25c; dozen, \$2.50.

Scottish Chief—Fine flower of a new and unusual shade of golden cocoa or amber coloring, sometimes tipped with white deepening into pink. Each, 50c; dozen, \$5.00.

Type of Decorative Dahlia

Paeony Flowered Dahlias

Type of Peony Flowered Dahlia

Chicota—A ideal golden yellow of large size, exceptionally long stems. Each, 50c.

Freda Newman—Bright orange bronze, margined with old gold, excellent. Each, 25c; dozen, \$2.50.

Mme. Bystein—Very beautiful, pure lilac lavender; large size and lovely form; erect, on splendid stems; one of the best. Each, 50c; dozen, \$5.00.

La Glorietta—Yellow at the base, shading to a beautiful rosy pink shade; the flowers are enormous in size. Each, 50c; per doz., \$5.00.

P.-W.'s Dahlia Collection Offer No. 4—Your selection of one each of any six of the above Peony Flowered Dahlias for \$2.00, postpaid.

Naiad—Cream pink. Beautiful by day, and simply grand under artificial light. Each, 25c; dozen, \$2.50.

Queen Esther—Beautiful deep red of enormous size, long, strong stems. Each, 50c.

Romola Pizzani—Yellowish salmon, very large and free blooming. Each, 25c; dozen, \$2.50.

South Pole—A large, pure white. Each, 50c; dozen, \$5.00.

The Oriole—A gorgeous combination of burnt orange, red and yellow with many of the flowers tipped white. Each, 75c; dozen, \$7.50.

Van Dyke—Mammoth flower, salmon rose, tinted heliotrope; petals twisted. Each, 25c; dozen, \$2.50.

Typical Show and Fancy Dahlia

Show and Fancy Dahlias

Dr. I. B. Perkins—Large pure white, long stems, excellent. Each, 25c.

Golden Opportunity—Hybrid show. Rich butter-cup yellow, shaded burnt orange. Each, 50c; dozen, \$5.

Geo. K. Gero—A rank, healthy grower. Color clear, rich pink. Each, 50c; dozen, \$5.00.

Mrs. C. D. Anderson—Stems long and wiry. Flowers large and almost round. Color, rich clear purple. Early and very prolific bloomer. Each, 50c; dozen, \$5.00.

P.-W.'s Dahlia Offer No. 5—Your selection of one each of any six of the above named Show and Fancy Dahlias for \$1.50, postpaid.

Miss Helen Hollis—Undoubtedly the largest deep scarlet Show Dahlia in existence. Each, 30c; dozen, \$3.00.

Purple Gem—Rich royal purple, clear and constant. This variety is a decided improvement over the old varieties. Each, 25c; dozen, \$2.50.

The Rose—Very large; color similar to the American Beauty rose. Each, 25c; dozen, \$2.50.

W. W. Rawson—Fine large flower, produced on long stems. Color, pure white, overlaid with delicate lavender. Each, 25c; dozen, \$2.50.

DOUBLE PEONIES

Peonies will do well in almost any garden soil, but the better enriched the more vigorous the growth. The plant is extremely hardy and will survive the coldest winters with little or no protection.

An important point to observe in the planting of Peonies is not to plant too deep. The roots should be placed so that the crowns are covered with two or three inches of soil. Too deep planting is a frequent cause of shy flowering. Prices include Postage.

Standard Varieties Peonies

Albert Crousse—Bomb type. Late. Shell pink. Center slightly flecked crimson. Large compact and vigorous. \$1.00 each; \$10.00 per dozen.

Berloiz—Large, bright currant red shaded amaranth. 75c each; \$8.00 per dozen.

Delachei—Medium, compact, rose type. Violet-crimson, slightly silver tipped. Late mid-season. 75c each; \$8.00 per dozen.

Edulis Superba—This is the famous Decoration Day Peony. Color a beautiful clear pink, with silvery reflex. 50c each; \$5.25 per dozen.

Felix Crousse—Large, ball-shaped bloom; very brilliant red. One of the finest self-colored varieties. 90c each; \$9.00 per dozen.

Festiva Maxima—The finest white in cultivation. 55c each; \$5.50 per dozen.

Grover Cleveland—Rose Type. Late. Dark Crimson. Very large and full. Tall. One of the best red varieties. \$1.50 each.

Karl Rosenfield—Large, globular, compact, semi-rose type. Dark crimson. Midseason. Very fine. \$1.50 each; \$16.00 per dozen.

L'Eclatante—Bomb type, midseason. Flowers very double and full; color deep, brilliant velvety-crimson. 75c each; \$7.50 per dozen.

Madam Leoline Calot—Milky-white, flesh tinted flecked with crimson. Late midseason. 70c each; \$7.00 per doz.

Marie Jacquin—Midseason. Semi-rose type, known as the "Water-Lily Peony." Very interesting on account of its variable forms. Color is a most delicate flesh tint that gives way to lilac-white. Semi-double, blooms in profusion. \$1.25 each.

Mons. Jules Elie—Immense globular, very full flowers. Color glossy lilac-pink, shading to deeper rose at base, the entire flower overlaid with a sheen of silvery hue. Early midseason. \$1.00 each; \$10.50 per dozen.

Meissonier—(Syn. American Beauty) Bomb type; midseason. Very brilliant crimson; full double flowers on stiff, wiry stems. 70c each; \$7.00 per dozen.

Officinalis Rubra—Extra early large globular brilliant crimson. The very popular old time "Piney" first of all in Peonies to bloom in the Spring. 95c each; \$9.50 per dozen.

Queen Victoria—Bomb type; early midseason. One of the best every day white. Very pretty in the bud state, when it has a faint blush tint. 55c each; \$5.50 per dozen.

Rubra Superba—Magnificent rich brilliant crimson. Very large, full, and double. Highly fragrant. Decidedly the best late red Peony. 70c each; \$7.00 per dozen.

MIXED—Double Red—50c each; \$5.50 per dozen.

Double White and Double Rose-Pink—45c each; \$4.50 per dozen.

New Japanese Varieties

Akaku (Japan)—Very large deep carmine flowers or uniform color. Clear even tone, fine form and immense in size. Huge center of saffron yellow petaloids. Fine grower and free bloomer. \$4.00 each.

Mikado—Japanese; dark, brilliant crimson petals, center cushion of golden yellow petaloids, crimson edged; long, wiry stems; an exquisite flower. \$3.50 each.

P.-W.'s "Big Six" Peony Collection

Here is a get acquainted selection of a half dozen best standard varieties as follows:

1 Festiva Maxima —White.	1 Felix Crousse —Red
1 Festiva Maxima —White	1 Edulis Superba —Pink
1 Queen Victoria —White	1 Albert Crousse —Pink
1 Officinalis Rubra —Red	

Regular value of above, \$4.45. Sale price, \$3.50, postpaid.

Florentina Iris, in Attractive Back Yard of I. A. Jackson.

Flag Iris (Germanica)

Avoid planting too deep, barely covering the rhizomes (creeping root stems) being sufficient. In the arid sections of the west where water is not obtainable the Flag Iris varieties are most suitable as they are great drought resisters. We offer the following choice named varieties.

"S" refers to the three standards, or upright curling petals.

"F" to falls or drooping petals.

Elderado—"S" flery opalescent, "F" purplish gold. Each, 30c; dozen, \$3.00.

Fairy—"S" white, "F" fringed blue. Each 25c; dozen \$2.50.

Florentina—"S" white, "F" veined violet. Each 25c; dozen, \$2.50.

Kharput—Both "S" and "F" violet purple. Each 25c; dozen, \$2.50.

Lohengrin—Large, handsome, silvery mauve, both "S" and "F". Each, 30c; dozen, \$3.00.

Loreley—"S" light yellow, "F" ultra-marine blue. Each, 25c; dozen, \$2.50.

Pallida Dalmatica—Both "S" and "F" clear lavender blue. Each, 35c; dozen, \$3.50.

Mixed Named Iris (Separate to Color)—White shades, Yellow and Orange shades, Lavender shades, Blue shades, Purple shades, Variegated shades. All shades and colors mixed, any of above each, 15c; dozen, \$1.25; 100, \$8.50.

Phlox (Hardy Perennial)

Phlox are a garden in themselves, succeed in almost any soil and position, and flower freely for many years without attention, yet they respond quickly to and are improved by liberal cultivation. They should be planted in October or November or in the very early spring.

B. Comte, rich French purple.

Beacon, bright cherry red.

Champs Elysee, rosy magenta.

Commander, New bright crimson dark eye.

Michael Buchner, pale lavender strong grower.

Rheinlander, salmon pink claret eye.

Rosenberg, wine purple, tall grower, very showy.

Thor, lovely shade deep salmon pink.

Von Lassburg, pure white large.

Price, any of above 35c each; \$3.50 per dozen.

P.-W.'s PERENNIAL FLOWERS

Perennials have never been so popular as they are at the present time. Their permanency appeals to all. They are planted once and are always there; living through the winter with little or no protection, the flowers become better as the plants grow older. Will grow well in any soil, which may be enriched with decomposed manure or bone meal. The varieties we list are all perfectly hardy, the tops dying down in winter, but coming up early in the spring. A hardy border, properly planned and planted, is a continual source of joy throughout the season; from earliest spring to late autumn days it will be resplendent with color and will yield an abundance of flowers for indoor decoration. Once established, such borders need no other attention than to be kept free from weeds and to be given an occasional top-dressing with fertilizer for nourishment.

HOW TO GROW FROM SEED

Many of the hardy flowers will bloom the first year from seed if sown in the hotbed in February or March. Outdoors they may be sown any time from May 1 to August—the earlier the better, for the plants will then become stronger and better established before winter. A coldframe is an ideal place in which to sow Perennials, but, if you have none, prepare a seed-bed of finely sifted light soil made rich by adding and mixing with it thoroughly well-rotted barnyard manure, sheep manure, or humus. Sow the seed in shallow drills of squares of suitable size, partitioned off with laths; cover $\frac{1}{2}$ inch or more, according to the size of the seed—the very fine ones should only be pressed into the soil; press down with a flat board; water gently but thoroughly through a fine hose and do not allow the soil to become dry while the seed is in the process of germination, for as soon as the seed has sprouted and until it becomes a plant with roots, its life depends entirely on soil-moisture. It is fatal to allow the soil to become dry for even five minutes during this period, and nearly all failures in growing perennials are attributed to this neglect. Seed-beds must, therefore, be shaded from the sun in summer and carefully watched and watered until the plants have made from four to five leaves. While most of the hardy flowers germinate in from eight to fourteen days, there are some which take a month or more before they come up, so do not become impatient. If seedlings come up too thick, pull out some and transplant elsewhere in boxes or other seed-beds, and when plants are finally large enough they will be ready for setting out in their permanent places. This, however, should not be done later than October 1, in order to allow sufficient time for them to take a firm hold in the soil before frost.

Perennial Collection A—Suggestive Arrangement of a Hardy Border

This sketch of a Hardy Border (A) 50 x 5 feet, consisting of 30 choicest Perennials for continual bloom throughout the season, shows how to proceed with the laying out and placement of the plants.

1. Hollyhock, Double Rose.....\$.10	11. Campanula calyanthema, Pink.....\$.10	21. Aquilegia, Long-spurred Hybrids\$.15
2. Coreopsis lanceolata10	12. Pentstemon Hybrids15	22. Campanula pyramidalis10
3. Candytuft, Gibraltaria10	13. Gaillardia, New Hybrids..... .25	23. Scabiosa caucasica, Blue..... .10
4. Digitalis gloxinoides, White..... .10	14. Liatris spicata25	24. Delphinium, Gold Medal Hybrids .25
5. Rudbeckia purpurea10	15. Lupinus polyphyllus roseus..... .10	25. Veronica spicata15
6. Hesperis, Purple10	16. Wallflower, Mixed10	26. Eupatorium Coelestinum10
7. Pyrethrum roseum hybridum..... .15	17. Delphinium, Bellamosa25	27. Heuchera sanguinea splendens .25
8. Delphinium, Belladonna20	18. Centaurea montana10	28. Anchusa, Dropmore15
9. Stokesia cyanea10	19. Shasta Daisy10	29. Hollyhock, White10
10. Sweet William, Scarlet Beauty... .15	20. Pentstemon Hybrids15	30. Dianthus plumarius, Double..... .10

Our SPECIAL OFFER (A) of 1 pkt. each of the above 30 varieties (regular price \$4.20), \$3.50

To those desiring quicker results than can be had from seed we supply the field grown plants which will give a world of bloom the first season. Whether plants or seeds we can give you service. See page 79-83 inclusive. For seed of Annual Flowers, see pages 84-100.

P.-W.'s Perennial Flower Plants and Seeds

We furnish field grown plants of the varieties marked * listed below. 25c each, \$2.50 per dozen; \$15.00 per 100. If by mail add 5c each; 30c per dozen, for postage and packing.

Alyssum (Madwort)

***Saxatile Compactum** (Basket of Gold)—1 ft. May-June. Producing masses of golden flowers very early. May be planted effectively with Arabis. Seeds, pkt., 10c.

Italica, Dropmore Variety—5 ft. June-July. Beautiful gentian blue, flowers one of the best perennials. Thrives best in partial shade. Seeds, pkt., 15c.

St. Bridg's Strain—May-June. Double and single mixed. 12 in. A beautiful selection of the Coronaria varieties in a wonderful array of colors. Seeds, pkt., 20c.

Aquilegia (Columbine)

Canadensis (Turk's Cap)—Handsome scarlet and orange flowers. Pkt., 10c.

Coerulea (Rocky Mountain Columbine)—3 feet. One of the most beautiful of our native American flowers. Sepals, deep blue; petals, white. Pkt., 10c.

Long Spurred Columbines—Mixed. Pkt., 15c.

*Single Mixed—Pkt., 10c.

*Double Mixed—Pkt., 10c.

Agrostemma

***Coronaria Varieties Mixed**—Attractive free-flowering, producing bright colored flowers on long, slender stems like a single pink; blooms the first season; line for cutting; 1 to 2 ft. June-September. Seeds, pkt., 10c.

Anthem. (Marguerite)

***Kelwayi** (Hardy Marguerite)—2 ft. Daisy-like yellow blossoms, produced all summer. Excellent for cutting. Seeds, pkt., 10c.

Arabis (Rock Cress)

***Alpina**—6 in. Useful for spring edding and rockeries; pure white flowers. Seeds, pkt., 10c.

Bellis Perennis (Double Daisy)

Improved giant double-flowering, white and pink. Seeds, pkt., 10c; Plants, \$1.00 per dozen.

Aubrietia (Rock Cress or False Wall Cress)

One of the daintiest and most delicately beautiful of all dwarf, creeping plants for carpeting beds or rockeries, forming brilliant sheets of color for many weeks. Massed on rockeries or in borders with white Arabis and yellow Alyssum, it forms a charming contrast. A gem for planting in crevices of rocks or wall, forming a cataract of color. Grows well from seed. Sow in June and plant out in autumn where required for flowering in spring.

A. Bougainvillei—Height 6 inches. The color of the flowers is dark blue. Seeds, 25 per pkt. Plants 35c each, \$3.50 per doz.

Carnation

After a few years' trials, we have proved these to be quite hardy with ordinary protection. Large double flowers, in bloom all summer.

Grenadin, Mixed—Seeds, pkt., 15c.

***Double Mixed, Extra Choice**—Seeds, pkt., 15c.

Cerastium

***Tomentosum** (Snow in Summer)—4 in. Silvery white foliage, covered with snow-white flowers in early summer. Seeds, pkt., 15c.

CANTERBURY BELLS

Calycanthema (Cup and Saucer)—Perennial—2 feet. June to August. White, Pink, Blue. *Mixed Colors. Each of the above, pkt., 10c.

Campanula Medium (Canterbury Bell)—2 feet. Perennial. Single White, Single Blue, Single Pink *Single Mixed.

Each of the above, pkt., 10c.

Double White, Double Blue, Double Pink. *Double Mixed.

Each of the above, pkt., 10c.

Campanula Pyramidalis (Chimney Bellflower)—Mixed. 5-6 feet. Pkt. 10c

Centaurea (Hardheads)

Good plants for the flower border or wild garden, with thistle-like flowers. Blossom in July-August.

Macrocephala—Golden yellow. 2½-3 ft. July-August. Seeds, pkt., 10c.

***Montana Blue** (Hardy Corn Flower)—2 ft. June-September. Beautiful blue. Seeds, pkt., 10c.

Chrysanthemum

***Old-Fashioned Types**—Double Aster-like flowers. Colors, Red Bronze, White, Pink and Yellow. (Plants only.)

***Pom-Pom**—Miniature types, White, Pink, Bronze, Yellow, Red, (Plants only.)

Japanese Types—These are the hardier early flowering selections from those mammoth indoor or Greenhouse types. Yellow, Pink, Lavender and White. (Plants only.)

Coreopsis

One of the most popular hardy perennials, of a graceful form, blooming June to October.

***Lanceolata Grandiflora**—2 feet. Large, orange-yellow flowers on long graceful stems. About the best yellow cutflowers blooming incessantly. Pkt., 10c.

Dianthus

(Hardy Pinks)

These very desirable sweet-scented, low-growing, early blooming and free flowering hardy garden Pinks are unequalled for the borders.

***Single Mixed**—Delicately fringed flowers. Pkt., 10c.

***Double Mixed**—Fine for cutting. Pkt., 10c.

Aquilegia (Columbine)

DELPHINIUM (Perennial Larkspur)

Few plants are so handsome as the perennial Larkspurs. The most important are the tall hybrids, varying from 1 to 6 feet, and from the palest lavender through every conceivable shade of blue to deep indigo.

Chinese Mixed—Pkt., 10c.

Double Mixed—3 feet. Pkt., 15c.

***Formosum**—3 feet; deep blue, white eye, open spike. Pkt., 10c.

***Belladonna** (Light Blue)—2 feet; flowers exquisite shade of turquoise blue. Pkt., 20c.

***Bellamosum**—This is a dark form of the popular light blue Belladonna with which it is identical in habit and growth, freedom of bloom. Pkt., 25c.

***Gold Medal Hybrids**—Height 6 feet. Unquestionably one of the finest strain of mixed hybrids offered. Large flowers on spikes two feet and over, the majority running in the lighter shades of blue. Mixed colors. Pkt., 25c.

P.-W.'s Wrexam Hybrid Delphiniums

Coquet—Amethyst violet flowers on strong stems. Each bloom is delicately shaded with blue and set off with a gold brown centre. Seed pkt., \$1.00.

Jenny Jones—Large blooms of pansy violet with vivid flashes of real gentian blue. Seed, pkt., \$1.00.

Purple Splendour—Very large spikes. Cornflower blue, shaded amethyst. Centre of each bloom is a black brown and green "bee." Seed pkt., \$1.00.

Happy Thought—Outer petals tinted pale blue on background of pansy-violet, shaded with rosy amethyst. Late flowering. Seed, pkt., \$1.00.

Cambria—Clear helio, splashed venetian blue, with black eyes, semi-double. Seed, pkt., \$1.00.

Queen Mauve—Pale hortense violet shaded with sylvia blue, and white centre. Seed, pkt., \$1.00.

Collection—1 pkt. each of above 6 varieties. Pkt., \$1.00.

P.-W.'s Wrexam Hybrids Mixed—All varieties. Pkt., \$1.00.

Canterbury Bells

P.-W.'s Perennial Plants and Seeds

We furnish plants of all the varieties listed below marked * at 25c each; \$2.50 per dozen; \$15.00 per 100. If by mail add 5c each; 30c per dozen for postage and packing.

Dicentra (Spectabilis)

Bleeding Heart or Sea Flower—An old-fashioned favorite, at home in any part of the hardy border, and especially valuable for planting in the shade. Strong roots. Each, 75c; doz., \$8.00.

Doronicum

Plantagineum Excelsum—Large bright yellow flowers and one of the most effective very early spring flower. It is also a splendid flower for cutting, as it carries well and stands a long time; succeeds everywhere. Plants, 50c each; \$5.00 per dozen; 10 seeds, 50c.

Digitalis (Foxglove)

These produce spikes of blossoms, three to five feet high in June and July.

Gloxiniaeflora, White—Flowers shaped and spotted like a gloxinia. Pink, Purple. Each color, packet, 10c.

***Gloxiniaeflora, Mixed Colors**—Packet, 10c.

Purpurea Mixed—Many colors. Pkt., 10c.

Eryngium (Sea Holly)

Handsome ornamental plants, growing from 2 to 3 feet high. The flower heads, which are produced from July to September, are useful to cut for vases or to dry for winter bouquets.

Amethystinum—The finely-cut spiny foliage and the beautiful thistle-like heads are of glistening amethystine-blue. Packet 10c.

Eupatorium (Thoroughwort)

Strong growing border plants suitable for cutting; they bear minute flowers in dense heads; ordinary garden soil suits them.

***Coelestinum (Mist Flower)**—September-October. Light blue. 2 ft.

Euphorbia

***Polychroma**—1 ft. April-May. Leaves oblong and dark green, floral leaves different shades of yellow at flowering time. Grows into fine compact bush. Little known but very desirable. Seeds, pkt., 10c.

Ferns (Hardy)

Hardy Ferns are especially suited to partial and dense shade and will flourish where grass will not grow. For naturalizing in woodland they are fine subjects associated with Foxgloves, Funkias and Aquilegias. They make a grand effect in shady spots in any garden. Their culture is easy. (Ready March 15).

Hardy Maidenhair Fern—1 ft. The best dwarf fern.

Hardy Lady Fern—2 to 3 ft. Fine delicate fronds, very hardy, will grow in the sun if soil is kept moist.

Hardy Ostrich Fern—3 to 4 ft. Stately, handsome dark green fronds. Plants of above three varieties—50c each; \$5.00 dozen.

Feverfew (Matricaria)

Little Gem—A most useful border plant and valuable summer cut flower, with large double white flowers; June until October; 18 to 24 inches high. Packet, 10c.

Funkia (Plantain Lily)

The Plantain Lilies are among the easiest plants to manage; their broad massive foliage makes them attractive subjects for the border even when not in flower. They succeed equally well in sun or shade.

***Lanceolata**—Valuable by reason of its late flowering, lilac flowers in September. 2 feet.

PLANTS—Any of above varieties marked * 25c per clump; \$2.50 per dozen; \$15.00 per 100. If by mail add 5c per dozen for packing and postage.

Gaillardia (Blanket Flower)

One of the showiest hardy plants, growing about 2 feet high and succeeding in any soil in a sunny position; beginning to flower in June, they continue the entire season.

***Grandiflora Mixed**—Composite flowers, variegated with shades of red and yellow. Packet, 10c.

***New Hybrids**—Very large flowers, in a great variety of colors. Pkt., 25c.

Geranium (Crane's Bill)

***Sanguineum**—A desirable plant; with pretty cut foliage and bright crimson flowers; blooms the entire season; 18 inches.

Geum (Avens)

Pretty border plants, growing about 15 to 18 inches high, and producing showy, bright-colored flowers from May to July.

***Atrococcineum fl. pl.**—Brilliant scarlet double flowers. Pkt., 15c.

Grasses (Hardy Ornamental)

For large beds or groups on lawns nothing gives a finer effect than the Hardy Grasses, largely used in prominent positions in many of the finest public parks, etc.

Cyperium Argenteum (Pampas Grass)—White silvery plumes; blooms the second season; 5 feet. Pkt., 10c.

Eulalia Zebrina (Zebra Grass)—Light green, barred with creamy white across foliage; 6 feet. Pkt., 10c.

Variegata—Long, narrow, green leaves, striped with white; fine feathery plumes; 6 feet. Packet, 10c.

Pennisetum Japonicum—one of the most valuable for beds or specimens. Easily grown from seed, making nice plants the first year; 4 feet. Pkt., 10c.

Gypsophila

Graceful border and rock plants with small flowers on light stems. Greatly prized for cutting.

Paniculata Flore Pleno—Improvement on the single-flowered type and more lasting, the flowers forming miniature balls of white petals. 2-3 ft. July-August. Not quite fixed, but about 25 per cent come true. Seeds, pkt., 25c.

***Paniculata (Baby's Breath)**—2-3 ft. July-August. Small flowers on branched stems, so thick as to give the plant a white lacelike effect. Seeds, pkt., 10c.

Hesperis Matronalis

(Sweet Rocket)—Evening Scented Stock)

Deliciously sweet scented flowers for garden or cutting. 2-3 ft. June-August. Sow in Spring in boxes and transplant in April or May—or sow in open ground in April for later bloom.

Purpurea—Purple, ½ oz., 30c; pkt., 10c.

Alba—White. Seeds, pkt., 10c.

Helenium (Sneezewort)

Delightful perennials allied to the Helianthus (Sunflower). Splendid and lasting as cut flowers.

***Riverton Gem**—Covered from August to October with brilliant old gold and splashes of darker shades, changing later to wall-flower red. 3½ feet. Pkt., 15c.

Helianthus (Hardy Sunflower)

Hardy perennial sunflowers flourish splendidly in any garden, city or country.

Maximiliani—Small and graceful flowers of deep yellow on stems 2 to 4 feet long, blooming from August to October. Packet, 25c.

Perennial Varieties, Mixed—Pkt., 15c

Digitalis (Foxglove)

Hemerocallis

(Yellow Day Lily)

Popular hardy plants belonging to the Lily family. They succeed everywhere and should always be included in every border of old-fashioned hardy plants.

***Flava (Yellow Day Lily)**—The best known variety; very fragrant, deep lemon-yellow flowers in June and July; height, 2½ to 3 feet.

Hibiscus (Rose Mallow)

Shrub-like plants, with handsome green foliage, bearing throughout summer large bright flowers, from 3 to 5 inches in diameter. August-September. Very hardy. Suitable for garden and indoor use when cut 3 to 5 feet high.

***Mixed Mallow Marvels**—Grand assortment. Seeds, pkt., 10c.

Hollyhock

One of the best hardy garden flowers. Makes a charming hedge or background. 6 to 8 ft. August-September.

Double Varieties—White, Maroon, Rose, Black, Salmon, Yellow, Crimson, Blood-Red. Each color, pkt., 10c.

***Double Mixture**—Finest shades in perfect flowers. Pkt., 10c.

***Single Varieties**—Red, Pink, Black, Flesh, Rose, White, Salmon. Mixed, each, pkt., 10c.

Iberis (Perennial Candytuft)

Dwarf evergreen plants, 6 to 10 in., covered with blooms in spring and early summer. Excellent for rockeries or borders where bright dwarf masses are wanted.

***Sempervirens**—Flowers form a pkt., 10c.

***Sempervirens**—Flowers form a sheet of whiteness. Seeds, pkt., 15c.

P.-W.'s Perennial Flower Plants and Seeds

We furnish plants of the varieties marked * listed below. Prices except where otherwise noted—Field Grown Plants: 25c each; \$2.50 per dozen. \$15.00 per 100. If by mail add 5c each; 30c per dozen, for postage and packing.

Lathyrus Latifolius

(Hardy Pea)

Very decorative climbing vines of the Pea family, for growing on fences, trellis, etc., as floral screens and for cutting. Blooms all summer. 6 feet.

Pink Beauty—Pale pink variety. Seeds, pkt., 10c.

Rubra—Bright rosy crimson. Seeds, pkt., 10c.

White Pearl—Large-flowering white. Seeds, pkt., 15c.

***Mixed**—The above colors. Seeds, pkt., 10c.

Lavandula (Lavender)

***Vera**—This is the true Sweet Lavender; grows about 18 inches high; delightfully fragrant blue flowers in July and August. Seeds, pkt., 10c.

Liatris (Blazing Star, or Gay Feather)

***Pycnostachya**—Showy and attractive native plants, succeeding anywhere, producing large spikes of light rosy-purple flowers in July and August; 5 feet. Seeds, pkt., 10c.

Linaria

***Cymbalaria** (Kensilworth Ivy, or Mother of Thousands)—Lavender and purple. A charming, neat, hardy perennial trailing plant, suitable for baskets, vases, pots and rock work. Seeds, pkt., 10c.

Linum (Flax)

***Perenne**—A desirable plant for the border or rockery, growing 1½ feet high, with light graceful foliage and large blue flowers all summer. Pkt., 10c.

Lupinus (Lupine)

Effective plants, producing large spikes of flowers; blooming in May and June. They require only well-prepared garden soil, preferably in a semi-shady location. 3 feet.

***Polyphyllus**—Clear blue. Pkt., 10c.

Lychnis Campion (Lamp Flower, etc.)

Of the easiest culture, thriving in any soil, and this, in addition to their brightness has brought them into high favor with lovers of hardy plants.

***Chalcedonica** (Jerusalem Cross)—A most desirable plant, heads of brilliant orange-scarlet in June and July; grows 2 to 3 feet high. Pkt., 10c.

Myosotis (Forget-Me-Not)

The true Forget-Me-Not—a lovely dwarf plant for damp places, spreading rapidly and carpeting the ground. Makes excellent edgings and carpetings for beds or borders of perennial plants. We list the seeds of Alpestris varieties treated as such by those who have no hothed or cold frame accommodating for wintering the yearling plants. 4 to 9 in.

***Palustris** Semperflorens—Dwarf blue, in flower from early spring until autumn. Seeds, pkt., 20c.

Popaver (Poppy)

***Nudicaule** (Iceland Poppies)—15 inch. Mixed. Elegant free flowering plants bearing flowers in abundance all summer. Pkt., 10c.

Nudicaule yellow, orange, white. Each color, pkt., 10c.

***Oriental Red**—For gorgeous color—see the Oriental Poppies have few rivals among hardy plants. They

produce magnificent effect in shrub-beries and herbaceous borders, while for cutting they are invaluable. 3 feet. Pkt., 10c.

Oriental Hybrids, Mixed—Pkt., 10c.

Pentstemon (Beard Tongue)

The Pentstemons bloom persistently through the summer, and are found very useful for cut-flowers or for color masses in the garden. Easily grown in any garden soil.

***Large Flowering Newest Hybrids**—Splendid assortment of colors. Seeds, pkt., 15c.

Phlox (Hardy)

Decussata—2-3 ft. June-October Perennial varieties mixed from a celebrated collection. Seed slow in germination and may not sprout in a year. Seeds, pkt., 15c.

Plants—See page 25.

Physalis

***Franchetti** (Chinese Lantern Plant)—1½ ft. Flowers yellow with dark center. Produces balloon like husks, which turn bright red when ripe and resemble Chinese lanterns. Seeds, pkt., 10c.

Physostegia (False Dragon Head)

Fine for a cool situation and rich, light soil, bearing erect spikes of pretty tubular flowers. Useful for borders, wild gardens and for cutting.

***Virginiana**—Dense bushes with spikes of delicate pink tubular flowers. 3 ft. June-September. Seeds, pkt., 10c.

Platycodon

Chinese Bell Flower or Balloon Flower—Very handsome border plants of the Campanula family, the flowers in bud having the appearance of inflated balloons, they flower from June

***Grandiflorum**—1-2 ft. Large handsome deep blue flowers. Seeds, pkt., 10c.

Primula (Primrose)

These Hardy Primroses are among our most delightful spring flowers. They require a partially shaded location.

Auricula—6 inch. Flowers in early spring in colors of yellow, brown and red. Pkt., 10c.

Japonica Mixed—Pkt., 15c.

***Veris** (Elatior) (Grandiflora)—The pale yellow Oxlip, bearing flowers in umbels. An extra choice large-flowered mixture strain. Pkt., 20c.

Pyrethrum (Painted Daisy)

One of the most valuable of our early summer flowers. Charming color, and wonderful lasting properties as a cut flower; flowers in May and June, and frequently in August and September; in all shades of rose and pink.

***Roseum, Double Mixed**—Extra choice, selected seed. Only a small percentage will be double, balance will be semi-double and single in the variety. Pkt., 25c.

***Rosum Hybridum Grandiflorum. Single Mixed**—Pkt., 15c.

Double Hollyhock

Incarvillea

Delavayi (Hardy Gloxinia)—2 ft. June. Splendid gloxinia flower borne in large bright rose umbels. Likes a sunny situation. Seeds, pkt., 25c.

Heuchera (Alum Root)

They are of the simplest cultivation, and thrive well in ordinary garden soil. Their dainty sprays of flowers make them invaluable for cutting.

Sanguinea—2 ft. July-August. Long stems of large crimson-scarlet flowers. Splendid for cutting. Seeds, pkt., 25c.

We furnish plants of the above varieties marked * except where otherwise noted field grown, 25c each; \$2.50 per dozen; \$15.00 per 100. If by mail add 5c each; 30c per dozen for postage and packing.

P.-W.'s Perennial Flower Plants and Seeds

We furnish plants of the varieties marked * listed below. Prices except where otherwise noted—Field Grown Plants: 25c each; \$2.50 per dozen; \$15.00 per 100. If by mail add 5c each; 30c per dozen, for postage and packing.

Hyacinths, Tulips, Narcissus, Crocus, Hardy Lillies, etc., are supplied by us in great variety for Fall planting. The Dutch Bulbs come to us in car load lots direct from Holland's most critical growers. Quality considered we are not undersold in America. Ask for Free Fall Bulb and Seed Catalog issued in August.

Rudbeckia (Cone Flower)

The Rudbeckias are very decorative plants for shrubberies, flower borders or side of auto drives, thrives in any good garden soil. Golden Glow is perhaps the best known kind, although they are all worthy of a trial, especially the *Purpurea* for its wine-red color.

Fulgida. Yellow. 1-2 ft. Seeds, pkt., 10c.

***Hirta (Black-Eyed Susan)**—1-3 ft. Seeds, pkt., 10c.

Speciosa (Newmanii)—3 ft. Rich golden-yellow with central black disc. Seeds, pkt., 15c.

***Laciniata fl. pl. (Golden Glow)**—July-October. Yellow. 5 to 7 feet. 1 pkt. of 20 seeds 25c.

Purpurea Grandiflora, Syn., Echinacea Purpurea (Purple Cone Flower)—3 feet. September; large handsome crimson-purple flowers with dark central disc. Pkt., 10c.

Salvia

Beautiful plants, with long spikes of tubular blue flowers.

***Pitcheri (Meadow Sage)**—Makes a grand showing in the fall and is without a doubt one of the best of all Autumn blue flowers. August and September. 4 feet. Pkt., 10c.

Scabiosa (Pincushion)

***Caucasia Perfecta** — Light blue flowers on long stem; fine for cutting. 18 in. June-October. Seeds, pkt., 10c.

Sedum

Fine plants for rock-gardens, ruins, banks and walls, preferring open, loamy soil and stones. They will, however, flourish anywhere in city or country and stand dry weather. They are especially suited to sunny locations.

Acre (Golden Moss) — May-June. Yellow. 3 in. Pkt., 25c.

Brilliant—June-July. Scarlet 12 in. Pkt., 25c.

Stolonifera. One of the most desirable; flat succulent leaves; flowers purplish-pink; July and August; 6 inches. Pkt., 25c.

Plants of any of above three varieties—Each, 35c; \$3.50 per doz.

Statice (Sea Lavender)

Large spreading panicles of light graceful flowers, much prized for winter decoration; dried.

***Latifolia**—2 ft. Dense branching plumes of deep blue flowers. Pkt., 10c.

Stokesia (Stokes Aster)

***Cyanea**—18 inches July-October. Flowers rich blue, like a giant cornflower, very distinct. Seeds, pkt., 10c.

Sweet William

(*Dianthus Barbatus*)

The varieties offered are an improvement on the old-fashioned kinds. Sweet Williams look well in solid beds of masses and require a good, rich, well manured soil to grow them to perfection, excellent border plants and fine for cut flowers. Plants grow 18 to 24 inches high.

Single Varieties

Scarlet Beauty — A charming and distinct color. Pkt., 15c.

Copper Red—A new and rich color. Pkt., 15c.

Diadematus—One of the prettiest; flowers rose, spotted and sprinkled with white. Pkt., 10c.

Johnson's Giants — The range of color includes shades which are not to be found in other strains, and the peculiar and delicate markings on the flowers are most attractive. Pkt., 15c.

Nigrescens — Almost black. Pkt., 10c.

Pink Beauty — (Newport pink) — Pkt., 10c.

Albus—White. Pkt., 10c.

Atro-sanguineus—Blood-red. Pkt., 10c.

Roseus—Pink. Pkt., 10c.

***Single Giant-Flowered Mixed** — Pkt., 10c.

Double Varieties

White—Pkt., 10c.

Rose—Pkt., 10c.

Blood-red—Pkt., 10c.

***Double Giant-Flowered Mixed** — Pkt., 15c.

Effective Planting of Hardy Perennials

Tritoma (Kniphofia) (Torch Lily, Flame Flower, Red-Hot Poker)

Very handsome and showy border plants. Flowers borne in compact form on stout 3 and 4 ft. stems, having the appearance at a distance of orange and red colored spear heads. Require protection during winter, unless in a very sheltered position.

Grandis (Pfitzeri)—Orange-scarlet 3 ft. August-September. Seeds, pkt., 15c. Plants, each, 35c; doz., \$3.50; 100, \$20.00.

Veronica (Speedwell)

***Longifolia Subsessilis (Japanese Speedwell)**—The showiest and best of the Speedwells; from a bushy plant 2 to 3 feet high, with long dense spikes of deep blue flowers from the middle of July to early in September. Pkt., 15c.

Vinca

Valuable for rockeries or makes a grand evergreen carpet under and about shrubs and trees.

Minor (Grave Myrtle)—4 in. June. Green foliage, large blue flowers. Plants, 20c each; doz., \$2.00; 100 \$12.00. Seeds, pkt., 10c.

Viola (Violet)

Single—Deep blue, single violet. Seeds, pkt., 10c. Plants, 20c each \$2.00 doz.; \$12.00 per 100.

Wallflower

The old fragrant favorite; mixed colors, including yellow, brown, etc. Need winter protection. Seeds, pkt., 10c. Plants, 15c each; 71.50 per doz.

Yucca (Adam's Needle)

Filamentosa—5-6 ft. or more, June-July. Handsome creamy white flowers, much branched and densely packed with bloom, with sword-like foliage. Seeds, pkt., 10c.

1-year Plants, 25c each; \$2.50 doz.

2-year Plants, 50c each; \$5.00 doz.

4-year Plants, \$1.75 each; \$18.00 doz.

Sweet William

Shasta Daisy

***Alaska**—2 ft. Wonderful show of large white flowers. Fine for cutting. Blooms all summer. Pkt., 10c.

PLANTS—Any of above varieties marked * 25c per clump; \$2.50 per dozen; \$15.00 per 100. If by mail add 5c each or 30c per dozen for packing and postage.

Columbine

Shasta Daisies

Platycodon

12 Popular Perennials FOR ONLY \$2.50

or Two Collections for \$4.50

This list of 12 old-fashioned hardy perennial flowers will make you a lovely garden. They will grow anywhere and for anyone. Hardy everywhere. A special offer of these 12, one good strong plant or clump of each, for only \$2.50 postpaid. Safe arrival and satisfaction guaranteed. Will bloom profusely first year.

SEED OF THE 12 FOR 90c

These can also be grown from seed and will bloom the second year. We can send one packet each, 12 in all, for only 90c.

Sweet William

Gaillardia

Hibiscus

Delphinium

Butterfly Bush

Coreopsis

Gypsophila

Phlox

Mixed Annual Poppies.
Pkt., 10c; oz., 30c.
See page 96 for details.

Burnt Orange Dahlia-Flowered Zinnias.
Pkt., 15c; $\frac{1}{4}$ oz., 50c.
See page 100.

Scabiosa, Large Flowering Double.
Pkt., 10c; $\frac{1}{4}$ oz., 25c.
See page 97.

Marigolds: Orange Queen (left); Lemon Queen (right).
Pkt., 10c; $\frac{1}{4}$ oz., 40c.
See page 92.

Salpiglossis, Emperor Mixed.
Pkt., 10c; $\frac{1}{4}$ oz., 40c.
See page 97.

Cosmos, Giant Flowering Mixed.

P-W's Rainbow Collection of Annuals

One packet each of the six
annuals shown on this
page, postpaid for **50c**

Colorful Annuals Glorify the Garden

No garden is complete without a
liberal planting of a varied selection
of these beautiful flowers. See
pages following for complete list.

P.-W.'s ANNUAL FLOWER SEEDS

All the Best Flowers for 1929

The term "Annual" is applied to those flowers which bloom from seed the first season and last but the one year. For perennial flowers see pages 78-83.

How to Grow from Seed

All annual flowers are easily and most successfully grown from seed and offer a large field for selection. No matter for what purpose you may want flowers—for cutting, for garden beds, for color, or for foliage effect—you will find ample material among them from which to select. In buying flower seeds it is a matter of greatest importance to you to know that the seeds you are getting have been produced from the best plants—those bearing the finest flowers. It is only through great care in breeding, constant and most careful re-selection, that plants and flowers are brought up to and kept at a high standard of perfection.

Our aim is to secure the very best obtainable, both of home and foreign growth, adaptable to our intermountain region. And we have spared neither pains nor expense with this object in view.

Sowing of Annuals

All annuals can be sown in the garden in this vicinity in April and May when the ground is warm either in a seed-bed or directly in the spaces where they are to grow. There are some annuals, such as Poppies, Eschscholtzia, Mignonette, Centaurea, and the like, which on account of lack of fibrous roots, cannot be transplanted without a great set-back to the plant. These should be sown, either broadcast or in rows, in the location desired. Most of the annual flowers, however, benefit by being transplanted, as it develops for them a better root-system. These are better started in a coldframe or a specially prepared seed-bed of rich soil, deeply dug and finely sifted on top. Sow the seed in shallow drills or in squares of a convenient size, partitioned off with laths. Most flower seeds are small and can only be covered with about 1/4 inch of soil; the very fine seeds are simply pressed into the soil. Water carefully through a fine nozzle so as not to wash the seed out and keep the soil moist constantly. On warm, sunny days some shade should be given during midday. When the seedlings are large enough to handle, they can be transplanted 1 inch apart in another seed-bed, or if they are not too close together, they may be left in the original bed until large enough to transplant into permanent places. Always remember that flowers need rich soil, an open sunny situation, and sufficient space between plants for proper development.

All our Flower Seeds are delivered anywhere in the United States. Our packets contain a liberal quantity of seed.

Starting Seeds Indoors

Many annuals, such as Snapdragons, Stocks, Asters, Begonias, Carnations, Celosia, Cosmos, Cabaea, Dahlias, Dianthus, Heliotrope, Lobelia, Pansies, Myosotis, Petunias, Phlox, Salpiglossis, Salvia, Vinca, Verbena, if sown outside do not bloom until quite late in the summer, but you can have them early if you sow the seed in the ho bed. Early in March is about the best time to sow, except for Lobelias, Begonias, and Stocks, which can be started as early as February. Sow either directly in the hotbed in shallow drills or in pens or boxes. Special seed-boxes are usually 3 inches high, 12 inches wide, by 24 inches long. The soil should be light, finely sifted, and well watered before sowing. Scatter seeds evenly, but not too thinly. Even here it is to be remembered that in "union there is strength," for the fine seeds especially, when sown too thin, very often have not the strength singly to break through the soil. After sowing press the soil down with a flat board and cover the boxes or pens with newspaper to prevent too rapid evaporation. This covering must be removed as soon as the seedlings are up. Always water through a fine nozzle, and only when necessary, with tepid water and as much as possible in the forenoon or midday on bright sunny days, for if the soil is too wet over night, the small seedlings will become chilled and damp or rot off.

Transplanting

When seedlings have four leaves, transplant in similar boxes 1 inch apart or singly into small pots (paper pots are excellent for this purpose and quite inexpensive) shifting into larger ones if necessary. The earliness of starting the seeds will govern the amount and need for transplanting. Ventilate more or less according to the weather and gradually harden the plants, preparatory to setting them out when all danger of frost is past and the soil is warm. Cultivate frequently: hoe your beds often; and stimulate plant growth by applying a top dressing of Whizz fertilizer, Vigoro, or bonemeal (see page 34) to the soil at frequent intervals. This will keep up a steady, vigorous, healthy growth. Keep seed-pods removed; never allow withered flowers to remain on the plants if you want them to bloom right through the season.

AIDS IN SELECTING ANNUAL FLOWER SEEDS FOR SPECIAL PURPOSES

BACKGROUNDS AND BORDERS

Large Showy Annuals

Aretotis Grandis	Marigold (Tall)
Amaranthus	Poppy (Tall)
Celosia Plumosa	Ricinus
Clarkia	Salvia
Cosmos	Sunflower
Larkspur	Zinnia

Dwarfer Sorts

Alyssum (Hardy)	Godetia
Agapanthus	Dianthus
Candytuft	Myosotis
(Hardy)	Pansy
Carnation	Pinks

EDGING WALKS, ETC.

Ageratum	Marigold, Dwarf
Alyssum	Myosotis
Asters, Dwarf	Phlox, Dwarf
Candytuft	Pinks, Chinese
Dusty Miller	Nasturtium Dwarf
(Centaurea)	Zinnia, Dwarf
Lobelia Comp.	

FOLIAGE

Amaranthus	Kochia
Canna	Marvel of Peru
Coleus	Ricinus

CUTTING

Acroclinium	Mignonette
Antirrhinum	Nasturtium
Aster	Pansy
Calendula	Phlox
Calliopsis	Poppy
Carnation	Salpiglossis
Centaurea	Scabiosa
Chrysanthemum	Salpiglossis
Cosmos	Stocks
Dahlia	Sweet Peas
Dianthus	Sweet Sultan
Esch-scholtzia	Verbena
Larkspur	Wallflower
Marigold	Zinia
Matricaria	

PLANTS SUITABLE FOR POTS

that may be grown from seeds

Ageratum	Cyclamen
Antirrhinum	Heliotrope
(Dwarf)	Mignonette
Asters (Dwarf)	Nasturtium
Begonias	(Dwarf)
Carnation	Petunia
Cineraria	Primroses
Coleus	Stocks

BEDS AND MASSING

Alyssum	Esch-scholtzia
Ageratum	Gaillardia
Antirrhinum	Lobelia Comp.
Aster	Marigold
Balsam	Nasturtium, Dwarf
Celendula	Pansy
Calliopsis	Petunia
Candytuft	Phlox Drum
Carnation	Poppy
Celosia	Portulaca
Chrysanthemum	Salvia Splen
Convolvulus	Stocks
Dahlia	Verbena
Dianthus	Zinnia

PARTLY SHADY PLACES

Antirrhinum	Schizanthus
Begonia, Tuber	Pansy
Lace Flower	

DROOPING PLANTS FOR VASES, HANGING BASKETS, VERANDA, BOXES, ETC.

Alyssum	Nasturtium
Lobelia	Smilax
Petunia	Browallia

BORDERS OF ANNUAL FLOWERS

Arranged for continuous bloom throughout the summer and autumn months, these will not only be a feature in the garden, but will also furnish an abundance of cut-flowers for the house.

A hothead is not necessary. You can sow all these seeds right in the flower-bed in late April. In preparing the soil, add a liberal quantity of well-rotted manure, humus, or leaf-mold, dig in well, pulverize the surface, mark off the spaces, cover the seed with about $\frac{1}{4}$ -inch of sifted soil, and keep moist until the plants are up and well established. You may have to thin out where plants have come up too thick.

BORDER No. 1 An attractive arrangement for the foreground of shrubbery borders or foundation plantings.

1. Larkspur, Giant Stock-fl. Indigo	9. Giant Dahlia-Zinnia, Old Rose	18. Marigold signata pumila
2. Giant Dahlia-Zinnia, Exquisite	10. Scabiosa, Azure Fairy	19. Ageratum, Blue
3. Calendula, Orange King	11. Aretotis grandis	20. Phlox Drummondii, Isabellina
4. Cosmos, Giant Early-flowering Pink	12. French Marigolds, Glorius	21. French Marigold
5. Giant Dahlia-Zinnia, Oriole	13. Dimorphothea aurantiaca	22. Annual Blue Anchusa
6. Marigold, African Orange Queen	14. Phlox Drummondii, Chamois-Rose	23. Chinese Woolflower, Crimson
7. Lavatera	15. Lupins, Annual Blue	24. Erysimum, Orange Beauty
8. Cornflower, Selected Double Blue	16. Candytuft Lilac	25. Aster, American Beauty Rose
	17. Snapdragons, Giants-flowered	

One Packet Each of Above 25 Choice Annuals—Regular Value \$2.75, for \$2.25, postpaid.

BORDER No. 2. An attraction in the garden and a place where you will not be disappointed when you want flowers for cutting.

a. Giant, Zinnias, Orange	9. Chrysanthemum, Morning Star	18. Lupins, Assorted Annuals
2. Cosmos, Giant Early White	10. Salpiglossis, Mixed	19. Aster, King Violet
3. Larkspur, Giant Hyacinth-fl. Lilac	11. Calliopsis, Golden Wave	20. Phlox Drummondii, Brilliant
4. Helianthus cucumerifolius	12. Giant Zinnia, Salmon-Pink	21. Petunia, Violaacea
5. Larkspur, Giant Hyacinth-fl., Blue	13. Aster, Pink Crego	22. French Marigold, Gold-striped
6. Cosmos, Giant Early Pink	14. Gaillardia, Giant Double Mixed	23. Dianthus laciniatus splendens
f. Helichrysum, Assorted	15. Cornflower, Double Blue	24. Candytuft, Giant Hyacinth-fl.
8. Scabiosa, Azure Fairy	16. Calendula, Lemon Queen	25. Verbena, Mammoth Mixed
	17. Zinnia, Dwarf Pumila Dble Old Rose	

25 Packets, one each of above Choice Annuals (Regular Value \$2.50) for \$2.00, postpaid.

1. 2 pkts. Dahlia-Zinnias, assorted	\$.50
2. 1 pkt. Helianthus cucumerifolius, Stella	.10
3. 1 pkt. Larkspur, Double Branching	.10
4. 1 pkt. Lavatera, Sunset	.10
5. 2 pkts. Balsam, Double	.20
6. 2 pkts. Eschscholtzia, Golden West	.20
7. 3 pkts. Scabiosa	.25
8. 2 pkts. African Marigold	.20
9. $\frac{1}{2}$ oz. Sweet Alyssum, Little Gem	.40

9 Varieties, 14 Packets, including Alyssum border for \$1.50, postpaid.

\$2.05

Ageratum

Ageratum

One of the best summer blooming plants grown from seed, providing rare shades of blue.

Mexican Coeruleum — 18-inch. Beautiful soft lavender-blue, of free branching habit. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Album—White. Pkt., 10c.

Nanum, Blue Perfected—9 inch. The darkest Ageratum grown from seed. Pkt., 10c; $\frac{1}{4}$ oz., 35c.

Imperial Dwarf Blue—6 inch. A variety of compact growth, covered with heads of feathery flowers of a deep lavender color. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Little Blue Star — 4 to 5 inches. Miniature bushes covered with clusters of flowers opening light blue with purple center and developing to a bright blue self. Pkt., 15c; $\frac{1}{16}$ oz., \$1.00

Princess Victoria Louise—6 inch. Bushy plant's covered with sky blue flowers with white centers. Pkt., 10c; $\frac{1}{4}$ oz., 40c.

Alyssum

Benthami Maritimum (Sweet Alyssum)—This is one of the finest annuals for edging and is beloved on account of its modest blossoms. Flowers white and honey scented. It begins to bloom early in the season, and continues until frost. Oz., 25c; $\frac{1}{2}$ oz., 15c; pkt., 10c.

Little Gem—The plants are only a few inches high, and are completely covered with snowy-white blossoms. $\frac{1}{2}$ oz., 40c; $\frac{1}{4}$ oz., 25c; pkt., 10c.

Compactum Lilacinum — Distinct variety with delicate lavender flowers. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Acroclinium

Roseum—2 feet. A pretty Everlasting, bearing daisy-like flowers, pretty bright rose with yellow center, which can be dried. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Double Mixed— $\frac{1}{4}$ oz., 30c; pkt., 10c

Single Mixed— $\frac{1}{4}$ oz., 25c; pkt., 10c.

Agapanthus

Umbellatus — 1 foot. Bright blue flowers, produced in clusters on long stems. Water freely. Pkt., 15c.

Ammobium

Alatum Grandiflorum—2 $\frac{1}{2}$ feet. A white Everlasting. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Amaranthus

Brilliant foliaged, three feet high. Useful in borders or for the center of large beds. They thrive in a hot, sunny location.

Tri-Color (Joseph's Coat). — Pkt., 5c; $\frac{1}{4}$ oz., 20c.

Anchusa

Capensis (Summer Forget-me-not) —2 feet. A hardy annual which grows two feet high, branching freely and bearing a profusion of lovely flowers similar to the Forget-me-not, though much larger and of finer color. Pkt., 10c.

Arctotis Grandis (African Daisy)

A handsome annual which forms branched bushes 2 to 3 feet high; its flowers are large, purse white on the upper surface, the reverse of petals pale lilac-blue. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

ANTIRRHINUM (Snapdragon)

For gorgeous coloring few flowers can match Snapdragons; easily raised from seed in any rich, sunny bed.

New Tall Maximum

36 to 48 inches.

The newest creation in Giant Snapdragons, and in a marked advance over the older Tall Large Flowered type in size and brilliancy of color. The flowers are closely placed on the stems, each bloom measuring 2 to 3 inches.

Apple Blossom—Delicate pink with yellow lip.

Copper King—Velvety copper-scarlet.

Defiance—Brilliant scarlet.

Fairy Queen—Terra cotta.

Golden Queen—Bright deep golden-yellow with lilac-rose throat.

Old Gold—Deep golden-yellow.

Purple King—Rich purple.

The Rose—Rose pink.

Wallflower Colors — Brownish orange and copper-red shades.

Snowflakes—Pure snow-white, yellow tube.

Giant, Flowered—Mixed. All the above and others.

Each of above, pkg., 15c; $\frac{1}{4}$ oz., 75c.

Semi-Tall Sorts

18 to 20 inches.

Amber Queen—Canary yellow overlaid chamos pink, gold lip.

Aurora — Cinnabar scarlet, with white throat.

Crimson King—Rich crimson.

Bonfire—Orange or flame color. It has the tints of firelight.

Cottage Maid — Pale pink, white throat.

Golden Queen—Rich yellow.

Grenadier — Vivid orange, white throat, yellow lip.

Mauve Queen—Rosy mauve.

Queen of the North—Bushes covered with large white flowers.

Rose Dore — Self-salmon rose shaded gold.

The Fawn—Terracotta pink and pale yellow.

Each of above, pkt., 10c; any three packets for 25c; $\frac{1}{4}$ oz., 50c.

Semi-Tall Sorts Mixed—Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Tom Thumb Varieties

Height 8 inches. For edging and pot plants. Pink, white and scarlet.

Each of the above packages, 10c; 3 pkts., 25c; $\frac{1}{4}$ oz., 30c.

Browallia

One of our favorite profuse blooming bedding plants, covered with rich, beautiful winged flowers during the summer and autumn months, supplying a shade of intense blue, very uncommon; grows freely in any rich soil; blooms finely in the winter if lifted in autumn and cut back.

Speciosa Major—1 ft. high. Most brilliant blue; does well outside or in hanging baskets or vases. Pkt. 25c.

Antirrhinum

ASTERS

During the late summer and early fall the garden is usually a riot of reds and yellows, so the Asters in their dainty and distinct colors as well as their many attractive forms are a pleasing addition. The long stems make them desirable for cut flowers and the blooms last long in water. It should be remembered, however, in regard to Asters that good culture is essential in order to obtain an abundance of fine flowers.

New California Giant

Tall Section

16 inches and up

New California Giant Branch-

ing Asters A splendid new mid-season to late flowering strain, the result of years of pains-taking selecting by one of California's leading hybridizers; plants grow 3 to 3½ feet high with long, strong stems 18 to 24 inches in length bearing beautifully formed curled and interlaced flowers 5 inches and over across. We offer the following colors:

Lavender Blue, Peach Blossom, Pure White, Purple Violet, Rich Rose, Finest Mixed.

Any of the above—Pkt., 25c; ¼ oz., 75c.

American Beauty Similar in type of flower and growth to the Giant Branching Asters, but blossoms are produced on much longer and heavier stems. The flowers are fully double.

White, Carmine-Rose, Purple, Lavender, September Beauty, Rose Pink.

Each of the above, pkt., 15c; any 3 pkts., for 35c; ¼ oz., 75c.

Mixed all colors—Pkt., 15c.

American Beauty

Giant Crego The flowers measure four to five inches in diameter, and are borne on stems twelve inches or more in length. Their lasting qualities when cut are unsurpassed.

White, Shell Pink, Rose Pink, Crimson, Lavender, Dark Blue, Purple.

Each of the above, pkt., 10c; any 3 pkts., for 25c; ¼ oz., 60c.

Mixed all colors—Pkt., 10c.

P.-W.'s Giant Branching Beautiful cut flowers. The branching habit is accompanied with great vigor of growth and profusion of bloom.

White, Peachblossom, Flesh Pink, Rose Pink, Crimson, Blue, Lavender, Dark Violet, Purple.

Each of the above, pkt., 10c; any 3 pkts., for 25c; ¼ oz., 50c.

Mixed, all colors—Pkt., 10c; ¼ oz., 50c.

Ostrich Feather The finest type of the Giant Comet, or Ostrich Feather type of Aster.

White, Soft Pink, Lavender, Rose, Crimson, Silvery Lilac, Light Blue, Dark Blue.

Each of the above, pkt., 10c; any 3 pkts., for 25c; ¼ oz., 50c.

Mixed, all colors—Packet, 10c.

King Aster

The King The habit is similar to the popular Giant Branching. In form the flower is entirely distinct; petals somewhat resembling the quilled varieties, but are much larger and broader.

White, Pink, Rose, Crimson, Violet, Lavender.

Each of the above, pkt., 10c; any 3 pkts., for 25c; ¼ oz., 50c.

Mixed, all colors—Pkt., 10c; ¼ oz., 50c.

American Asterum An attractive and descriptive name for a new race of asters which belong to the Comet family.

Snow White, Rose Pink, Lavender.

Each of the above, pkt., 10c; 3 pkts., for 25c; ¼ oz., 60c.

Mixed, all colors—Pkt., 10c; ¼ oz., 60c.

Giant Crego

Dwarf Varieties

Up to 10 inches

Dwarf Comet. Mixed, all colors—Handsome and very distinct, resembling the Japanese Chrysanthemum in shape and flowers. Pkt., 10c.

Dwarf Chrysanthemum Flowered—All colors, mixed. Of very compact growth; 3¼-in. flowers. Excellent for formal hedging. Pkt., 10c.

Queen of the Market—The best early aster, usually in full bloom two weeks before most other sorts begin to blossom.

White, Flesh, Pink, Crimson, Scarlet, Light Blue, Lavender, Purple, Dark Blue.

Each of the above, pkt., 10c; any 3 pkts., for 25c; ¼ oz., 50c.

Mixed, all colors—Pkt., 10c; ¼ oz., 50c.

Balloon Vine

Love in a Puff—A clean, free-growing vine reaching 10 to 15 feet, bearing numbers of large, round, inflated seedbuds resembling miniature balloons. Pkt., 5c; oz., 30c.

Double Balsam

(Lady Slipper)

An old favorite garden flower, producing its gorgeous masses of brilliant double flowers in profusion. Balsams like the hot sun, rich soil and plenty of water.

Double Rose and Camelia-flowered Mixed—Pkt., 10c; ¼ oz., 25c.

Invincible Mixed—Mixed from separate colors and includes everything that is desirable in Balsams. Pkt., 15c; ¼ oz., 45c.

Dwarf Mixed—8 inches, perfect little bushes with double and semi-double flowers. Pkt., 10c; ¼ oz., 25c.

Goliath White—4 feet—Pkt., 10c.

Goliath Scarlet—Extremely brilliant, large and very double. Pkt., 10c.

COSMOS

4 to 6 feet

One of the most showy and useful of our garden plants. Plants are very bushy. Flowers borne on long delicate stems. Foliage very finely cut.

Early Flowering Mammoth—These are recommended for planting north of the latitude of Middle Illinois, as the late, or Giant flowered varieties are nearly always caught by early frost.

White, Pink, Crimson. Mixed, all colors. Each of the above, pkt., 10c; ¼ oz., 20c.

Late Giant Flowered—Crimson, White Lady Lenox, Pink Lady Lenox, Giant Mixed.

Each of the above, pkt., 10c; ½ oz., 20c.

Anemone Flowered

These differ from the other cosmos in the formation of the center of the flower, which develops a crown or crest, like an anemone, the guard petals remain the same. Pink Beauty, White Queen, Mixed.

Each of the above, pkt., 10c; ¼ oz., 45c.

Candytuft

Clarkia

2 feet

Clarkias are summer annuals perfectly hardy, and can be grown in ordinary soils.

Apple Blossom—Double apple blossom, pink.

Brilliant—Double salmon scarlet.

Queen Mary—Lovely rose scarlet.

Queen Mary—Lovely rose carmine.

Double and Single Mixed—Each of the above, pkt., 10c; ¼ oz., 30c.

Cardinal Climber

25 feet

A very attractive, strong and rapid grower, attaining a height of 25 feet, with beautiful fern-like lacinated foliage and literally covered with a blaze of fiery cardinal red flowers from midsummer to frost. Pkt., 25 seeds, 15c.

Calendula

(Pot Marigold)—1 foot

One of the showiest free-flowering hardy annuals, growing in any good garden soil, producing a fine effect, in beds or mixed borders, particularly bright in late fall, continuing in bloom from early summer until killed by frost; valuable also for pot culture, blooming freely in winter and early spring.

Orange King—The outer petals are slightly imbricated, while those of the center are curved like those of the peony. Color glowing orange. Pkt., 10c; ½ oz., 25c.

Mixed, all colors. Pkt., 5c; ½ oz., 15c.

Collipsois

(Tickseed)—6 inches to 2 feet. Very graceful border plants, supplying throughout summer an abundance of showy flowers of yellow, orange and dark brown variations. Will thrive anywhere.

Crown of Gold (Coronata Maxima)—Splendid cut flower. Pure golden yellow 2 inches across, on long, wiry stems; hardy and blooms nearly all season. Pkt., 10c; ¼ oz., 35c.

Drummond's Golden Wave—2 feet. Flowers yellow with a circle of rich crimson-brown around the eye. Pkt., 10c; ¼ oz., 20c.

Tall Varieties, Mixed—Valuable for wild gardens, and for cutting. Pkt., 5c; ½ oz., 20c.

Dwarf Varieties, Mixed—Valuable for small mixed beds and borders. Pkt., 5c; ½ oz., 25c.

Double Mixed, all colors. Pkt., 10c; ¼ oz., 20c.

Cobaea

Scandens Cathedral Bells—30 feet. One of the handsomest and rapid growing climbers. The flowers are bell-shaped and open a clear green but turn a beautiful purplish lilac. Seed should be sown edgewise. Very vigorous and prolific bloomer. Pkt., 10c; ¼ oz., 25c.

Coleus

The handsomest foliage plant obtained from seed. The leaves are heart-shaped and handsomely crimped toothed and frilled; their color combinations are remarkably rich. Pkt., 25c; 1/32 oz., \$1.00.

Canary Bird Vine

15 to 20 feet

A dainty vine with beautiful cut leaves and pretty, delicate flowers of a clear canary-yellow. Does well in the shade. Pkt., 10c; ½ oz., 25c.

Candytuft

They soon flower from seed and remain long in beauty. For massing in flower beds and borders and for edgings they are admirably adapted.

Giant Hyacinth-Flowered White—1 foot. A grand border plant, bearing very large, bold spike of snowy white flowers, habit sturdy and compact. Pkt., 10c; ½ oz., 30c.

Dwarf, Hybrids, Mixed—Plants of fine, compact growth, covered with large flowers ranging in color from rose, salmon, coral-pink and delicate blush to lilac and purple crimson. Pkt., 10c; ½ oz., 30c.

Mixed, all Colors—Pkt., 5c; ½ oz., 20c.

Chrysanthemum, Annual

Single Flowering Varieties

Morning Star—Primrose with golden yellow center. Pkt., 10c; ¼ oz., 25c.

Carinatum Eclipse—Yellow with dark brown disk. Pkt., 10c; ¼ oz., 25c.

Burrigdenum—Banded with crimson, white and yellow. Pkt., 10c; ¼ oz., 25c.

Golden Feather—Foliage striking yellow; flower with a crimson ring near center. Pkt., 10c; ¼ oz., 25c.

Mixed Single Varieties—Pkt., 10c; ¼ oz., 20c.

Double Mixed—Pkt., 10c; ¼ oz., 20c.

Cosmos Single

Plants of the Hardy Chrysanthemums together with seeds and plants of a selected list of other beautiful hardy perennial flowers will be found on pages 78-83 inclusive.

Cosmos, Anemone Fl.

Celosia

(Coxcomb)

Crested Dwarf Sorts

President Thiers—Fine dwarf habit, with bronze foliage, and large band-some velvety crimson combs. Pkt., 10c; ¼ oz., 40c.

Dwarf Mixed—Pkt., 10c; ¼ oz., 50c.

Plumosa or Plumed Varieties

2½ to 3 feet

They form pyramidal bushes branching out in candelabra shape, and the numerous massive plumes which resemble ostrich feathers, wave gracefully above the foliage.

Plumosa Mixed, all Colors—Pkt., 10c; ¼ oz., 25c.

Pride of Castle Gould—Plants grow compact and pyramidal and produce immense flower heads, resembling willow plumes in many remarkable shades. Pkt., 25c; ¼ oz., 65c.

Chinese Woolflower (Celosia Childsii)—Plants grow two to three feet high, the bloom starting early with a central head, round and globular, which often reaches the immense size of two feet in circumference. Pkt., 15c; ¼ oz., 50c.

Dianthus

(Garden Pinks)—1 foot

A popular annual variety distinguished for brilliant, contrasting colors appearing in each flower.

Single Flowering

Mirabilis—(Single Wonder Pink)—

The petals are deeply cut into fine strips of threadlike fringes. All shades from pure white to deep purplish. Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Chinese Single Mixed—Pkt., 10c; $\frac{1}{4}$ oz., 35c.

Laciniatus Mixed—Single fringed flowers. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Laciniatus Splendens—The flowers are beautifully fringed and come in various shades of red with large white centers and white edges around the petals. Pkt., 20c; $\frac{1}{4}$ oz., 40c.

Centaurea Cyanus

Centaurea Cyanus

(Bachelor's Button or Cornflower)

—2 feet. One of the most valuable blue flowers for the border. Re-seeds itself and may be used for naturalizing purposes. The double flowers are fines.

Single—Mixed, all colors. $\frac{1}{4}$ oz., 15c; pkt., 5c.

Double Flowering Varieties—White, Blue, Pink and Rose Shades, Purple, Double Mixed, Dwarf Victoria, 9-inch Edging, blue. Each of the above, pkt., 10c; $\frac{1}{4}$ oz., 30c.

Centaurea Imperialis

(Sweet Sultan)

The beautiful sweet scented flowers are borne on long, strong stems; when cut will last for several days in good condition. White, Dark Lilac, Brilliant Rose, Purple Crimson, Deep Lavender, Mixed, all colors. Each of the above, pkt., 10c; $\frac{1}{4}$ oz., 30c.

Carnations

Easily grown either in flower-beds, borders, or pots.

American Hybrids—A race of large-flowered carnations, bearing handsome blooms on long, wiry stems. Pkt., 35 seeds, 25c.

Giant Margaret Mixed—Flowers of very large size, measuring 3 inches or more in diameter; colors include all the shades of white, pink, crimson and striped. Pkt., 100 seeds, 15c.

Cypress Vine

10 feet

It has a profusion of scarlet or white star-shaped blossoms, and its finely cut foliage is particularly ornamental.

White—Pkt., 10c.

Scarlet—Pkt., 10c.

Mixed— $\frac{1}{4}$ oz., 20c; pkt., 10c.

Ivy-Leaved Scarlet—A rapid-growing variety with deeply lobed, ivy-like leaves, and small scarlet flowers. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Cyclamen

(Alpine Violet)—1 foot

Charming house plants, with beautiful foliage and rich colored, fragrant flowers. May be successfully raised from seed with a little care and patience.

Giant Flowered Cyclamen—Mixed extra choice. 10 seeds, 20c; 20 seeds, 30c; 100 seeds, \$1.20.

Carnation, Giant Margaret

Double Flowering

Chinese Double Mixed—Blooms in clusters, flowers very double and in a large range of colors. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Diadematus Double Mixed—Beautiful flowers in various shades with the outer edges fringed and almost white. Pkt., 10c; $\frac{1}{4}$ oz., 40c.

Imperialis Double Mixed—Bushy grower. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Laciniatus Double Mixed—Flowers deeply lacinated. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Mixture of Double Pinks—Selection of the best double pinks in cultivation. Flowering ranging in color through all the brightest and most brilliant shades. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Mixture of Double and Single Pinks—This magnificent mixture contains the cream of the Dianthus family and unexpected results may be obtained by planting a package. Pkt., 10c; $\frac{1}{4}$ oz., 35c.

Centaurea Imperialis

Dimorphotheca

(African Golden Daisy)

Aurantiaca—An extremely showy annual daisy from South Africa, which suits our climatic conditions perfectly. The bushy plants grow 12 to 15 inches high. The flowers, which are 2½ inches and over across, are a unique, rich, glossy orange-gold, with dark disc and halo. They bloom, the greater part of the summer and fall. $\frac{1}{4}$ oz., 40c; pkt., 10c.

Erysimum (Fairy Wallflower)

Perofskianum (Orange Beauty)—A pretty annual, growing about 18 inches high, bearing throughout the summer dense racemes of brilliant orange-yellow Wallflower-like flowers a rather unusual color in annuals. It is of the simplest culture. Sow the seed in the open ground in spring and give it a sunny position. $\frac{1}{4}$ oz., 30c; pkt., 10c.

Everlastings

Winter bouquets of your own growing make an attractive present for a friend, besides supplying a bit of brightness for your own home. The drying is a simple operation. Cut before fully expanded, bunch like sweet peas and hang on a line in a warm, dark, dry room. They will dry thoroughly in ten days.

Collection of one pkt., each of eight leading annual everlastings for 65c.

Dianthus Laclanatus

Escholtzia (California Poppy)

Gaillardia (Blanket Flower)

They will produce from early spring until late fall a continuous profusion of brilliantly colored flowers, red and yellow predominating. Of easy culture, sow where they are to remain.

Annuals

Amblyodon—Deep red. Pkt., 10c; ¼ oz., 40c.

Picta Single Mixed—Pkt., 10c; ¼ oz., 25c.

Lorenziana Double Perfection Mixed—Large handsome heads of double quilled flowers in rich shades of red and yellow. Pkt., 10c; ¼ oz., 25c.

Godetia

1½ feet

The plants bloom profusely and bear showy flowers of satiny texture in a rather poor soil.

Many Sorts and Colors Mixed—Pkt., 10c; ¼ oz., 25c.

Double Mixed—Pkt., 10c; ¼ oz., 35c.

Dwarf Sorts Mixed—Neat globular, about 10 inches in height. Pkt., 10c; ¼ oz., 35c.

Gomphrena (Globe Amaranth)

A showy annual everlasting with clover-like heads.

Mixed all colors—Pkt., 10c; ¼ oz., 25c.

Lupinus

Annual Mixed—Pkt., 10c; oz., 30c.

Grasses

Ornamental Annual Mixed—2 to 5 feet. These are most useful for winter bouquets when combined with Everlasting flowers. They are easily grown in any soil. Pkt., 10c; ¼ oz., 30c.

Helichrysum (Strawflower)

Helichrysms are an ornament to the garden when growing and are everywhere prized for the winter bouquets.

Mixed all colors—Pkt., 10c; ¼ oz., 30c.

Heliotrope

Favorite on account of its delightful fragrance. Seed sown in the Spring make fine plants for bedding out and are as easily grown as Verbenas.

Mammoth Mixed—Large flowers, ranging in shade from dark blue to lilac. Pkt., 15c; ¼ oz., 50c.

Hollyhocks

(Annuals)—5 feet

These annual kinds, however, bloom the first year.

Everblooming Single Mixed—Large single flowers, exhibiting every shade known in Hollyhocks. Pkt., 10c; ¼ oz., 40c.

Everblooming Double Mixed—Double and semi-double. Pkt., 10c; ¼ oz., 35c.

Escholtzia

(*alifonia*, cppy)—1 foot

The State flower of California. A bright, free-flowering plant of low spreading growth with finely cut silvery foliage. Sow the seed where the plants are to remain.

Carmine King—Beautiful carmine rose color, both on the interior and exterior of the flower. Pkt., 10c; ¼ oz., 25c.

Golden West—Flowers bright yellow and orange, penciled and blotched. Pkt., 5c; oz., 30c.

Mandarin—Inner side of the petals rich orange, the outer side brilliant scarlet. Pkt., 10c; ½ oz., 35c.

Mixed all colors—Many shades. ¼ lb., \$1.00; oz., 35c; pkt., 10c.

Double and Semi-Double Mixed—Pkt., 10c; ¼ oz., 30c.

Kochia New Giant

Hunnemannia

Fumariaefolia (Bush Escholtzia, or Yellow Tulip Poppy)—1½ ft. The plants grow into a shrubby bush and produce their large cup-shaped flowers 3 in. across on stems 12 in. long. The color is of clear, bright yellow; the petals are broad and crinkled, like crushed satin. The cut blooms keep in water two weeks. Pkt., 10c; ¼ oz., 25c.

Lantana

Hybrida, Mixed—2 ft. Shrubby plant with Verbena-like flowers in shades of white, red and yellow. May be grown in pots or set out in summer, remains in bloom late in autumn. They have an agreeable aromatic perfume. Pkt., 10c; ¼ oz., 30c.

Kochia

The New Giant (Summer Cypress, Burning Bush)—Grows 2 to 2½ feet high and resembles a close-clipped ornamental evergreen. The plant may be grown singly or in the form of a hedge or background. In early Autumn the whole bush becomes carmine or blood-red, whence the name of Mexican Fire Plant, Burning Bush, etc. ¼ oz., 30c; pkt., 10c.

Euphorbia

Variegata (Snow on the Mountain)

—The flowers are inconspicuous; the foliage, however, is attractive; veined and margined with white; 2 feet. Per ¼ oz., 20c; oz., 50c; pkt., 10c.

Gypsophila

Gypsophila Elegans Grandiflora Alba (Angel's Breath)—Two feet. This is an improved, large flowering, pure white form of the annual Angel's Breath; of free, easy growth. Several sowings should be made during the season to keep up a supply. Combined with sweet peas they make pretty bouquets. Pkt., 10c; ½ oz., 20c.

Gourds

Twenty feet. 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.

Small Fruited Varieties, Mixed—Pkt., 10c; oz., 25c.

All Varieties, Mixed—Pkt., 10c; oz., 25c.

Dahlias

One of the best late summer and autumn flowering plants, and now enjoying a wide popularity; as easy to grow from seed as Nasturtiums; the double sorts will bloom the first season if the seed is sown before the beginning of April; the single sorts will bloom from seed sown in the open grounds as late as June, although an earlier start is better.

Peony Flowered Best Mixed—Pkt., 15c; ¼ oz., 65c.

Double Cactus Best Mixed—Pkt., 15c; ¼ oz., 65c.

See pages 75-76 for Dahlia Roots.

Larkspur

(Annual Delphinium)

These handsome Larkspurs are very effective in borders and planted among shrubs. Sow seed in the open border either in early spring or late fall so germination may take place very early.

Stock Flowered

Dark Blue, Exquisite Pink, Flesh Pink, Lilac, Lustrous Carmine (Newport Pink), Sky Blue, White.

Each of the above, pkt., 10c; ¼ oz., 30c.

Mixed, all colors—Oz., 70c; ¼ oz., 20c; pkt., 10c.

Giant Hyacinth-Flowered Mixed—3 feet. Derives its name from the striking resemblance of the flowers to a double Hyacinth. Delicate colors. Pkt., 10c; ¼ oz., 25c; oz., 75c.

Larkspur Stock Flowered

Lavender Lace Flower

Lavatera 2½ fee

The Lavateras or Annual Mallows are showy and effective plants covered during the entire summer with bloom.

Splendens Alba—Very large, silky, pure white flowers. Pkt., 10c; ¼ oz., 20c.

Splendens Rosea—Very large, bright rose flowers. Pkt., 10c; ¼ oz., 20c.

Lavender Lace Flower

Didiscus coeruleus—3 feet. Long-stemmed lavender flowers; look like blossoms of Queen's Lace Handkerchief or Wild Carrot. A constant boomer. The culture is not at all difficult, only the seed is somewhat slow in germinating. To be sown in May in partial shade where it is to remain. Pkt., 10c; ¼ oz., 50c.

Lunaria (Honesty)

Annus (Biennis) (St. Peter's Penny)—Flowers purple, followed by silvery seed pods, prized for winter decoration. Annual but readily self-sows. Pkt., 10c; ¼ oz., 25c.

Linum

Grandiflorum Rubrum (Crimson Flax)—2 feet. One of the most brilliantly colored of summer annuals, flowers glowing crimson-rose. May be had in bloom from May to October by successive sowings. Pkt., 10c; oz., 30c.

Lobelia Erinus Compacta

This charming class forms compact little bushes about 6 inches high and are fairly sheeted with bloom throughout the season. Highly desirable for edgings, ribbon bedding and garden decoration as well as for pot culture.

Crystal Palace Compacta—6 in. Rich deep blue; dark foliage; the finest dark blue for bedding. ¼ oz., 50c; Pkt., 10c.

Gracilis—Light blue; light green foliage; trailing. ¼ oz., 40c; pkt., 10c.

Mixed Dwarf—Pkt., 10c; ¼ oz., 40c.

Nigella

(Love in the Mist)—1½ feet

Miss Jekyll—A lovely variety, bearing on long stems large semi-double flowers of a lovely tender blue, nestling in fine feathery foliage. Pkt., 10c; oz., 30c.

Marigold Tagetes

In late summer, when many bedding plants are past their prime, Marigolds afford a wealth of color that is simply invaluable.

Double Tall Varieties—5 feet
Lemon Queen African—Pkt., 10c; ¼ oz., 40c.

Orange Queen African—Pkt., 10c; ¼ oz., 10c.

Tall African Mixed—Extra large double flowers. Pkt., 10c; ¼ oz., 20c.

Tall French Mixed—Large bushes covered with a multitude of small double flowers. Pkt., 10c; ½ oz., 30c.

Double Dwarf African (Pride of the Garden)—15 inches. Immense golden yellow flowers, compact dwarf habit forming dense bushes. Pkt., 10c; ¼ oz., 20c.

Dwarf French Double Sorts, Gold Striped—10 inches—Velvety maroon, striped gold. Pkt., ¼ oz., 20c.

Dwarf French Double Mixed—Low bushes, covered with small flowers. Pkt., 10c; ½ oz., 30c.

Mixture of Dwarf Marigolds Double and Single Varieties—These dwarf, compact strains are very attractive, each plant being covered with hundreds of small, bright flowers. ½ oz., 30c; pkt., 10c.

Single Dwarf Varieties

Legion of Honor—Flowers rich golden yellow, marked with velvety brown. Best for edging. Pkt., 10c; ¼ oz., 25c.

Signata Pumila—A dwarf, compact, bushy plant, with beautiful, dentate, fern-like leaves, densely covered with flowers of bright golden yellow. Pkt., 10c; ¼ oz., 50c.

Morning Glories

Convolvulus Major—Tall Varieties

White, rose, crimson, striped, dark blue, lilac.

Each of the above, pkt., 5c; any 6 pkts. for 20c.

Mixed, all colors—¼ lb., 35c; oz., 20; pkt., 5c.

Convolvulus Minor—Dwarf or Bush Varieties—1 foot. Are very showy and beautiful hardy annuals for flower beds and borders, also rockwork; they bloom for a long period and delight in sun.

Mixed, all colors—Oz., 20c; pkt., 5c.

Marigold Orange Queen

Ipomoea

Imperialis (Japanese Morning Glory)
Mixed—The Japanese Morning Glory requires a warm situation. The south side of a wall or building where the plants are protected from the north and west winds will mostly be found beneficial for these vines. Pkt., 10c; oz., 25c.

Setosa (Brazilian Morning Glory)
—The thick stems and leaf stalks are covered with reddish brown hairs. The deeply lobed leaves are about nine inches across; flowers about two inches in diameter, of delicate texture, tinted pink with a five-pointed star of satiny pink, and are followed by curiously seed pods. Pkt., 10c; ½ oz., 25c.

Moon Vine

Ipomoea Mexicana Grandiflora Alba (White Moon Flower)—Covered with large white flowers every evening and cloudy day. Seeds should be started inside. Pkt., 10c; ½ oz., 35c.

Ipomoea Mexicana Grandiflora Giant Pink—Soft lilac pink flowers. Pkt., 10c; ½ oz., 35c.

Nicotiana

(Sweet Scented Tobacco Plant)—2 feet. One of the easiest annuals to raise and one of the most effective. The flowers open toward evening and emit a powerful perfume.

Affinis—Most showy and profuse bloomer, giving a continuous display of waxy white flowers right through the summer and autumn. Pkt., 10c; ¼ oz., 25c.

Sanderae—Bearing beautiful rosy carmine flowers. Pkt., 10c; ¼ oz., 25c.

Marigold Signata Pumila, (Tagetes)

Collection**No. 1****Dwarf Nasturtium**

Our choice of
1 pkt. each
of 7 varieties
for 25c

**Collection No. 2
Tall Nasturtiums**

Our choice of one packet
each of 7 varieties
for 25c

Mignonette**(Reseda) 6 to 12 inches**

No garden is complete without this fragrant plant of unassuming mien. One of the principal uses is for cutting purposes and combining in bouquets with other more pretentious blossoms without its delicate odor.

Grandiflora—Large flowered. Oz., 20c; pkt., 5c.

Machet—It is the best Mignonette for all purposes, either outside or inside. It is an ever-bloomer, the flowers lasting until late in the fall. ¼ oz., 25c; pkt., 10c.

Mixed—Many shadows and types. Pkt., 5c; oz., 25c.

Mirabilis**(Marvel of Peru or Four O'Clocks)****2 Feet**

This is another good old-fashioned flower of hushy habit, bearing hundreds of flowers during the season of white, yellow, crimson and violet.

Mirabilis (Continued)

Mixed, all sorts and colors—¼ lb., 40c; oz., 20c; pkt., 5c.

Dwarf Mixed—12 in. Pkt., 10c; oz., 35c.

Sweet-Scented (Longiflora Alba)—White. Pkt., 10c; oz., 40c.

Mysostis**(Forget-Me-Not)**

They are considered among the best spring flowers and grouped with Pansies and Daisies the most lovely combinations may be obtained. Respond to good treatment and flourish in shady, moist situations.

Alpestris Blue—Trailing habit. Pkt., 10c; ¼ oz., 40c.

Alba—White. Pkt., 10c; ¼ oz., 50c.

Rosea—Pink. Pkt., 10c; ¼ oz., 60c.

Eliza Farnrobert—Flowers large, sky blue, with clearly defined white eye. Pkt., 10c; ¼ oz., 60c.

NASTURTiums

These graceful flowers are so thrifty they do well in poor soil, and are so generally grown, we are apt to think of them with less regard than the more difficult and rarer blossoms. But wise gardeners know that no other flower has so rich a color range of these rare shades, and is so prolific of the blossoms needed to register in the garden bed or border. Inside the house, the orange, pink and red blossoms give a luminous color accent. The dwarf varieties are excellent for edging, particularly when one color is used to carry on a color scheme. The tall growing types are valuable for trailing from window boxes, or use on fence or trellis.

Tom Thumb or Dwarf Types

Aurora—Chrome yellow blotched crimson.

Beauty—Scarlet splashed canary.

Bronze—Burnt bronze color, dark leaved.

Chameleon—Flowers of quite distinct coloring on one and the same plant.

Empress of India—Very dark leaves, crimson flowers.

Golden King—A golden yellow.

King of Tom Thumbs—Intense deep scarlet, dark foliage.

Lacinium Mixed—The flowers are deeply lacinated and appear in many attractive colors.

Pearl—Creamy white.

Ruby King—Ruby red, dark leaved.

Golden Cloth—The foliage is of bright yellow, while the flowers are intense scarlet.

Ivy Leaved Mixed—Deep green leaves of distinctive ivy form. The flowers are beautifully fringed at the edge of the petals and at the throat.

Price, any of above, pkt., 5c; oz., 20c; ¼ lb., 50c.

P.-W.'s Best Dwarf Mixed—Pkt., 5c; oz., 15c; ¼ lb., 45c; lb., \$1.35.

Climbing or Tall Types

Emperor of India—Very dark foliage. Rich, deep scarlet flowers.

Twilight—Yellow, marbled salmon rose.

Vesuvius—Salmon rose, dark leaved.

Von Moltke—Ruby red.

Price, each of the above, pkt., 5c; oz., 20c; ¼ lb., 50c.

P.-W.'s Best Tall Mixed—Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

Lobb's Nasturtiums**(Tall)**

This class has intensely brilliant colors and flowers, which are a trifle smaller than those of other sorts.

Black Prince—Velvety black flowers, dark foliage.

Cardinal—Scarlet flowers, dark foliage.

Firefly—Foliage rich and dark, flowers rosy salmon underlaid with bright golden yellow.

Flamingo—Magnificent lacinated orange flowers.

King of the Blacks—Black-red, dark leaves.

Queen Emma—Variegated leaves, deep scarlet flowers.

Queen of the Morning—Variegated leaves, flowers aurora colored.

Virchow (Rose Queen)—The best pink.

Price, each of the above, pkt., 5c; oz., 20c; ¼ lb., 50c.

Lobb's Mixed—Pkt., 5c; oz., 20c; ¼ lb., 45c; lb., \$1.35.

PANSIES

Pansies like cool weather, and the best way to grow them in the north is to start them in the late summer and carry the plants over the winter in a cold frame. The plants will then come into flower with the first tulips. The violas will live over winter with a heavy mulch for protection, and are splendid for bedding.

P.-W.'s Best Giant Mixture It includes the richest reds, coppers and bronzes, together with the most delicate rose-pink shadings. Pkt., 25c; $\frac{1}{4}$ oz., \$1.00.

Boulogne Giant Mixture—The flowers are of the largest size, great substance, fine form and are borne on particularly strong stems. They are mostly 3 and 5 blotched delicately veined. Pkt., 25c; $\frac{1}{32}$ oz., \$1.00.

Cassiers 3 and 5 Blotched Mixed—Mostly light shades with dark blotches. $\frac{1}{4}$ oz., 75c; pkt., 20c.

Masterpiece (New Giant Curled or Spencer Pansies)—The petals are crimped and curled so the flowers appear double. Pkt., 25c; $\frac{1}{4}$ oz., \$1.00.

Mixture of Orchid Flowered Varieties—Including only pretty tints and combinations of cream, primrose, and pale mauve, the flowers being exquisitely frilled and veined in contrasting colors. Pkt., 15c; $\frac{1}{8}$ oz., 75c.

Paris Market—An improved strain of Trimardeau, with better flowers and more compact habit. $\frac{1}{4}$ oz., 60c; pkt., 10c.

Steele's Mastodon Mixed—This is one of the most colorful mixtures of mammoth flowering pansies of which we are familiar. Pkt., 25c; $\frac{1}{16}$ oz., \$1.00.

Rosy Morn—A bright purplish crimson margined with a clear white edge. Pkt., 15c; $\frac{1}{4}$ oz., 60c.

Ruby Red—Pkt., 15c; $\frac{1}{4}$ oz., 50c.

Violet Blue—A very pleasing shade. Pkt., 15c; $\frac{1}{4}$ oz., 50c.

Pure White—Pure white without blotches. Pkt., 15c; $\frac{1}{4}$ oz., 50c.

Pure Yellow—Golden yellow without blotches. Pkt., 15c; $\frac{1}{4}$ oz., 50c.

Bedding Mixed—Great diversity of colors, free flowering, blossoms slightly smaller than the Giant sorts. $\frac{1}{4}$ oz., 40c; pkt., 10c.

Tufted Panises (Viola Cornuta)

(Tufted Pansies) 3-6 inches Flowers all summer from seed sown in early spring, and are valuable for edging beds and borders. Require protection during winter.

Scotch Pansies—Produce flowers with "faces"; the colors range from pale lavender to deep rich purple, many charming intermediate shades. Pkt., 25c; $\frac{1}{4}$ oz., 75c.

Cornuta Mixed—Pkt., 10c; $\frac{1}{4}$ oz., 60c.

Passiflora

Coerulea Grandiflora (Passion Flower)—15 feet. **Southern Beauty.** A beautiful vine for greenhouse and window. Pkt., 10c; $\frac{1}{4}$ oz., 40c.

Pennisetum

Longistylum—2 $\frac{1}{2}$ feet. An Abyssinian grass with long, feathery, bearded bristles. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Rueppelianum—The spikes are longer and more graceful. Used to border canna beds. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Polemonium

(Jacob's Ladder)

Coeruleum (Greek Valerian)—2 feet. Beautiful sky-blue spikes. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Grandiflorum Album—Pure white. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

P.-W.'s Giant Pansy

Primula Chinensis (Chinese Primrose)

This is one of the most charming winter flowering house plants. The flowers are remarkable, not only for size, beauty and brilliancy of the colors, but for the great substance of the petals.

Malacoides—10 inches. The flowers are of a delicate shade of lavender, produced in whorls on tall graceful spikes in great profusion. Pkt., 25c.

Forbesi (Baby Primrose)—10 inches. The flowers are very graceful, of the most pleasing rose color with yellow eyes and are borne on erect stems. Packet, 15c.

Primula (Obconica Grandiflora)—This is one of the most beautiful Primulas for pot culture and also succeeds well in the open border during the summer.

Giant Mixed—Pkt., 200 seeds. 25c.

Pyrethrum Annual

Aureum (Golden Feather)—6 inches. One of the best plants for edging, grown for its beautiful yellow foliage. Most successfully treated as an annual. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Phlox Drummondii

The Phloxes are the showiest and most easily raised of all Annuals. All the tints of the rainbow are represented with all possible variations of stripes, veins and eyes of contrasting shades. Seed should be sown in the ground as soon as danger of frost is over and in a few weeks the beds are a blaze of glory.

Grandiflora Varieties—1 foot. This section has beautiful, round-petaled flowers which overlap each other.

Alba—Pure white.

Altro-purpurea—Black brown.

Brilliant—Rose with dark eye.

Carnea—Flesh color.

Chamois Rose.

Coccinea—Fiery scarlet.

—**Coerulea Striata**—Blue striped.

Crown Prince—Salmony scarlet.

Isabellina—Yellow.

Kermesina Splendens—Vivid crimson, with white eye.

Golden Star—Pink with gold star.

Rosea—Pink.

Violet.

Each of the above, pkt., 10c; $\frac{1}{4}$ oz., 50c.

Drummondii Mixed—Good mixture. $\frac{1}{4}$ oz., 40c; pkt., 10c.

Cuspidata Mixed—Mixture of star-shaped flowers. Pkt., 10c; $\frac{1}{4}$ oz., 40c.

Semi-Double Varieties Mixed—Pkt., 15c; $\frac{1}{8}$ oz., 75c.

Nana Compacta Dwarf—8 inch.

These are much superior to the other Phloxes for ribbon bedding or borders. The plants are very symmetrical in neat, little bushes, covered with flowers during the whole summer and fall.

Fireball—Blood-red, Pkt., 15c; $\frac{1}{4}$ oz., 75c.

Chamois Rose—Pkt., 10c; $\frac{1}{4}$ oz., 60c.

Snowball—Pure white. Pkt., 15c. $\frac{1}{4}$ oz., 75c.

Isabellina—Yellow. Pkt., 15c; $\frac{1}{4}$ oz., 75c.

Sky-blue with White Eye—Pkt., 15c; $\frac{1}{4}$ oz., 75c.

Salmon-Pink—Pkt., 15c; $\frac{1}{4}$ oz., 75c.

Nana Compacta, Mixed, all colors—Pkt., 10c; $\frac{1}{4}$ oz., 15c.

Portulaca

(Rose Moss) 6 Inches

This plant will grow and bloom profusely in dry, hot situation, where almost any other plant will soon die. Easily transplanted.

Large Flowering Single—White, yellow, pink, striped, scarlet, mixed. Each of the above, pkt., 10c; $\frac{1}{4}$ oz., 40c.

Best Large Flowering Double—White, yellow, pink and scarlet. Each of the above, pkt., 10c; $\frac{1}{4}$ oz., 75c.

Best Double Mixture— $\frac{1}{4}$ oz., 50c; pkt., 10c.

P.-W.'s Fluffy Ruffled Giants

Single Bedding Petunias

All of the following are wonderfully effective in beds, borders, window boxes, etc.

General Dodds—Rich crimson garnet. $\frac{1}{4}$ oz., 50c; pkt., 10c.

Snowball—Pure satiny-white. $\frac{1}{4}$ oz., 50c; pkt., 10c.

Violet Queen—Rich velvety violet blue. $\frac{1}{8}$ oz., 50c; pkt., 10c.

Howard's Star—Rosy-crimson with a clearly defined five-pointed star of bluish-white. $\frac{1}{4}$ oz., 50c; pkt., 10c.

Rose of Heaven—A very effective rich and brilliant rose-colored variety. $\frac{1}{4}$ oz., 50c; pkt., 10c.

Rosy Morn—Soft rose-pink with white throat; very dainty. $\frac{1}{4}$ oz., 50c; pkt., 10c.

Collection of a pkt., each of above 6 Bedding Petunias, 45c.

Collection of $\frac{1}{8}$ oz., each of above 6 Bedding Petunias, \$2.50.

Striped and Blotched—A good strain of the small-flowering type; beautifully striped and blotched flowers; fine for massing; $\frac{1}{4}$ oz., 50c; pkt., 10c.

P.-W.'s Fine Mixed Bedding—Good bright colors. $\frac{1}{4}$ oz., 40c; pkt., 10c.

Balcony Petunias

A splendid large and free flowering type either for window boxes, sashes, hanging baskets, etc., the flowers average 3 inches across and make a very effective display over a long season.

Balcony Blue—Velvety indigo blue. $\frac{1}{32}$ oz., 60c; pkt., 20c.

Balcony Rose—Brilliant rose-pink; very effective. $\frac{1}{32}$ oz., 40c; pkt., 20c.

Balcony White—The pure white form. $\frac{1}{32}$ oz., 40c; pkt., 20c.

Balcony Crimson—Rich velvety crimson. $\frac{1}{32}$ oz., 40c; pkt., 20c.

A packet each of the above 4 Balcony Petunias for 60c.

Special Discount

Offer on "Garden Guide"

advertised elsewhere on this page. This most valuable book will be sent you at **one-half price** if your order on other items from this catalog exceeds \$5.00.

PETUNIAS

For freedom of bloom and length of flowering season, the petunia is unsurpassed as a bedding or window box plant. The many improvements recently made in its color range and form of flower have raised it to the front rank. The seed are very small and germinate slowly. Sow them indoors if possible, quite early, and be patient in awaiting the appearance of the seedlings. The Balcony type, of trailing habit, are excellent for porch and window boxes.

The Single Bedding kinds can be sown out of doors in May. Our contract grower is a specialist celebrated for his magnificent strains of both the large flowering single and double varieties, which are being improved each year by careful selection and hybridization.

Large-flowering Single Sorts

P.-W.'s Superb Large-flowering Fringed—This seed is from the finest flowers of very large size and beautiful shape; deep-throated and of valued and brilliant colors, and beautifully fringed. Pkt., 300 seeds, 35c.

Purple Prince—A large flowering velvety, purple violet variety. 3 pkts., \$1.00; pkt., 35c.

Giants of California—Flowers very large, in great variety of colors and markings, with deep yellow throats. 200 seeds, pkt., 25c.

P.-W.'s Fluffy Ruffled Giants—Flowers of extraordinary size and substance, and distinguished from the large flowering fringed section by the deep huting, giving it the appearance as is artistically ruffled, and in addition to the ruffling, a very fine fringed edging, making a very handsome flower. Pkt. of 250 seeds, 50c.

Large-flowering Double Sorts

In growing Double Petunias from seed the weaker seedlings should be carefully saved, as these usually produce the finest double flowers.

P.-W.'s Superb Double-fringed—Saved from an unrivalled collection that will produce a large percentage of double flowers of the largest fringed varieties in bright colors. Pkt., 200 seeds, 50c.

Double Large-flowering (European Mixed)—Beautiful varieties in mixture. This is grown for us by a European specialist. Pkt., 200 seeds, 35c.

GARDEN GUIDE

A complete handbook for the amateur gardener 384 pages and over 275 teaching illustrations with beautiful cover in four colors.

The gem of gardening literature. Over 35,000 copies sold throughout the United States and Canada. **Garden Guide** has wonderful chapters devoted to the Vegetable, Flower and Fruit Gardens, with practical layouts and planting plans.

Covers every step from spading the ground to preserving the harvest.

Price, paper cover, postpaid, \$1.10;
cloth cover, postpaid, \$1.65.

Giants of California Petunia

POPPIES

Poppies are noted for their satiny flowers of silk-like texture, in many brilliant color combinations. The foliage is delicate and the blossoms are airily poised on slender stems. If the flowers are gathered early in the morning when the dew is on them, they will remain fresh in water all day. Plant the seed in succession two weeks apart for a continuous bloom all summer. Mix seed with sand before sowing so as to distribute the seed thinly and evenly.

Single Annual Poppies

Admiral—Glistening white, with a broad margin of brilliant scarlet. Pkt., 10c; $\frac{1}{4}$ oz., 20c.

Bride—Very large pure white, perfectly formed flowers. Pkt., 10c; $\frac{1}{4}$ oz., 20c.

Danebrog or Danish Flag—Brilliant scarlet flowers, with a silvery spot on each petal, forming a white cross. Pkt., 10c; $\frac{1}{4}$ oz., 20c.

Flanders Poppy—Vivid scarlet-red. This flower has in the minds of men been associated for over two hundred years with the battlefields of Flanders. Was the first official flower of the American Legion. Pkt., 10c; $\frac{1}{4}$ oz., 20c.

Hansa—The flowers have a pure white ground color, passing towards the finely slitted edge to a deep crimson. Pkt., 10c; $\frac{1}{4}$ oz., 20c.

King Edward—Flowers deep scarlet, shaded crimson, with a large black blotch at the base of each petal. Pkt., 10c; $\frac{1}{4}$ oz., 20c.

Persian (Laevigatum or Firedragon)—Dark scarlet, black spots. Pkt., 10c; $\frac{1}{4}$ oz., 20c.

Tulip (Glaucum)—Large tulip-shaped flowers of dazzling scarlet; not unlike a Scarlet von Thol Tulip. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Umbrosium—Rich vermilion flowers with shining black spot on each petal. Pkt., 5c; $\frac{1}{4}$ oz., 20c.

Shirley Poppies

Silk or Ghost; have beautiful satiny flowers of various colors, all with white centers, which makes the plants very attractive. Foliage is bairy and finely cut.

Blue Shirley—Various shades of blue. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Rose Shirley—Shades of rose and pink. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Shirley Mixed—Beautiful shades in delicate shades of rose, apricot, salmon-pink, and bluish to growing crimson with a sprinkling of blues. Pkt., 10c; oz., 30c.

Double Shirley Poppy

Miss Sherwood—Flowers shining, satiny white, the half of the corolla being a silky chamois rose. Pkt., 10c; $\frac{1}{2}$ oz., 20c.

Eldorado (Fine Mixed)—The flowers are large, single, semi-double and double, and contain magnificent shades of soft salmon, orange, orange scarlet, pink, rose and white, without any dark markings whatever. The substance of the petals in some of the lighter shades is as delicate as China silk. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Eldorado Salmon Shades—2 feet. The introducer made a selection of these most popular shades and will especially appeal to those admiring pastel shades in flowers. Pkt., 10c; $\frac{1}{4}$ oz., 30c.

Mixture Single Poppies—This mixture included all the above choice Poppies and many other kinds not listed. Pkt., 10c; oz., 25c.

Double Carnation Poppy

Double Annual Poppies

American Flag—Flowers very large, snow white, scarlet bordered.

Fairy Bush—The flowers have the effect of large feathery balls, overcast with a rosy shade.

Carnation Flowered—Splendid double-fringed flowers; mixed colors. Pkt., 5c; oz., 25c.

Giant, Double—Pure White, Pale Yellow, Pink, Cardinal Red, and Lilac. Any of above varieties except where noted—Pkt., 10c; oz., 30c.

Salvia Splendens

(Scarlet Sage)

The *Salvia Splendens* is a standard bedding plant that keeps the garden bright with color until late in autumn. This plant lends itself to many uses; it makes a good pot plant, does well in window boxes, and is useful for cutting. Its best use, however, is as a hedge or border plant, for brilliant color effect.

America, or Globe of Fire—This is the freest and most continuous bloomer; also the most uniform in habit of growth, which makes it particularly valuable for bedding or planting in lines. Pkt., 25c; $\frac{1}{16}$ oz., 75c.

Splendens (Scarlet Sage)—Beautiful bright scarlet; 3 feet. Pkt., 10c; $\frac{1}{4}$ oz., 75c.

Single Shirley Poppy

Rainbow Corn

(*Zea Japonica Variegata*)

Ornamental foliage plant, highly effective and very interesting; grows about 5 feet high, quite bushy, variegated leaves striped with bright green, silvery white, rosy purple and sulphur yellow. Pkt., 10c; oz., 25c.

Rhodanthe

(Everlasting)—1 Foot

A charming annual; succeeds in a light rich soil and a warm sheltered situation; valuable for pot culture; flowers everlasting; mixed colors. Pkt., 10c; $\frac{1}{4}$ oz., 50c.

Romneya

Coulteri (California Tree Poppy)—5 feet. Flowers all summer. Beautiful snowy white fragrant flowers. Pkt., 15c; $\frac{1}{4}$ oz., 75c.

Ricinus

(Castor Bean)

Stately, strong growing plants, with very ornamental foliage, well adapted as center plants of groups of Cannas, Dahlias, etc.

Cambodgensis—6 to 8 feet. Large palm-like leaves of darkest maroon; stalk nearly black. Pkt., 10c; oz., 25c.

Panormitanus—8 to 10 feet. Huge leaves of a peculiar old bronze shade; stems blue powdered. Pkt., 10c; oz., 25c.

Red Spire—A new and very effective variety with bronzy green foliage and brilliant rosy crimson seed spikes. Pkt., 10c; oz., 40c.

Zanzibariensis Mixed—10 to 12 feet. The ornamental leaves, beautifully lobed, are $2\frac{1}{2}$ to 4 feet across. Each plant makes a perfect pyramid of foliage. Pkt., 10c; oz., 25c.

Mixed—Many sorts. Pkt., 5c; oz., 20c.

Rudbeckia (Cone Flower)

Bicolor Superba—2 feet. Annual. Produces an abundance of bright yellow flowers with brown central disc, fine for cutting. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Salpiglossis

Salpiglossis

2½ Feet

Undoubtedly one of the most attractive annuals and should be in every garden. Each flower is veined with a giant of gold. The Salpiglossis is deservedly known as the Orchid of Hardy Annuals.

Emperor—Bright crimson, Faust black, pink, velvety violet, golden yellow, purple and gold, scarlet and gold, rose and gold. Each of the above, per pkt., 10c; ¼ oz., 50c.

Emperor Mixed—Large unproved strain, complete range of colors. Pkt., 10c; ¼ oz., 40c.

Scabiosa

(Mourning Bride) 2½ Feet

Commonly known as the Pincushion Plant. The flower stems are long and the blossoms keep well in water. The soft shades predominate. When given plenty of room and the seed vessels are kept regularly picked off, it will last through the whole summer.

Large Flowering Double

Snowball, golden yellow, flesh, fiery scarlet, azure fairy, cherry red, black prince, rose.

Each of the above, per pkt., 10c; ¼ oz., 25c.

Mixed—The above and others. Pkt., 10c; ¼ oz., 25c.

Scarlet Runner Beans

Scarlet Runners—A great favorite in England and Europe, not only as an ornamental climber, but for the delicious edible beans which succeed the spray of bright scarlet pea-shaped blossoms. Lb., 55c; pkt., 10c.

Schizanthus

Schizanthus

This is one of the daintiest of annuals. The seed germinates readily and in a few weeks the plant is a mass of small but bright flowers in a bewildering range of colors, all blotched and marked in contrasting shades.

Grandiflorus, Garaway's Hybride—A grand strain bearing a profusion of large flowers, all with handsome markings on a white, buff, brilliant rose, rich blue or purple ground. Pkt., 25c; ¼ oz., 50c.

Wisetonensis—1½ feet. Profusion of flowers varying from almost white with yellow eye to a brilliant rose with bronze brown center. Pkt., 15c; ¼ oz., 50c.

Mixed, all colors—¼ oz., 25c; pkt., 10c.

Silene

1½ Feet

Armenia Mixed (Catchfly)—A very showy early flowering hardy annual, bearing in quantity, heads of beautiful white, pink and red flowers. Pkt., 10c; ¼ oz., 20c.

Scabiosa

Stocks

(Large Flowering)

The Stocks represent all the desirable qualities of a flower. The plants have good habit, fine, dull or glossy leaves. The flowers appear on long, stiff stalks like small rosettes, are exceedingly fragrant and range through a most complete scale of all the soft and distinct shades.

10 Weeks—1 Foot

White, canary yellow, flesh, rose pink, crimson, light blue, mauve (war blue), dark blue, mixed.

Each of the above, pkt., 10c; any 3 pkts. for 25c; ¼ oz., 50c.

Giant Perfection "Cut and Come Again"—1½ Feet

Useful for outdoor bedding as well as for pots or cut-flower. They throw out numerous side branches, all bearing very double, fragrant flowers.

White, canary yellow, pink, old rose improved, scarlet, light blue, dark blue, mixed.

Each of above, pkt., 10c ¼ oz., 65c.

Statice

Bismark

If sufficient room is given the plants develop to enormous dimensions, forming magnificent bushes, with long and large flower stalks. Blooms after the ten weeks stocks have ceased. White, lilac, rose, gold ball, blood-red, mixed.

Each of above, pkt., 15c; ¼ oz., \$1.

Emperor or Winter—2 Feet

These are useful in planting in California and the South, outdoors.

Large Flowering White Lady—White. Pkt., 15c; ¼ oz., 75c.

Empress Elizabeth—Brilliant carmine rose. Pkt., 15c; ¼ oz., 75c.

Winter Stocks Mixed—Pkt., 15c; ¼ oz., 75c.

Statice

Russian (Suworow)—1 foot. Flowers bright rose color; valuable for winter bouquets. Pkt., 15c; ¼ oz., 75c.

Bonduelli—Producing numerous heads of bright yellow flowers, valuable for drying, very attractive. Pkt., 10c; ¼ oz., 25c.

Sinuata Blue—Forming pretty rosettes of foliage from which rise branching flower stems 2½ feet high, light to dark lavender flowers. Pkt., 10c; ¼ oz., 25c.

Sinuata Rosea—Pkt., 10c; ¼ oz., 25c.

Sinuata White—Pkt., 10c; ¼ oz., 25c.

Stocks

MARVELOUS SWEET PEAS

Sweet Peas are of easy culture and there should be no failures if ordinary care is taken. The absolute essentials are good seed, rich soil deeply dug, early sowing, early staking and frequent stimulation to insure continuous growth and good cultivation to keep the soil loose and porous. The seed should be sown as early in the Spring as the soil can be worked. In the vicinity of Salt Lake, early March in average years is the proper time. It is best to make a trench or furrow about six inches deep, in the bottom of which sow the seed and cover with about one inch of soil, pressing it down firmly. As soon as they are above the ground thin out about three or four inches apart. When planted too close they do not obtain full development. They should be staked up either with branches or stout stakes on which wire netting has been fastened; these should be about four or five feet high. Sweet Peas should be watered thoroughly and frequently and flowers cut often to prevent running to seed which will stop them from continuing in bloom. One oz. will plant 25 feet of row. To inoculate the seed gives added vigor and health. See page 31.

Early Flowering Spencers

This new type is in great demand by commercial florists for forcing under glass and are just as valuable for outdoor culture, coming into flower five or six weeks earlier than the regular orchid-flowered type. If flowers are kept picked will continue to bloom over a period of nearly four months.

Meadow Lark—Primrose yellow.

Fair Maid—Blush-pink.

Morning Star—Rich, rosy salmon.

Early Harmony—The Finest clear lavender.

Early True Blue—Rich mid-blue.

Early Zvolanek's Rose—Rich rose pink.

Blue Bird—Violet blue.

Grenadier—Dazzling scarlet. Excellent. Pkt., 10c; oz., 85c; ¼ lb., \$3.00.

Illumination—Salmon cerise.

Lavender King—Clear lavender.

Mrs. Kerr—Salmon. Very fine. Pkt., 10c; oz., 85c; ¼ lb., \$3.00.

Snowstorm—Improved. Pure white.

Yarrowa—Bright rose pink, lighter wings.

Any of the above except where noted—Pkt., 10c; oz., 85c; ¼ lb., \$1.75.

Early Flowering Spencer Mixed—

Pkt., 10; oz., 50; ¼ lb. \$1.50; lb. \$5.00

Cupid or Dwarf Sweet Peas

These form a line of emerald-green foliage a little over a foot wide and 6 inches high, and from June until late summer are literally a sheet of bloom; the mixture contains all the colors.

Pkt., 10c; oz., 20c; ¼ lb., 60c; lb., \$2.

Mary Pickford This delightful new Giant Spencer variety, named after "America's Sweetheart," is a beautiful light and dainty cream-pink, with just the faintest suffusion of salmon; the flowers are perfectly formed, decidedly waved. Pkt., 15c.

P. W.'s Giant Spencer Sweet Peas

Of the hundreds of Orchid-flowered or Spencer Sweet Peas introduced in the last few years, we offer this season what we consider the very choicest and most distinct varieties, each one of which is a leader in its respective color, and sure to give entire satisfaction.

Austin Frederick Improved—Large rosy lavender, the best in this color.

Blanche Ferry Spencer—Bi-color immense, pink and white.

Bolton's Orange—Rich orange salmon self. Pkt., 10c.

***Charming**—A most brilliant rosy orange cerise, large flower.

***Colne Valley**—Lavender blue, very large.

Commander Godsall—Very rich deep violet blue.

***Constance Hinton**—Enormous size. The best white for outdoor use.

***Dobbie's Cream**—The finest primrose-yellow.

P. W.'s Special Collection Spencer Sweet Peas

Price—Any of the above, except where noted, pkt., 10c; oz., 30c; ¼ lb., 90c; lb., \$3.00. 1 Pkt. each of Best Red, White, Lavender, Pink, Salmon and Maroon (6 pkts.) for..... 50c

*** Rainbow Collection (A) of one packet each of the twelve "*" varieties offered above, \$1.00.

*** Rainbow Collection (B) of 1 ounce of each of the twelve "*" varieties offered above, \$2.25.

P. W.'s GIANT SPENCER MIXED

This represents the highest development in Sweet Peas to date. This mixture has been made up out of named sorts only, insuring a well balanced range of colors. It would be impossible to get anything of higher quality at any price. Pkt., 10c; oz., 25c; ¼ lb., 60c; lb., \$2.00.

Lady Evelyn Eyre—A most delicately colored large pale pink lightly flushed with salmon.

***Margaret Atlee**—The best giant rich pink.

Old Rose—A lovely old rose color.

R. F. Felton—Exquisite large soft lavender blue with slight suffusion of rose.

Robert Sydenham—Glowing orange. Splendid.

***Royal Purple**—Rich royal purple.

Royal Salute—The sensational fiery-scarlet cerise, preferable to "Fiery Cross," same color.

***Royal Scot**—A most brilliant scarlet.

Splendour—Rich reddish maroon; very pleasing.

***The Cardinal**—Intense popy-scarlet; very large and wavy.

Wedgwood—Bright silvery blue.

Verbena

Sunflower (*Helianthus*)**Large Flowered Tall**

These comprise plants of majestic growth and immense showy flowers.

Red Sunflower—4 to 8 feet. Some flowers of a rich chestnut-red color, others tipped with yellow and others slightly washed with red. Pkt., 10c; ¼ oz., 20c.

Argyrophyllus—4 feet. Handsome silvery foliage, single bright yellow flowers, black disk, pyramidal growth. Pkt., 5c; ¼ oz., 15c.

Chrysanthemum Flowered Double—6 feet. Golden yellow flowers. Pkt., 10c; ½ oz., 25c.

Russian Mammoth—See Farm Seeds, page 54.

Miniature-Flowered Sunflowers.

The *Helianthus cucumerifolius* form spreading bushes with small graceful foliage and bear a multitude of small elegantly formed flowers, which are borne for a long time in succession.

Stella—Large golden yellow petals; small, dark center. Pkt., 10c; ¼ oz., 30c.

Orion—Petals rolled, resembling single Cactus Dahlia. Pkt., 10c; ¼ oz., 30c.

Liliput, Babey Sunflower—6 to 8 inches. Flowers are single, bright yellow, dark disc. Pkt., 10c; ¼ oz., 30c.

Zinnias

The most gorgeous annuals with a wonderful range of color. Beautiful old rose, dainty cream, striking red and brilliant yellow flowers of velvety texture, extremely double with long stems and good keeping qualities, make this old-fashioned flower a joy in the garden. The Colossal produce such enormous blooms they appear as greenhouse Chrysanthemums that have mistaken their time and place of flowering. If you plant but one annual, plant this. The plant's may be taken up when in full bloom and transplanted without any visible effect.

P.-W.'s Giant Double Colossal Zinnias**3 feet**

The flowers are of enormous size, thickly set with velvety petals. The plants are healthy, vigorous, branching freely, and make excellent material for grouping or cutting.

White, Cream, Buttercup (Deep Primrose), Apricot Yellow, Flesh Color, Salmon Shades, Shrimp Pink, Pink Shades, Golden Yellow, Sulphur Yellow, Orange, Scarlet, Violet, Purple.

Each of above, pkt., 10c; any 3 for 25c; ¼ oz., 35c.

P.-W.'s Colossal Zinnias, Mixed—The flowers are gigantic in size and deep and velvety in appearance, exhibiting all the hues and in arresting colors. Pkt., 10c; ¼ oz., 25c.

Verbena

Verbena is one of the most popular garden annuals and lends itself willingly to many uses. The clusters of showy and often fragrant flowers are borne in constant succession from June until frost.

Hybrida

Defiance—An intense scarlet. Pkt., 10c; ¼ oz., 50c.

Dark Blue with White Eye—Pkt., 10c; ¼ oz., 50c.

Lutea—Yellow. Pkt., 10c; ¼ oz., 60c.

Striped—Mostly light colors with red and blue stripes. Pkt., 10c; ¼ oz., 50c.

White—Dense heads of finely shaped white flowers. Pkt., 10c; ¼ oz., 50c.

Mayflower—Various shades of pink. Pkt., 10c; ¼ oz., \$1.00.

Firefly—Intense red. Pkt., 10c; ¼ oz., 70c.

Purple Shades—Dark purple. Pkt., 10c; ¼ oz., 50c.

Mammoth Mixed—Producing in handsome umbels flowers of large size in beautiful shades of white, rose, scarlet, blue, purple. Pkt., 10c; ¼ oz., 40c.

Hybrida Gigantea

A wonderful mixture of large flowering varieties. The flowers are, as the name indicates, gigantic, and with white eye, the reds particularly attractive. Pkt., 15c; ½ oz., 50c.

Erinoides (Moss Verbena)—6 inch. Produces a mass of moss-like foliage, spreading over the ground like carpet, above which are borne heads of purplish-blue and white blossoms; flowers in June and continues until frost. For beds, baskets or rockeries it is highly desirable. Pkt., 10c; ½ oz., 80c.

Venosa (Hardy Garden Verbena)—Used for bedding purposes; thrifty grower about 1 foot high, and covered from early summer until late fall with its bright purplish-heliotrope flowers. Pkt., 10c; ¼ oz., 70c.

Citriodora (Lemon Scented Verbena)—An old favorite with fragrant evergreen leaves. It is a low-growing tender plant and may be grown in the garden in summer and in pots in winter, and the leaves dried and laid among linens. Pkt., 10c; ¼ oz., 65c.

Wallflower

Well-known deliciously fragrant half hardy perennials, blooming early in the spring, with spikes of beautiful flowers. In the north they should be protected in a cold frame in the winter and planted out in April.

Single Mixed—All colors. Pkt., 10c; ¼ oz., 20c.

Double-flowering Finest Mixed—Pkt., 15c; 1/16 oz., 40c.

Wild Cucumber**(*Echinocystis Lobata*)**

Thirty feet. This is the quickest growing climber on our list. Grows wild self-sown in many parts of the west. Should be sown late in the fall or very early in the spring. It is thickly dotted over with pretty, white fragrant flowers, followed by an abundance of ornamental and prickly seed pods. It will quickly cover an old tree or an unsightly building. Pkt., 50c; ½ oz., 20c; oz., 30c; ¼ lb., 90c.

Annual Flower Seeds**Wild Garden Collection**

This is a surprise collection, containing practically every annual in existence. Large borders, along carriage drives and woodland walks, shrubby borders, and the like, may be pleasingly brightened as a result of freely sowing mixed flower seeds. The expense involved is very nominal in comparison with the wealth of bloom obtained. Such plantings will be a continuous source of joyous surprise to you as, among the many growing annuals, you recognize old friends or discover new ones. And at blooming time, some of the cheery flowers may be cut and transferred indoors with out noticeably lessening the charm of the outdoor plantings. Be careful, not to sow the seeds too close together, as suitable space for plant development will contribute to the effectiveness of your planting. Oz., 25c; ¼ lb., 75c; lb., \$2.25.

P.-W.'s Giant Colossal Double Zinnia

DAHLIA FLOWERED ZINNIAS

"Award of Merit" and Gold Medal by Royal Horticultural Society.

Large Double Flowers 6 to 8 inches across

P.-W.'s Dahlia Flowered Zinnia Collections

(A)—1 packet each of the ten varieties listed below for

\$1.00

(B)—1/16 oz. each of the ten varieties Dahlia Flowered Zinnias for

\$2.25

Postpaid

Double Dahlia Flowered Zinnias

The plants of this new race are very sturdy and produce many flowers with stout stems. In formation the broad petals are closely imbricated, sometimes seeming almost to be piled one upon the other. The flowers often measure 4 inches in depth and 6 to 8 inches in diameter. In general appearance the flowers compare with the Show Dahlias.

Canary Bird—A delicate shade of primrose—very large and holds its color well out of bloom.

Buttercup—An immense deep creamy yellow. A very desirable flower, which should be included in every collection.

Crimson Monarch—Rich crimson. By far the largest and best of red shades. Flowers often eight inches in diameter.

Dream—A fine, deep lavender, turning to purple, a new desirable shade in Zinnias.

Exquisite—By far the most pleasing of our collection. Truly Dahlia flowered as regards form and size. Color light rose with center a deep rose.

Burnt Orange (Golden State)—A very rich orange yellow in the bud, turning to an attractive orange when in full bloom.

Old Rose—This is adequately described by its name, as it is of the real Old Rose Shade.

Oriole—An immense orange and gold bicolor, changing slightly as it ages.

Polar Bear—A very large pure white, the best white yet seen in Zinnias. True Dahlia form.

Scarlet Flame—A large, beautiful, bright scarlet, with a delightful blending of orange throughout the petal. Each of above, pkt., 15c; any 4 pkts., 50c; 1/16 oz., 25c.

Dahlia Flowered Mixed—All the above and others. Pkt., 15c; 4 pkts., 50c; 1/4 oz., 30c.

Giant Picotee

A remarkable new and distinct class with beautiful double flowers in orange, flesh, lemon, pink and cerise, each petal being distinctly tipped with various shades of dark, resembling the Picotee Carnations.

Giant Picotee Mixed—Pkt., 15c; 1/4 oz., 60c.

Zinnia California Giants (Double Flowered)

In presenting the above type we offer a rare collection of striking and desirable colors. They are larger than Colossal and a cross between them and the Dahlia Flowered types.

Lemon Queen—A most pleasing color. The petals are high canary on the upper and cerise on the lower side, the two shades blending as the flower develops. It is the only Zinnia with fragrance.

Orange King—Similar in color to the Calendula of the same name—a glowing orange.

Purity—A clean pure white.

Rose Queen—Bright rose with a deep rose red center and gradually develops into a warm deep rose.

Each of the above, pkt., 15c; 1/4 oz., 60c.

One pkt. each of above four varieties, 50c.

Giant Double Quilled Achievement

The petals are partially tubular or quilled giving the flower somewhat the appearance of a cactus dahlia and displaying a rich variety of colors mostly of the warmer shades, such as, salmon, old rose, deep rose, lilac, bronze and dark red tones. On the reverse side the petals are light or dark lilac, making a wonderful combination of colors. The plants are of strong, robust growth and produce an abundance of very large double flowers often 5 inches in diameter. Pkt., 15c; 1/4 oz., 60c.

Zinnia Liliput Double

The plants form handsome little bushes and fairly bristle with tiny, short-stemmed, very double flowers hardly exceeding a daisy flower in size. They are very pretty plants; bloom all summer until late in the fall. 12 in. high. We furnish them in scarlet, white, golden orange and mixed colors. Pkt., 10c; 1/4 oz., 30c.

Red Riding Hood—1 ft. Of compact form and covered the entire season with little button-like, intense scarlet flowers not over an inch across; as a border plant it is highly effective. Pkt., 10c; 1/4 oz., 30c.

GARDEN SEEDS IN BULK

Condensed Quantity Prices for Large Buyers and Market Gardeners

The varieties most commonly used by Market Gardeners are listed below. Should prices be desired on others not found here, we shall be pleased to quote promptly upon request. See pages preceding for detailed description and more complete list.

PRICES ON THIS PAGE DO NOT INCLUDE DELIVERY CHARGES. IF BY MAIL ADD POSTAGE.

ASPARAGUS

	1 lb.	10 lbs.
Washn. Rust Resistant.....	\$2.00	\$18.00
Mary Washington.....	2.50	22.50
All other varieties p. 51.....	.75	6.50

BEETS—For Table Use

	1 lb.	10 lbs.
P-W's Dark Leaved Globe.....	\$1.00	\$ 9.00
P-W's Blood Red.....	1.00	9.00
All other varieties, p. 52.....	.75	7.00

BEETS—For Stock Feeding

	1 lb.	10 lbs.
All varieties, p. 53.....	\$2.50	\$23.00

BEANS—Wax Podded

	10 lbs.	100 lbs.
All varieties, p. 53.....	\$2.50	\$23.00

BEANS—Pole

	1 lb.	10 lbs.
Scarlet Runner.....	\$2.70	\$25.00
Pole Lima.....	2.25	20.00
Other varieties, p. 54.....	2.00	18.00

BEANS—Dwarf Lima

	1 lb.	10 lbs.
Fordhook Bush Lima.....	\$2.50	\$24.00
Burpee's Imp. Bush Lima.....	2.30	22.00
Henderson's Bush Lima.....	1.80	17.00

BEANS—Shell

	1 lb.	10 lbs.
Mexican Pinto.....	\$1.50	\$13.50
Pink Eye.....	1.25	11.00
Broad Windsor.....	1.80	17.00
All other varieties, p. 54.....	1.00	9.00

BRUSSELS SPROUTS

	1 lb.	10 lbs.
Odense Market.....	\$2.25	\$20.00

CARROTS—Table and Stock

	1 lb.	10 lbs.
P-W's Coreless.....	\$2.00	\$17.50
All varieties, p. 56.....	.75	7.00

CRESS

	1 lb.	10 lbs.
Ex. Curled or r Pepper G.....	\$1.00	\$ 9.00
True Water.....	4.50	42.50

CABBAGE (Chinese)

Pe-Tsal.....	\$2.25	\$20.50
--------------	--------	---------

CABBAGE

	1 lb.	10 lbs.
Copenhagen Market.....	\$2.00	\$17.50
Baby Head.....	2.75	25.00
Danish Round Head.....	2.00	17.50
Mammoth Red Rock.....	2.50	22.50
Marvill's Savoy.....	2.50	22.50
Danish Ball Head.....	2.00	18.00
Golden Acre.....	2.75	25.00
Charleston.....	1.85	16.50
Succession Smr Ballhead.....	2.25	20.00
All other varieties, p. 57.....	1.75	15.00

CAULIFLOWER

	Oz.	1/4 lb.
All other varieties, p. 56.....	\$2.00	\$ 6.50
Early Enfert.....	1.75	5.00

CELERY

	lb.	10 lbs.
Wonderful or Glad Plume.....	\$12.00	—
Golden Crisp.....	10.00	—
Golden Self Blanching.....	8.00	—
All other varieties.....	2.00	—

CORN—Sweet

	10 lbs.	100 lbs.
P-W's Bantam Evergreen.....	\$1.80	\$16.00
Early Mayflower.....	1.80	16.00
Country Gentlemen.....	1.80	16.00
Davis Co. Excelsior.....	1.80	16.00
P-W's Portland Market.....	2.00	18.00
All other varieties, p. 60.....	1.70	15.00

CUCUMBERS

	1 lb.	10 lbs.
P-W's Longfellow.....	\$2.50	\$22.50
All varieties, p. 68.....	1.25	11.00

EGG PLANT

	1 lb.	10 lbs.
All varieties, p. 59.....	\$4.00	—

ENDIVE

	1 lb.	10 lbs.
Broad Leaved Batavian.....	\$1.50	\$13.50
Green Curled.....	1.25	11.50

KALE

All varieties, p. 50.....	\$1.20	\$11.00
---------------------------	--------	---------

KOHL RABI

All varieties, p. 50.....	\$1.75	\$15.00
---------------------------	--------	---------

LETTUCE

	1 lb.	10 lbs.
New York.....	\$2.00	\$19.00
Cos or Romaine.....	1.50	14.00
Black Seeded Simpson.....	1.25	11.50
Ey. Curled Simpson.....	1.25	11.50
Grand Rapids.....	1.25	11.50
Prizehead.....	1.25	11.50
All other varieties, p. 50.....	1.50	14.00

MUSKMELONS

	1 lb.	10 lbs.
Hale's Best Crown Set.....	\$2.00	\$17.50
Hale's Best Early.....	1.50	12.50
Honey Ball.....	2.50	22.00
Honey Dew Casaba.....	1.75	16.50
Golden Beauty.....	1.75	16.50
Persian.....	2.50	22.00
Orange Flesh.....	1.75	16.50
Super Perfecto.....	2.00	17.50
Rocky Ford Cantaloupe.....	1.00	9.00
Hackensack.....	1.00	9.00
All other varieties, p. 62.....	1.25	11.50

WATERMELONS

	1 lb.	10 lbs.
Angellno, p. 64.....	.85	7.50
Klondike.....	1.25	11.50
Klondike Crown Set.....	1.75	15.00
Winter (King and Queen).....	1.50	13.50
All other varieties, p. 64.....	.75	6.50

ONION

	1 lb.	10 lbs.
Sweet Spanish.....	—	—
Valencia Cal. Crown.....	\$4.50	\$42.50
Valencia Domestic.....	4.50	42.50
Giant Gibraltar.....	2.25	20.00
Mt. Yellow Danvers.....	2.00	18.50
Red Wettershead.....	1.75	15.00
Australian Brown.....	1.75	15.00
Silver Skin.....	2.25	20.00
Southport White Globe.....	2.25	20.00
Mammoth Silver King.....	2.25	20.00
Ex. Ey. Barletta.....	2.00	18.50
P-W's Yellow Globe.....	1.75	15.00
Prizetaker.....	2.25	20.00
Alice Craig.....	2.25	20.00
Southport Yellow Globe.....	1.75	15.00
Yellow Flat Danvers.....	1.50	13.50
Southport Red Globe.....	2.00	18.00
White Pearl.....	2.00	18.00
White Queen.....	2.00	18.00
Crystal White Wx. (Ital.).....	3.00	27.50
Crystal White Wx (Ten).....	3.50	32.50
P-W's Peerless White.....	3.50	32.50
Yellow Strashurg.....	1.60	14.50

ONION SETS

	10 lbs.	100 lbs.
Yellow and Brown.....	\$1.50	\$13.00
White.....	1.60	14.00

PARSNIPS

	1 lb.	10 lbs.
All varieties, p. 67.....	.85	8.00

PARSLEY

All varieties, p. 67.....	\$1.40	\$10.00
---------------------------	--------	---------

PEPPERS

	1 lb.	10 lbs.
Chinese Giant.....	\$5.00	\$45.00
All other varieties, p. 67.....	4.00	37.50

PUMPKIN

	1 lb.	10 lbs.
King of Mammoth.....	\$1.00	\$ 9.00
All other varieties, p. 68.....	.75	7.00

PEAS

	10 lbs.	100 lbs.
Early Alaska.....	\$1.60	\$14.00
Laxtonian Hundred Fold.....	1.30	17.00
New, Worlds Record.....	1.80	16.00
Dw. Telephone.....	1.80	16.00
Buss Everbearing.....	1.60	14.00
P-W's Laxton Progress.....	2.00	18.00
P-W's Laxton Superb.....	1.70	15.00
All other varieties, p. 69.....	1.70	15.00

RADISHES

	1 lb.	10 lbs.
Long Black Spanish.....	.65	5.50
Chinese Rose—Winter.....	.65	5.50
Celestial, White Chinese.....	.65	5.50
All other varieties, p. 70.....	.50	4.50

SALSIFY

	1 lb.	10 lbs.
Mam. Sandwich Island.....	\$1.75	\$16.00

SPINACH

	1 lb.	10 lbs.
King Denmark.....	.30	2.50
All other varieties, p. 70.....	.25	2.20

SQUASH

	1 lb.	10 lbs.
Chicago Warded Hubbard.....	\$1.25	\$11.50
Cocozelle.....	1.25	11.50
Banana.....	1.25	11.50
All other varieties, p. 71.....	1.00	9.00

TOMATOES

	1 lb.	10 lbs.
Sunnybrook—P-W's.....	\$4.00	\$36.00
King of Earlies.....	4.50	41.50
Avon.....	3.50	32.50
Bonny Best.....	2.65	24.00
Small Fruited Varieties.....	3.50	32.50
Maiglobe.....	10.00	—
Matchless.....	2.75	25.00
Ponderosa.....	4.50	41.50
New Stone.....	2.75	25.00
Landreth Red Rock.....	2.75	25.00
All other varieties, p. 72.....	3.00	27.50

TURNIPS

	1 lb.	10 lbs.
Ex. Ey. Purple Top Milan.....	\$1.00	\$ 9.00
Ex. Ey. White Milan.....	1.00	9.00
All other varieties, p. 71.....	.65	6.00

RUTA GAGA

	1 lb.	10 lbs.
Imp. Purple Top.....	.65	6.00

ORDER EARLY

In January and February, if possible, before the Spring rush begins. March and April are our busy months and our full force works day and night under top pressure. We allow you 5% discount for the privilege of filling your order before March 1.

5%

Five pounds and over at 10 lb. rate; 25 lbs. and over at 100 lb. rates. Prices on this page do not include delivery charges; if wanted by mail add postage.

MAKE A HEALTH GARDEN

Aside from being an interesting and fascinating "hobby," the Vegetable garden is a vitally important factor to the health of the entire family.

The comparative recent discovery of the mysterious food elements called VITAMINES means more to a solution of the health problem than any other discovery of Modern Science.

Medical men now fully appreciate unless these vitamins are present it is possible to starve even though the body be well supplied with protein, fats and carbohydrates formerly considered all the elements of a complete diet. Science has named these additional necessary food elements; Vitamines A, B, C, and D, these are found chiefly in milk and vegetables.

With such facts in mind every Home Gardener will want to provide his family with these necessary health giving elements. The following list will be of great assistance in this respect.

Vitamine A promotes growth and its absence causes sore eyes and blindness; and stunted growth in children.

Vitamine B, if lacking, brings on gastro-intestinal troubles, neuritis, anemia.

Vitamine C, if lacking, makes people irritable, lacking in stamina and in extreme cases, causes scurvy.

Vitamine D is a yeast growth promoting element, the definite food value of which has not been determined.

BEANS, eaten green, contain fat soluble A, water soluble B, and water soluble C.

BEANS, dried kidney, contain water soluble B.

BEANS, dried navy, contain water soluble B.

BET JUICE contains small amount of water soluble B and C, of water soluble B and C.

BET ROOT, raw, contains fat soluble A, and water soluble B and water soluble C.

CABBAGE, fresh cooked, contains fat soluble A, water soluble B and water soluble C.

CABBAGE, raw, contains fat soluble A, water soluble B and water soluble C.

CARROTS, raw, contain fat soluble A, water soluble B and water soluble C.

CAULIFLOWER, contains water soluble B.

CHARD (SWISS), contains fat soluble A and water soluble B.

CORN, yellow, contains fat soluble A and water soluble B.

LETTUCE, contains fat soluble A, water soluble B and water soluble C.

ONIONS, cooked, contain water soluble C.

ONIONS, raw, contain water soluble B and C.

PARSNIPS, contain fat soluble A and water soluble B.

PEANUTS, contain fat soluble A and water soluble B.

POTATOES, cooked, contain water soluble B and C.

POTATOES SWEET, contain fat soluble A and water soluble B.

RUTABAGA, contains fat soluble B and C.

SPINACH, contains fat soluble A and water soluble B.

TOMATOES, contain fat soluble A, water soluble B and water soluble C.

TURNIPS, white, contain water soluble B.

TURNIPS, cooked, contain water soluble C.

PEAS, dried, contain water soluble B.

PEAS, green, contain fat soluble A, water soluble B and water soluble C.

POTATOES, raw, contain fat soluble A and water soluble C.

AVERAGE TIME REQUIRED FOR MAIN

Bean	5 to 10 days
Beet	7 to 10 days
Cabbage	5 to 10 days
Carrot	12 to 18 days
Cauliflower	5 to 10 days
Celery	10 to 20 days

TYPES OF GARDEN SEED TO GERMINATE UNDER PROPER CONDITIONS

Corn	5 to 8 days
Cucumber	6 to 10 days
Endive	5 to 10 days
Lettuce	6 to 8 days
Onion	6 to 10 days
Pea	6 to 10 days
Parsnip	10 to 20 days
Pepper	9 to 14 days
Radish	3 to 6 days
Salsify	7 to 12 days
Tomato	6 to 12 days
Turnip	4 to 8 days

NUMBER OF TREES OR PLANTS PER ACRE SET AT REGULAR DISTANCES

Distance apart	No. of plants	Distance apart	No. of plants	Distance apart	No. of plants
3 by 4 inches	522,720	4 1/4 by 4 1/2 feet	2,150	14 by 14 feet	222
4 by 4 inches	392,040	5 by 1 foot	8,712	15 by 15 feet	193
6 by 6 inches	174,240	5 by 2 feet	4,356	16 by 16 feet	170
1 by 1 foot	43,560	5 by 3 feet	2,904	16 1/2 by 16 1/2 feet	160
1 1/2 by 1 1/2 feet	19,360	5 by 4 feet	2,178	17 by 17 feet	150
2 by 1 foot	21,780	5 by 5 feet	1,742	18 by 18 feet	134
2 by 2 feet	10,890	5 1/2 by 5 1/2 feet	1,440	19 by 19 feet	120
2 1/2 by 2 1/2 feet	6,960	6 by 6 feet	1,200	20 by 20 feet	108
3 by 1 foot	14,520	6 1/2 by 6 1/2 feet	1,031	25 by 25 feet	69
3 by 2 feet	7,260	7 by 7 feet	888	30 by 30 feet	48
3 by 3 feet	4,840	8 by 8 feet	680	33 by 33 feet	40
3 1/2 by 3 1/2 feet	3,555	9 by 9 feet	537	40 by 40 feet	27
4 by 1 foot	10,890	10 by 10 feet	435	50 by 50 feet	17
4 by 2 feet	5,415	11 by 11 feet	360	60 by 60 feet	12
4 by 3 feet	3,630	12 by 12 feet	302	66 by 66 feet	10
4 by 4 feet	2,722	12 by 13 feet	257		

RULE—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet, for each plant or bill, which, divided into the number of square feet in an acre (43,560), will give the number of plants to the acre.

TABLE OF DISTANCES FOR PLANTING FRUIT TREES, ETC.

Apples, 30 to 40 ft. each way.
Pears, 20 to 25 ft. each way
Cherries, 20 to 25 ft. each way
Plums, 20 to 25 ft. each way
Peaches, 18 to 20 ft. each way

Apricots, 18 to 20 ft. each way
Quinces, 15 ft. each way
Walnuts, 40 to 50 ft. each way
Currants, 3 to 4 ft. each way
Gooseberries, 3 to 4 ft. each way

Raspberries, 3 to 4 ft. each way
Strawberries, 1 1/2 to 3 ft. each way
Blackberries, 6 to 8 ft. each way
Grapes, 8 to 10 ft. each way

GARDEN TALK BY RADIO

On Monday evenings, at 7:15 o'clock Mountain Time, during the months of February, March and April, The Porter-Walton Company will Broadcast Timely and Instructive Garden Topics. There will be no offensive advertising propaganda in these talks, it will be worth your while to "tune in" on K S L Station at Salt Lake.

P-W's Klondike Watermelon

The Wonderful New Market Melon. See page 48.

Novelty Vegetable Collection Offer

One packet each of the five varieties on this page, prepaid for 40c

P-W's New
World's
Record Peas

See
page 47
for full
description.

P-W's Mary Washington (The New Rust-Proof Asparagus)

See page 48 for description.

P-W's Golden
Sunshine Sweet Corn

A week earlier than its parent, the popular Golden Bantam. See page 60 for details.

Hale's
Best
Cantaloupe

See
page 48.

P-W'S COVER COLLECTION

18

SUPERB GLADIOLUS—
Six large bulbs of each of
the three kinds shown above
(See Page 21)

\$1.00
Post
paid

PORTER~WALTON COMPANY
SALT LAKE CITY, UTAH