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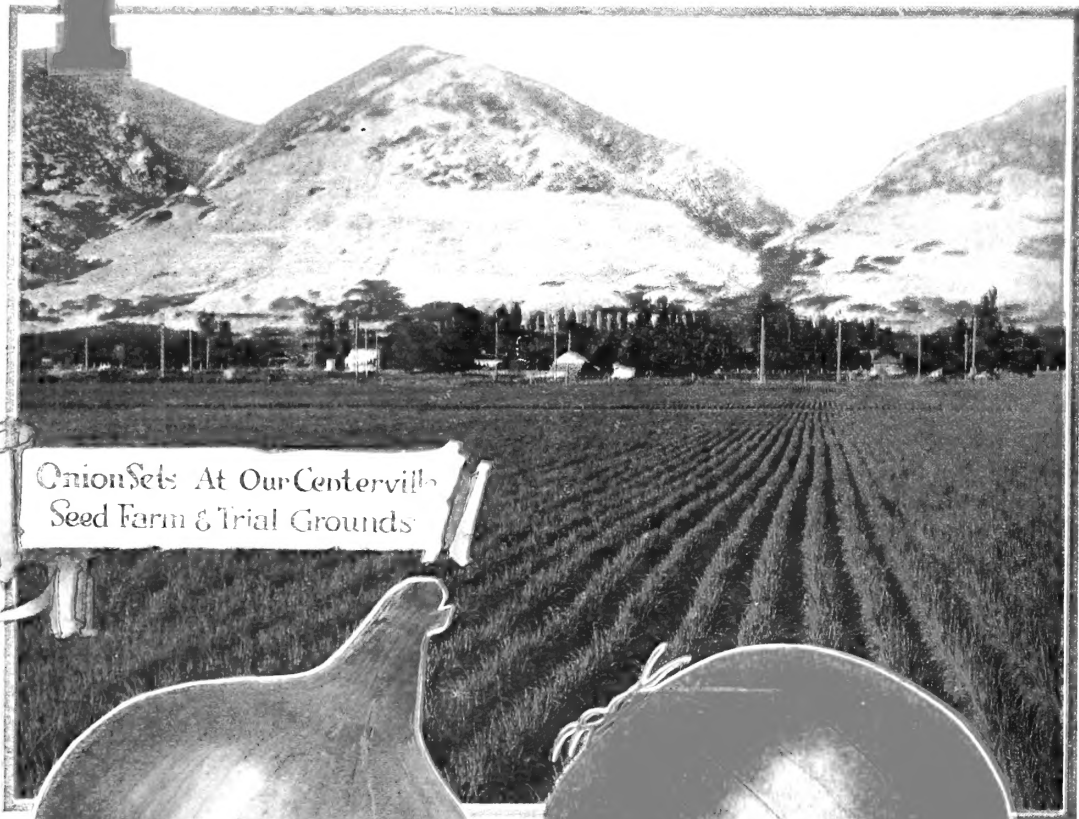
Every Seed A Sturdy Plant

JAN 31 1920

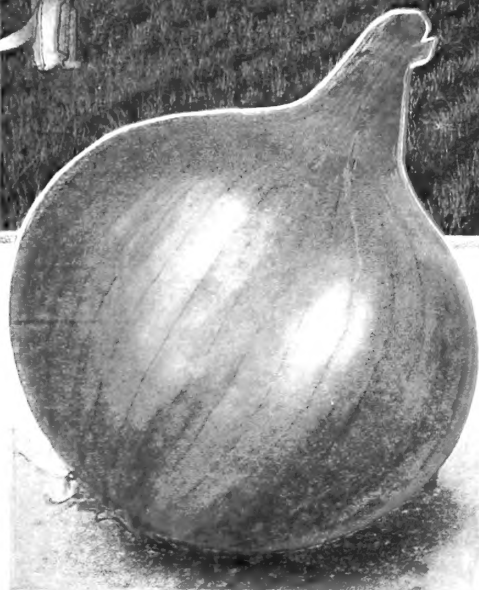
U. S. Department of Agriculture

PORTER-WALTON'S

SEED AND NURSERY BOOK 1920



Onion Sets At Our Centerville
Seed Farm & Trial Grounds



PW's Southport Red Globe Onion



PW's Ohio Yellow Globe Onion

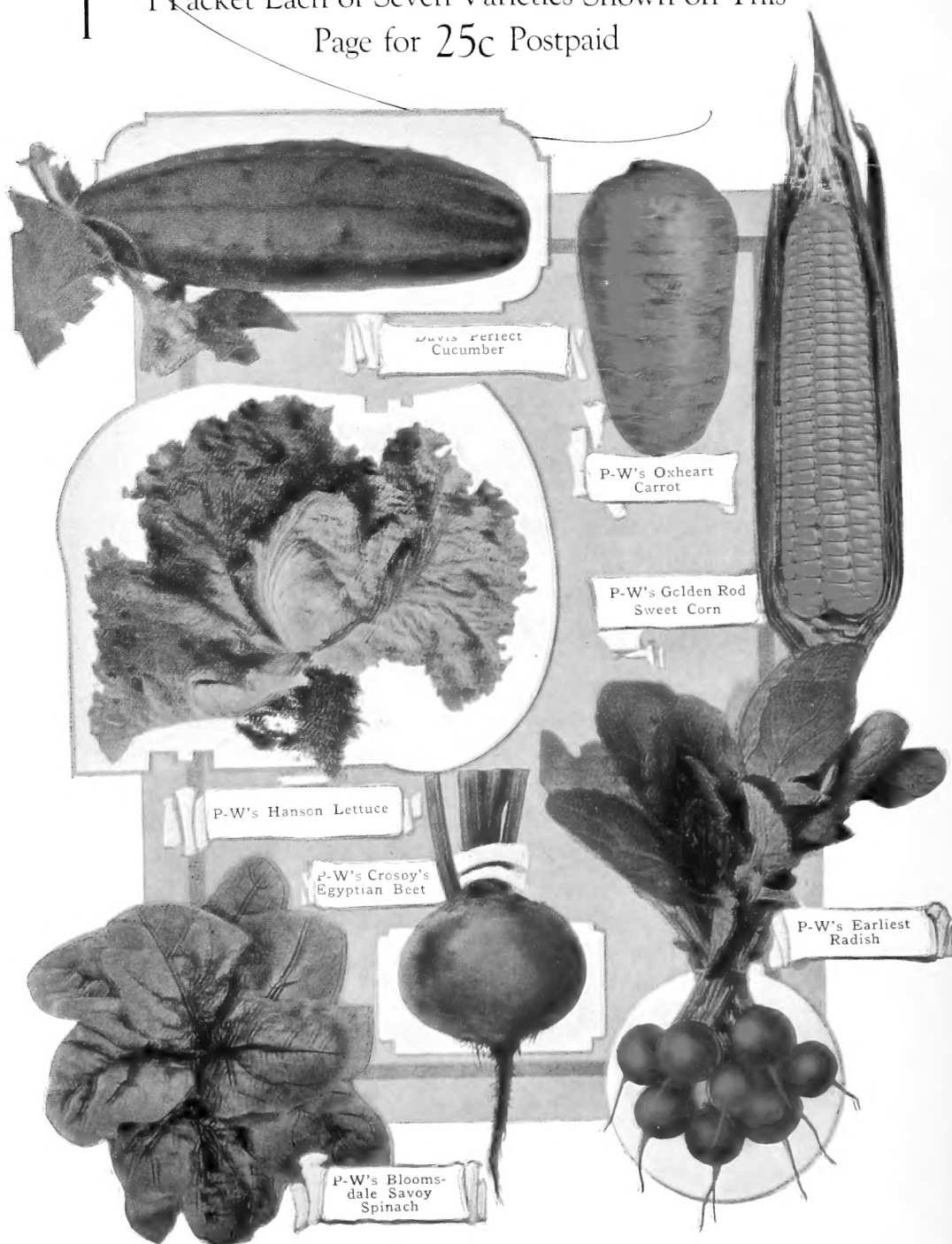
Porter-Walton Co.

Seed & Nursery Specialists

· SALT LAKE CITY UTAH ·

FRONT PAGE COLLECTION OFFER

1 Packet Each of Seven Varieties Shown on This
Page for 25c Postpaid



Ask for Front Page Collection Offer, 25c Postpaid

ORDER SHEET FOR SEEDS

BULBS, IMPLEMENTS, POULTRY SUPPLIES
FERTILIZERS, INSECTICIDES

When Ordering Plants, Shrubs and Trees Please Use "Plant Order Sheet"

PORTER-WALTON CO. SALT LAKE CITY, UTAH

ORDER NO.

Received 19....

Amt. \$.....

By

THE AMOUNT ENCLOSED

Exp. Money Order, \$.....

P. O. Money Order,

Bank Draft, - -

Stamps, - - -

Cash, - - -

Total, - - -

Send By

State if wanted by mail; (Express and Company); Freight (and Route)

To (Name)

P. O. Box, Street
or Rural Delivery

Post Office

County; State

Station or Express Office

(Only if different from P. O.)

Date, 19.....

ABOUT POSTAGE

If you wish order sent by Parcel Post see our Catalog to ascertain amount to remit for Postage. We pay postage on Garden and Flower Seeds in Pkts. and Oz. unless otherwise specified.

WARRANTY AND RESPONSIBILITY FOR CROP

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

V	QUANTITY	ARTICLES	PRICE	AMOUNT

(over) Amount carried forward

PLEASE USE OTHER SHEET WHEN ORDERING SEEDS, BULBS, POULTRY SUPPLIES, ETC.

QUANTITY	ARTICLES	PRICE	AMOUNT
			Amount brought forward
Total Amount Sent			

if by mail remit Postage on all items not postpaid.

Amount for Postage

The following are persons, I think, will likely purchase something in your line this year and would appreciate your Catalog.

NAMES	ADDRESSES

(PLEASE DO NOT WRITE IN THIS SPACE)
SHIPPING MEMORANDUM

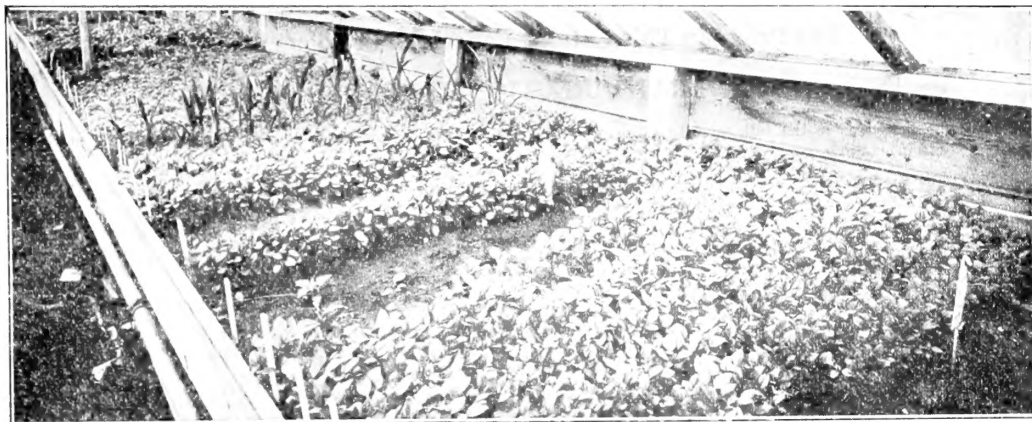
Shipped Via						Date	19
	No.	Postage	C. O. D. Fee	Insurance	Total Postage	Freight	Express
Packages							
Bags							
Bundles							
Boxes							
Total							

Bill Lading No. Express Bill

Shipping Clerk Date

..... Laid out by

..... Checked by



A Section of Soil Tests For Germination at Our Centerville Greenhouses

SEED TESTING

Aside from the field tests to maturity carried on at our Centerville Trial Grounds, testing for germination is done in soil at our Greenhouses (see above cut). 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 of anything is used to supply our customers that does not show a satisfactory germination test, and fully measure to P.-W.'s High Standard.

It is not enough that we have the intent to please and satisfy our customers—we have the system and the organization that almost entirely eliminates mistakes and gives to them those selected types, possessing the right "blood," vigor and hardiness to produce thrifty, sturdy, productive plants.

It is this scrupulous care in the growing, selecting and testing of our seeds that enables us to sell them on the following

POSITIVE MONEY-BACK GAURANTEE

that we have exercised the greatest care in growing, selecting, re-cleaning and testing all our seeds and know them to be of high quality and germination. We sell them with the distinct understanding that if a mistake should occur and the seed should not be found as represented we will refund the entire purchase price of the seeds in question, but further than this, of course, we can assume no liability. We cannot guarantee the crop for we cannot control moisture, weather, pests and other contingencies.

Please note what we say on Page 59 about Trees, Plants and Shrubs.

ABOUT SERVICE

The opportunity is taken to thank our patrons of last year for their liberal patronage which made our business by far the largest in our history. We did our best to give prompt, efficient service, but with many of our staff still with "Uncle Sam," we were seriously handicapped.

This year we are fortunate in beginning with splendid stocks, an increased staff of experienced workers and much larger facilities in every way. We confidently

Wait to Serve You,

PORTER-WALTON CO.

Retail Store 251 South State St.
Office, Wholesale and Mail Order
Departments, 522-536 South Third West
Seed Farm, Nurseries and Trial Grounds,
Centerville, Utah

SALT LAKE CITY,

UTAH

SUBJECTS TREATED IN THIS BOOK

Seeds, Farm, Field and Lawn	37-41	Plants, Vegetable	32
Seeds, Flower	42-56	Trees, Ornamental and Fruit	72-79
Seeds, Vegetable	9-32	Shrubs, Roses, etc.	60-65, 69-71
Bulbs, Flowering	56-59	Poultry Supplies, Incubators and Brooders	91-95
Plants, Bedding and Flowering	65	Garden Pest Killers, etc.	91-95

For Detailed Index See Last Page

The Prices in This Catalog Cancel All Previous Prices

GENERAL DIRECTIONS TO PATRONS

That you may receive the full benefit of the prompt, efficient service our facilities enable us to give, please observe the following in making your order:

THE ORDER BLANKS accompanying this catalog will be convenient for customers and facilitate our filling orders (extra ones mailed on request). Use the Plant Sheet when ordering plants—Page 32, also Pages 59-80, these being filled at our Nursery Department, Seeds and all other goods being collated at our Seed Warehouses, though all can be shipped together when advisable. Give full shipping instructions in every order sent, and write address legibly. Always sign your letters and orders with the same initials.

IMPORTANT—Before making out Plant Shrub or Tree orders, see Page 59 for special rules and instructions.

YOU TAKE NO CHANCES in sending money with order. Inquire of any Bank, Trust Company or Mercantile Agency as to our responsibility. You may remit at our risk by Post Office Money Order, Express Order, Bank Draft, Checks, Cash or Stamps. Always register letter when you send Cash.

OUR TERMS ARE STRICTLY CASH WITH ORDER—All our catalog prices are made on a cash basis and we have no facilities for credit accounting. While most any of our customers are worthy of credit accommodations, yet for the reasons above stated we can offer no credit favors and kindly ask that remittance be sent with order.

C. O. D. SHIPMENTS can be made only where at least 25 per cent of the amount is sent with order. We decline to ship Plants, Shrubs, Trees or any other perishable items C. O. D.

ORDERS FOR DELIVERY AT LATER DATE can be booked only providing at least one-fourth of the purchase price accompanies the order. Shipment cannot be made until payment is made in full. Public Institutions are the only exception to this rule.

EVERY ORDER IS FILLED WITHIN A DAY OR TWO AFTER ARRIVAL, or is acknowledged if, under rare circumstances, its shipment is likely to be delayed. If goods, notification of shipment, or acknowledgement of order is not received after a reasonable lapse of time, please notify us at once and send copy of order.

FREE AND SAFE DELIVERY GUARANTEED ON SEEDS, BULBS AND ROSE SHRUBS at prices quoted in this catalog, except where otherwise noted. This places all our customers throughout the West as near to us as their Express or Post Office, and is a big step in advance in the way of service.

ABOUT PLANTS, TREES, SEEDS IN QUANTITY, POULTRY AND STOCK SUPPLIES, ETC., quoted at "Not Prepaid" prices: These are F. O. B. Salt Lake City and purchasers pay expense of freight, express or parcel post. If wanted by parcel post, always send postage with the order. See table below to ascertain amount of charges.

PARCEL POST RULES, ETC.

THE MAXIMUM WEIGHT allowable in local and to the first and second zones is 70 pounds, and to all other zones (third to eighth) is 50 pounds.

THE SIZE OF THE PARCEL must not exceed 7 feet (84 inches) for combined length and largest girth.

INSURANCE ON PARCEL POST PACKAGES against loss may now be effected by us for value up to \$25.00 for 5 cents and up to \$50.00 for 10 cents if customer so requests and remits for same.

We strongly advise customers living in towns removed from the railway to have insurance placed on all orders.

PARCEL POST C. O. D.—We can forward by parcel post "C. O. D." up to \$100.00 for goods, to all money order post offices, collection charges 10 cents extra, which includes insurance up to \$50.00; but we must request a remittance with the order of 25 per cent of the value of the goods. The balance due being collected on delivery.

We cannot send Plants, Shrubs, Trees or any perishable items C. O. D. See Page 59.

DOMESTIC PARCEL POST RATES	First lb. Each additional lb. or	
	fraction	fraction
Within the U. S. and Possessions		
From Salt Lake City		
First Zone within 50 miles	5c	1c
Second Zone within 50 to 150 miles	5c	1c
Third Zone within 150 to 300 miles	6c	2c
Fourth Zone within 300 to 600 miles ...	7c	4c
Fifth Zone within 600 to 1000 miles ...	8c	6c
Sixth Zone within 1000 to 1400 miles..	9c	8c
Seventh Zone within 1400 to 1800 miles	11c	10c
Eighth Zone all over 1,800 miles	12c	12c

IMPORTANT—In remitting postage, always add it to the foot of the order as a separate item—this will help to avoid mistakes.

SPECIAL NOTICE

While the prices herein quoted are those prevailing at the time of going to press and will be adhered to as nearly as possible during the season, yet large users of Garden or Farm Seeds or any other commodity listed will be best served by getting our Special "Blue List" for prices on quantities.



"Hand Picking" Beans at Our Salt Lake Seed Cleaning Plant

Not content with the best cleaning and grading that can be done by the most up-to-date machinery yet devised, the "finishing touches" on such seeds as Peas, Beans, Corn, etc., are made by "Expert Hands," as shown in the above cut. In this manner cracked or deformed kernels and berries which machinery will not take out are removed. Just another detail that makes "P.-W.'s STANDARDS" different from the ordinary.



City Store
251 So. State Street
Salt Lake City



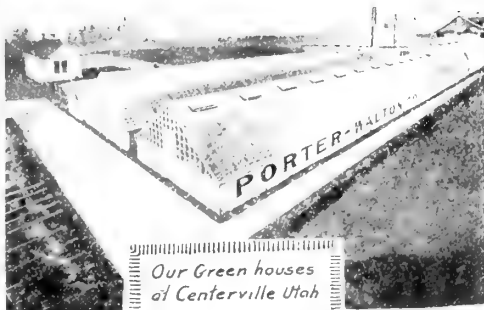
Storage Room
in our Farm Seed
Department



Seed
and Nursery
Warehouses 522
536 South 3rd West
Storage Capacity
100 car loads
No Order too large
for Our Service

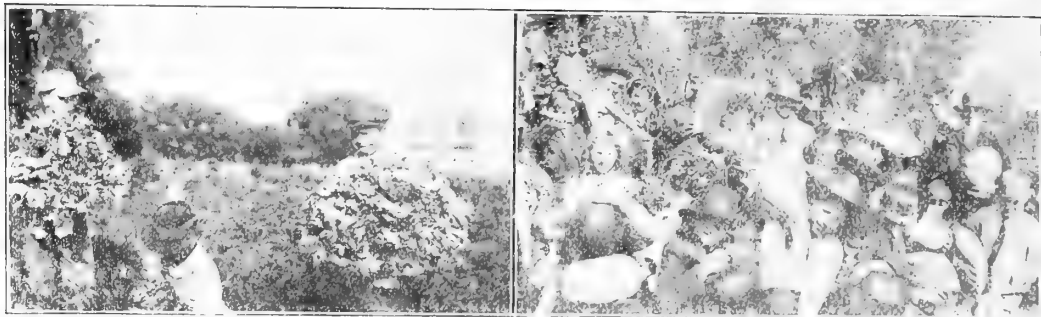


General Offices
and Mail Order
Department
The above Building
Adjoins Our
Warehouses at
522-536 So. 3rd West



Our Green houses
at Centerville Utah

Seed Trial Grounds
and Nurseries, Where
Soil Tests are made



At Harvest Time All the Boys and Girls Are Happy Because They Planted P.-W.'s Mountain Grown Tested Seeds

HERE IS REAL MONEY FOR 25,000 BOYS AND GIRLS

OUR DEAR YOUNG FRIENDS:

This year we have a job for 25,000 real wide-awake, hustling boys and girls and there is good money in it, too, for everyone that works.

This job is so very easy, any Boy Scout or schoolboy or girl can do it after school hours and at odd times, so it will not interfere at all with regular work or play.

Now, what we want you to do is this:—Sell our "Junior Seed Collection" to your friends, neighbors and all the rest of the people in your town, who plant a garden or have any ground where one can be planted. We know there are just any number of boys and girls and grown people, too, who will make a garden when they find out good seeds will cost such a small amount and how easy it really is to grow a lot of nice, crisp, fresh vegetables for the table and the wonderfully beautiful flowers that will make everybody cheerful and happy.

Listen to this: For only 40c. you can sell our "Junior Collection" of 12 big, well-filled packets of the choicest vegetable and flower seeds with full directions printed on each packet of just how to plant and take care of them.

Here is the list of Seeds in our Junior Seed Collection:

1 pkt. Beets	1 pkt. Cress	1 pkt. Radishes	1 pkt. Poppies
1 pkt. Carrots	1 pkt. Muskmelon	1 pkt. Spinach	1 pkt. Sweet Peas
1 pkt. Cucumbers	1 pkt. Lettuce	1 pkt. Turnips	1 pkt. Tall Nasturtium

Just think of it! The above 9 big packets of Vegetable Seeds and 3 big packets of Flower Seeds—12 in all—for only 40c.

With such a great bargain there is no doubt but what you will sell a collection to most everyone you try. And out of all you sell you keep one-third of the money for your share and send the rest to us.

We want good honest boys and girls who are willing to get out and hustle. We know you belong to this class and that you'll treat us right; we are therefore willing to trust you for 30 days with 10 of our Junior Collections to start out with and when you have sold them you can send us your share of the money and order another "ten." No doubt you'll be able to sell several "tens" before the spring is over.

The thing to do is to get busy right away, before some one else jumps in ahead of you. You don't need to send us any money in advance.

You don't have to pay us anything until you have sold the seeds. If you don't sell them all within the 30 days time allowed, you are to return all the seeds left and our share of the money for those you have sold.

Fill out the order blank below, telling us your name, address and age. Remember to have your father, mother or Guardian sign, so we will know you have their permission, and that they know of the arrangements between us. We will send you the seeds by return mail.

PORTER-WALTON CO.

P. S. We want all the people in your town to know what good seeds and trees they can get from us. We don't come out even on this collection you are selling for us, but we know when once they plant our seeds they will be so pleased they will always buy them after this. If any want our catalog send us their names and we will mail them a free copy. We would much rather pay you to help advertise than all the newspapers in the country, because you are a lot more important and people will take more notice of you.

PORTER-WALTON CO.
Salt Lake City, Utah.

Tear this order off here and mail to us.

Date.....

Please send me at once by parcel post the ten "Junior Seed Collections." I promise to try my best to sell them at 40c each, but in case I should have any left at the end of 30 days I will return them to you in good order, and for all I have sold I will send you two-thirds of the money and keep the other one-third for my share.

.....
Have you sold for us before?

.....
Sign your name on this line

.....
Age

.....
R. F. D. Box No.

.....
Post Office

.....
State

Approved by
Get your Father, Mother or Guardian to sign on this line so that we will be sure they know about it.

GARDENING SUCCESS DEPENDS ON THE FOLLOWING:

1st—Good Soil Thoroughly Prepared

A sandy loam is the best, but a fair degree of success may be secured from any soil which can be made rich and friable. Vegetables of the best quality cannot be grown on barren sand, a cold, hard, lumpy clay, nor in the shade of orchard or other trees.

A soil which does not enrich in order to produce the best results is rarely found and very often success in proportion to the liberality with which fertilizers have been used. Well decomposed stable manure, where straw bedding has been used is the best. When good stable manure is not available, commercial fertilizers may be used.

Fertilization of the soil is only the beginning and much depends on its preparation. It must be made friable by thorough and judicious working; if this is well done all that follows will be easy; if it is neglected only partial success is possible and that at the cost of a great deal of hard work.

2nd—GOOD SEEDS Properly Planted

Too much emphasis cannot be placed on securing good seeds and it is betraying no secret when we say that the main purpose in printing this catalog is to let you know where these can be secured. After these are secured it is equally necessary that favorable conditions to germination and growth be secured. These are:—Sowing the right amount at the proper depth, at the seasonable time—See Pages 6 and 7 for this information as nearly as we can give it in a general way. As each locality has its own peculiarities, it is a good thing for the beginner to consult a local planter of experience.

3rd—Wise Cultivation

Not only should every weed be removed as soon as it appears, but the crust which forms after a rain should be broken up and the ground stirred as soon as it is dry enough to permit it. The more frequently and deeper the soil is stirred while the plants are young, the better, but as they develop and the roots occupy the ground, cultivation should be shallow until it becomes a mere stirring of the surface. The yield and quality of vegetables have often been decidedly lowered by injudiciously deep and close cultivation after the roots of the plants had fully occupied the ground. A very small garden, well cultivated and cared for, will give larger returns and be in every way satisfactory than a much larger one poorly prepared and neglected.

DIRECTIONS FOR MAKING A HOTBED

In this locality from the middle of February to the 1st of March is quite early enough to make a hotbed. The time must vary according to the climatic conditions.

Provide a quantity of fresh horse manure from the stables, and add to this, if they can be had, one-third to one-half of its bulk of leaves. Mix them thoroughly, tramping down the mass in successive layers, and form into a large pile, so that fermentation will proceed, even in severely cold weather. In two or three days fermentation will be apparent by the escape of steam from the heap. Now, turn again, and allow the heap to remain two or three days longer, or until the second fermentation commences. Make an excavation or pit two and one-half feet deep and of a size suited to the number of plants required. The pit will be better if built up of brick. It should be made in some dry, sheltered spot, facing the south or east, if possible. Hotbed sashes are usually 3x6 feet and one or two sashes will give early plants enough for a small family. The frame for sashes should be 18 inches high at the back and 12 inches in front, which will give the proper slope to catch the sunlight. Cross-pieces should be placed for the sashes to slide on, to facilitate opening and shutting the frames.

When everything is ready, the manure is placed in the pit and trodden down firmly in layers to the required depth of 2 to 2½ feet. Then put on the sashes, and keep the pit closed until the heat rises. At first it will probably be 100 degrees or more, which is too hot to sow the seed in; but in two or three days it will subside to 90 degrees or a little less, when the soil may be put on to the depth of 6 to 8 inches. The heat may be readily ascertained by plunging a thermometer into the manure. The soil should be well rotted sod (or common garden soil will do), mixed with about a third of fine old manure; and in this the seeds may be sown thinly in drills 2 to 3 inches apart, and afterward (as soon as out of the seed-leaf), either thinned out or else transplanted to another frame. Air must be given every mild day by raising the sashes at the back. Water with tepid water whenever necessary, and during cold nights and snow-storms keep covered with mats or board shutters.

Tomatoes, Peppers and Egg-Plants should be sown in a separate frame from Cabbage, Cauliflower and Lettuce, as they require more heat. The same directions may apply to hotbeds made on the surface of the ground, except that the manure should be at least a foot wider on all sides of the frame.

HOW TO PREPARE A COLD FRAME

The cold frame is simply a frame set on the ground, no bottom heat being applied. It is banked up on the outside during the winter with marsh hay, straw or coarse litter. The soil is prepared by forking and thoroughly mixing to the depth of 10 or 12 inches a liberal quantity of old, well rotted manure. The manure of an old hotbed is good for the purpose. It is useful to protect and harden off plants from the greenhouse or hotbed before fully exposing them in the open air.

Insure Your Garden Against Blight and Insect Pests

Effective remedies against Blight, Aphis, Cut Worms, Slugs and other pests; also implements for application will be found on Pages 93-95. Ask for Free Booklet on "Garden Pests and Their Control." It will assist you greatly should your garden become infested.

GENERAL PLANTING INFORMATION FOR P.-W.'s VEGETABLE SEEDS

Variety	Seed Required for 100 ft. of Row	† Seed for 1 Acre Field Culture	* Usual Time of Sowing	Average Time Crop Matures
ARTICHOKE	3 pkts.	6 oz. T	Early Spring	Second Spring
“ Plants (Globe)	17 plants	2904 plants	Spring	Next Spring
“ (Jerusalem)	3 lbs.	300 lbs.	Spring	Late Summer
ASPARAGUS (Seed)	2 oz.	1 lb. in seed bed T	Early Spring	Third Spring
“ (Plants)	50 plants	1800-3000	Early Spring	Next Spring
BEANS, Bush	1 lb.	60 lbs.	Late Spring	40-65 days
“ Pole	8 oz.	40 lbs.	Late Spring	75 days up
BEETS, Table	2 oz.	5 lbs.	Spring S	65 days
“ Mangel	2 oz.	8 lbs.	Spring	6 months
BROCCOLI	1 pkt.	8 oz. T	Spring	90-120 days
BRUSSELS SPROUTS	2 pkts.	8 oz. T	Early Spring	120 days
CABBAGE	2 pkts.	8 oz. T	Early Spring	90-150 days
CARROT	1 oz.	4 lbs.	Spring	75-120 days
CAULIFLOWER	1 pkt.	4 oz. T	Spring	110 days
CELERY	2 pkts.	4 oz. T	Spring, (rather late)	150 days
CHERVIL	1 oz.	2 lbs.	Early Spring	Early
CHICORY	1 pkt.	4 lbs.	Early Spring	4 months
CORN SALAD	3 oz.	3 lbs.	Early Spring and Late Summer	65 days
CORN	1 pkt.	10 lbs.	Late Spring (S)	65-100 days
CRESS	½ oz.	3 lbs.	Early Spring (S)	30 days
CUCUMBER	2 pkts.	3 lbs.	Late Spring	120 days
EGG PLANT	1 pkt.	4 oz. T	Early Spring in Hotbed	160 days up
ENDIVE	½ oz.	4 oz. T		100 days
HORSE RADISH	70 roots		Spring	8 months
KALE	1 pktt.	2 lbs.	Spring	45 days
KOHL RABI	1 pktt.	4 lbs.	Early Spring	4 months
LEEK	½ oz.	4 lbs.	Early Spring	Late Summer
LETTUCE	3 pkts.	4 lbs.	Early and Late Spring	65 days up
MELONS, Musk	3 pkts.	3 lbs.	Late Spring and Early Summer	120-140 days
“ Water	1 oz.	4 lbs.	Late Spring	120-140 days
MUSTARD	1 pkt.	2-3 lbs.	Spring	Early
OKRA	2 oz.	100 lbs.	Late Spring	2½ months
ONION	1 oz.	4 lbs.	Early Spring	135-150 days
“ Sets	2 lbs.	250 lbs.	Early Spring	100 days
PARSLEY	1 pkt.	6 lbs.	Spring	Any Time
PARSNIP	2 pkts.	5 lbs.	Early Spring	4 months
PEAS	2 lbs.	60-125 lbs.	Early Spring (S)	8 to 12 weeks
PEPPER	1 pkt.	8 oz. T	Early Spring in Hotbed	130-150 days
POTATO, Irish	10 lbs.	800 lbs.	Spring	July to September
“ Sweet	75 slips	9680 plants T	Late Spring	150 days
PUMPKIN	2 pkts.	3 or 4 lbs.	Late Spring	100-175 days
RADISH	2 oz.	10 lbs.	Spring (S)	30-45 days
RHUBARB	½ oz.	1 lb.	Spring	Second Spring
“ Roots	33 plants	2420 roots	Early Spring	Next Spring
SALSIFY	2 oz.	8 lbs.	Early Spring (S)	5 months
SPINACH	1 oz.	10 lbs.	Early Spring and Fall	40 to 45 days
SQUASH	2 pkts.	2-3 lbs.	Late Spring	S. 65 and W. 150 days
TOMATO	1 pktt.	2 oz. T	Early Spring in Hotbeds	150 days
TURNIP	3 pkts.	3 lbs.	Spring and Summer (S)	60-75 days

* The terms used in this column are defined as follows:

“Early Spring”—Means as soon as buds in the trees begin to swell and the ground can be worked into gardening condition. This may be in March or April. Frosts have not passed, and such plants, if not too succulent, will stand a frost.

“Spring”—Refers to those vegetables which are not so hardy as the above, and which are usually planted later because they do so much better planted later. If for any reason early planting is necessary, they can be put in a week after the foregoing.

“Late Spring”—Is the time of year when the ground is well warmed and all frosts are passed. This probably will be early in May.

“Early Summer”—Means planting in June.

“S”—Placed in this column means that those sorts are sown for succession. Usually the planting of some sorts are made two weeks apart while others are often planted early and again late for crops at two different seasons.

† “T”—Placed in the column is to mark those sorts which are usually sown in beds and later transplanted to the garden, and always transplanted to the field.

For last planting of Beans, Sweet Corn, Kohl Rabi, Peas and Radishes, or even Tomatoes, take the earliest varieties just the same as are used for first planting.

Late sowings of Salsify are intended to remain undisturbed over winter. Roots from these sowings will, the next year, attain a size double that usually seen.

See Page 5 for directions how to make “Hotbeds” and “Cold Frames.”

GENERAL PLANTING INFORMATION FOR P.-W.'s VEGETABLE SEEDS

Variety	*Depth to Plant	† "Garden Culture" for Hand Cultivation		"Field Culture" for Horse Cultivation	
		Put Rows Apart	Leave Plants Apart in Rows	Put Rows Apart	Leave Plants Apart in Rows
ARTICHOKE	1 in.	3 ft.	2-3 ft.	5 ft.	3 ft.
" Plants (Globe).....		4 ft.	2-3 ft.	5 ft.	3 ft.
" (Jerusalem).....	2-3 in.	2 ft.	1-2 ft.	4 ft.	3 ft.
ASPARAGUS (Seed).....	1 in.	1 ft.	3-5 in.	1-2 ft. in bed	3 in.
" (Plants).....	3-5 in.	2 ft.	15-20 in.	5-6 ft.	2 ft.
BEANS, Bush.....	1-2 in.	18 in.	3-4 in.	24-30 in.	4 in.
" Pole.....	1-2 in.	3 ft.	3 ft. hills	36 in.	4-6 in.
BEETS, Table.....	¾-2 in.	12 in.	4-5 in.	20 in.	4-6 in.
" Mangel.....	2 in.	18 in.	8-10 in.	24 in.	10 in.
BROCCOLI.....	½ in.	24 in.	12-18 in.	30-40 in.	15 in.
BRUSSELS SPROUTS.....	½ in.	24 in.	16-24 in.	30-36 in.	16-24 in.
CABBAGE.....	½ in.	24 in.	12-18 in.	30-36 in.	15-18 in.
CARROT.....	1½-¾ in.	12 in.	2 in.	22-28 in.	4 in.
CAULIFLOWER.....	¼ in.	24 in.	14 in.	30-36 in.	24-30 in.
CELERY.....	1½ in.	20 in.	6 in.	4 ft.	6 in.
CHERVIL.....	¾ in.	18 in.	3-4 in.	30-36 in.	4 in.
CHICORY.....	½ in.	18 in.	2-4 in.	30-36 in.	6-10 in.
CORN SALAD.....	½ in.	12 in.	2 in.	30 in.	4 in.
CORN.....	1-2 in.	24 in.	24 in. hills	36 in.	30 in.
CUCUMBER.....	1-2 in.	4 ft.	4 ft. hills	6 ft.	6 in.
CRESS.....	1 in.	12 in.	4 in.	24 in.	4 in.
EGG PLANT.....	¼ in.	24 in.	18 in.	30-36 in.	18-24 in.
ENDIVE.....	1½-1 in.	18 in.	8-10 in.	30 in.	8-12 in.
HORSE RADISH.....	4 in.	30 in.	14 in.	30-40 in.	16-20 in.
KALE.....	½ in.	18-24 in.	30-24 in.	30-36 in.	18-24 in.
KOHL RABI.....	½ in.	18 in.	4-6 in.	24-30 in.	4-8 in.
LEEK.....	½ in.	12 in.	4 in.	22-28 in.	5 in.
LETTUCE.....	¾ in.	15 in.	4-6 in.	22 in.	6-12 in.
MELON, Musk.....	1-2 in.	4 ft. hills	4 ft.	6-8 ft.	4 ft.
" Water.....	1-2 in.	6-8 ft. hills	6 ft.	8-12 ft.	8-10 ft.
MUSTARD.....	¼ in.	12 in.	3 in.	30 in.	4 in.
OKRA.....	1 in.	3 ft.	24 in.	4-5 ft.	24-30 in.
ONION.....	½ in.	12 in.	4 in.	22-28 in.	5 in.
" Sets.....	1 in.	12 in.	4 in.	28 in.	5 in.
PARSLEY.....	½ in.	12 in.	4 in.	24-36 in.	3-6 in.
PARSNIP.....	¼-1½ in.	15 in.	5 in.	24-30 in.	6-8 in.
PEAS.....	2-4 in.	14 in.	2 in.	24-36 in.	3-4 in.
PEPPER.....	¼ in.	18 in.	14 in.	24-36 in.	15-18 in.
POTATO, Irish.....	4-8 in.	24 in.	12 in. hills	3-3½ ft.	12-18 in.
" Sweet.....	3 in.	24 in.	10 in.	30-36 in.	18 in.
PUMPKIN.....	1-2 in.	6 ft. hills	6 ft.	10 ft.	8 ft.
RADISH.....	½ in.	12 in.	1 or 1½ in.	22 in.	2 in.
RHUBARB.....	½ in.	12 in.	4 in.	6 ft.	3 ft.
" Roots.....	3-4 in.	4 ft.	3 ft.	6 ft.	3 or 4 ft.
SALSIFY.....	½-1 in.	12 in.	2 in.	24-30 in.	3-4 in.
SPINACH.....	½-1 in.	12 in.	3-4 in.	24-30 in.	4-6 in.
SQUASH.....	1-2 in.	6 ft. hills	6 ft.	6-8 ft.	4-8 ft.
TOMATO.....	¼-½ in.	4 ft. hills	4 ft. hills	6 ft.	6 ft.
TURNIP.....	¼-½ in.	12 in.	4 in.	22-30 in.	4-8 in.

† The information given here is a general average and based on the different ways of planting and different distances practiced in various parts. The usual distances are here given and the planter must use his judgment for his particular case. Where garden cultivation is by wheel hoe and ample room is available, a greater distance is better employed. If the patch will be cultivated by horse, the distance in the field culture column should be used.

* The Depth at which to plant seed cannot be given more than approximately because it varies so much with the condition of the moisture in the soil and the time of year. All seeds must have air, moisture and heat to germinate. Five times the diameter of the seed is approximately right for ideal conditions, but for sowing in wet soils that is too deep, and for sowing the same seeds in the dry soils it is too shallow. For field culture, sow comparatively deep or when the ground is becoming dry. The seed drill must get the seed to moist earth, and if rain is not expected it must be rolled or otherwise well firm to get the soil packed tightly around. This will aid germination greatly. Firm only lightly, soils which are heavy or wet.

AVERAGE TIME REQUIRED FOR MAIN TYPES OF GARDEN SEED TO GERMINATE UNDER PROPER CONDITIONS

Bean.....	5 to 10 days	Corn.....	5 to 8 days	Parsnip.....	10 to 20 days
Beet.....	7 to 10 days	Cucumber.....	6 to 10 days	Pepper.....	9 to 14 days
Cabbage.....	5 to 10 days	Endive.....	5 to 10 days	Radish.....	3 to 6 days
Carrot.....	12 to 18 days	Lettuce.....	6 to 8 days	Salsify.....	7 to 12 days
Cauliflower.....	5 to 10 days	Onion.....	7 to 10 days	Tomato.....	6 to 12 days
Celery.....	10 to 20 days	Pea.....	6 to 10 days	Turnip.....	4 to 8 days



A Typical Suburban Garden

P.-W.'s HOME GARDEN COLLECTIONS

Contain seeds of only true and tried varieties, most carefully selected to give a continuous supply of vegetables of exclusively high quality throughout the season. The quantities are proportioned to meet the requirements of such gardens as indicated by the titles of the collections, and will be found convenient for patrons who do not care to wade through long lists, or who prefer our judgment as to kinds and quantities; it may be that there are one or more items in these collections that some customers will not care for, but even if such are not needed, the great saving in price will more than compensate. We, however, cannot allow any alterations, because these collections are put up in quantities all ready to ship, before the commencement of our busy season thus enabling us to sell them at very much less than the articles would cost separately.

SMALL CITY GARDEN COLLECTION. For 50 Cents, Prepaid

1 pkt. Beet	1 pkt. Lettuce	1 pkt. Onion	1 pkt. Radish, round
1 pkt. Cabbage	1 pkt. Peas	1 pkt. Parsley	1 pkt. Tomato
1 pkt. Carrot	1 pkt. Muskmelon	1 pkt. Parsnip	1 pkt. Turnip
1 pkt. Cucumber	1 pkt. Watermelon	1 pkt. Radish, long	1 pkt. Swiss Chard

SUBURBAN GARDEN COLLECTION. For \$3.50, Prepaid.

1 lb. Peas, Early	1 pkt. Celery	1 pkt. Lettuce, Curled	2 oz. Radish, Turnip
½ lb. Peas, Late	2 pkt. Sweet Corn, Early	1 pkt. Muskmelon	1 pkt. Salsify
1 lb. Beans, String	2 pkt. Sweet Corn, Late	1 pkt. Watermelon	1 oz. Spinach
½ lb. Beans, Wax	1 pkt. Cucumber.	1 oz. Onion, White	1 pkt. Squash
1 oz. Beet, Table	1 pkt. Cress	1 oz. Onion, Yellow	1 pkt. Tomato, Early
1 pkt. Brussels Sprouts	1 pkt. Egg Plant	1 pkt. Parsley	1 pkt. Tomato, Late
1 pkt. Cabbage, Early	1 pkt. Kohl Rabi	1 oz. Parsnip	1 oz. Turnip, Purple Top
1 pkt. Cabbage, Late	1 pkt. Kale, Tall Scotch	1 pkt. Pepper	1 pkt. Sage
1 pkt. Cauliflower	1 pkt. Leek	1 pkt. Pumpkin	1 pkt. Swiss Chard
1 oz. Carrot, Table	1 oz. Lettuce, Head	1 oz. Radish, Long	

BIG DOLLAR VEGETABLE COLLECTION

THINK OF IT! 26 PACKETS FOR \$1.00, POSTPAID

This exceptional offer just cuts the regular Catalog prices in half and is offered as a special inducement for a "Trail Order" to those who have never grown P.-W.'s Mountain Grown Seeds.

True to the exacting Porter-Walton Standard of producing seeds of the highest vigor, germination, and productiveness, we have no hesitancy in saying that this collection, when results are considered, is worth many times the price asked for it at Catalog prices.

We know every order means a satisfied permanent customer; hence this bargain.

1 pkt. Peas, Early	1 pkt. Cabbage	1 pkt. Cucumber	1 pkt. Lettuce	1 pkt. Pepper
1 pkt. Peas, Late	1 pkt. Cauliflower	1 pkt. Cress	1 pkt. Muskmelon	1 pkt. Pumpkin
1 pkt. Beans, String	1 pkt. Carrot	1 pkt. Egg Plant	1 pkt. Watermelon	1 pkt. Turnip
1 pkt. Beans, Wax	1 pkt. Celery	1 pkt. Kohl Rabi	1 pkt. Onion	1 pkt. Radish, Long
1 pkt. Beet	1 pkt. Sweet Corn	1 pkt. Leek	1 pkt. Parsley	1 pkt. Radish, Round
				1 pkt. Tomato

The above 26 well filled Packets for \$1.00, Prepaid

VEGETABLE SEEDS

Selected Varieties, Superior Strains, Critically Grown and THOROUGHLY TESTED

If such a rare circumstance should happen that your crop failed through the fault of the seed purchased from us, we will refill 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 responsibility for the crop, as we cannot control the weather, soils, moisture, pests and other agents which make for success or failure.

The thing we make, not only our business but our religion as well, is to furnish our customers with the right kind of fresh, vigorous, acclimated seeds, the important beginning of all success in gardening.

Our "Market Gardener" Customers all appreciate the remarkable vigor and dependability of our Vegetable Seeds. The wonderful growth of our trade to this class of patrons has really astonished us. It is just an added testimony, however, that the scrupulous, painstaking care in selection, cultivation, and testing exercised by our Mr. Walton, who has personal charge of this department, is winning everywhere our stocks are planted.

Mr. Walton was a practical market gardener for 15 years before starting in the seed business; this accounts for his "crankiness" about "Quali-

ty and Dependability" in seeds; as no one realizes the importance of good seeds quite as much as the one whose "bread and butter" depends on them.

About Novelties—No expense or pains is spared to keep ourselves fully informed on the new developments in types and varieties. Thousands of competitive tests to maturity are made annually at our Cnterville Grounds. New varieties, both actual and "so-called," from all available sources, are tried out. Those of real merit, adapted to our Western climatic conditions, we list under the proper headings, while those of inferior or doubtful value are either rejected or held for further observation. We list nothing but what we have proved to be dependable and worthy; such that will justly reward for cultivation.

About Prices—All the prices on Vegetable Seeds listed herein are prepaid by us to your express or postoffice, unless otherwise specified. You are, therefore, as close to us as your Post Office. These prices are as reasonable as we can sell these seed in the quantities specified and will be adhered to during the season or as long as the stocks last. To All Who Buy in Larger Lots Than Those Listed Here, Please Ask for Our Special "BLUE LIST" for Prices. It costs us less accordingly to handle large orders, and you are entitled to the saving.

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 along in February and transplanted in the field about the latter part of March or April. With slight winter protection will remain in bearing 3 or 4 years.

LARGE GREEN GLOBE—The most popular variety, buds large, globular, deep green with a slight tint of purple at base. Pkt. 10c; oz. 75c; ¼ lb. \$2.15; lb. \$7.50.

Jerusalem (Tuberous Rooted)—While there are some who like the tubers for table use and we list this variety here; in our estimation, however, its best purpose is for a hog pasture for which it is admirably adapted; when once established it is hard to kill out. Lb. 20c; 10 lbs. \$1.50, Postpaid. Not Prepaid, 100 lbs. \$6.00.

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. The subsoil of the permanent bed should be dry, and if not so, it must be well drained. It should be dug thoroughly at least two and one-half feet deep, and mixed with plenty of well rotted manure. 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 in 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 drill fifty feet long.

CONOVER'S COLOSSAL—The standard variety for all purposes, especially for canning. It makes large, thick, wide, tender shoots of very greenish-white color, and we recommend it as the best variety for general cultivation that has come under our observation. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c, Postpaid.

OTHER GOOD VARIETIES

Barr Mammoth—Large and tender.

Columbian Mammoth White—Large white.

Palmetto—Light green.

Any of above: Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c, Postpaid.

FOR ASPARAGUS ROOTS—See Page 32.



Conover's Colossal

BEAN—DWARF OR BUSH

One lb. 100 feet of drill. .60 lbs. per acre.

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. Cultivate and hoe frequently.

See Page 35: Best results are obtained in seed inoculation.

GREEN-POD VARIETIES

THE LONGFELLOW

An extra early, round green-podded bush bean of fine quality. Long, round green pods always solid, tender and of delicious flavor. An ideal Snap Bean, producing a fine crop of round, straight, solid, fleshy pods, averaging 6½ inches long, wonderfully tender and brittle, without a trace of tough interlining, and having no string when broken, excepting when the pods are quite old. The flavor is most delicious, captivating and most critical, while the delicate green color of the pods is retained after cooking, adding to its attractiveness when served. The plants are of robust, compact habit, unexcelled in bearing qualities, maturing the crop very regularly. It is extra early, the pods being fit to pick four days in advance of any other variety of approximate size and merit. In our estimation, the best for general use of the Green-Pods.

Pkt. 10c; ½ lb. 20c; lb. 35c, Postpaid. Write for prices on quantities.

OTHER GOOD SORTS

BURPEE'S STRINGLESS GREEN POD.—Excellent early variety. Unexcelled for canning.

DWARF HORTICULTURAL—Late and very productive.

Early Red Valentine—Early, tender, heavy yielder.

Round Yellow Six Weeks—Brittle and tender.

Black Valentine—Pods long, straight, heavy yielder; rust-proof.

Price any of above: Pkt. 10c; ½ lb. 20c; lb. 35c, Postpaid.

WAX-POD VARIETIES

(YELLOW PODDED)

NEW PENCIL POD (BLACK WAX)

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.

Pkt. 10c; ½ lb. 25c; lb. 40c, Postpaid.

OTHER GOOD SORTS

CHALLENGE DWARF BLACK WAX—The pods are quite round, very fleshy, crisp, tender and stringless. A good market sort, being a prodigious yielder.

Davis' 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.

Wardwell's Kidney Wax—Long, flat pods, stringless and brittle; heavy cropper.

Price of any of above: Pkt 10c; ½ lb. 25c; lb. 40c, Postpaid. Write for quantity prices.

POLE OR 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.

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. 25c; lb. 40c, 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, Postpaid.

OLD HOMESTEAD or KENTUCKY WONDER—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. 25c; lb. 40c, 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. 25c; lb. 40c, Postpaid.

Write for Special Quantity Price List if you use larger lots than quoted in this catalog.

Our selected, critically grown stocks of Garden Beans have been thoroughly "hand picked" and are not to be compared with the ordinary grades.



Longfellow Green-Podded Bush Bean

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.

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. If planted in hills, make them 2 to 3 feet apart each way and four 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.

BUSH LIMA OR DWARF SIEVA

This variety is sometimes known as Henderson's Bush Lima. 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. 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.

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 Tepary or 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.

TEPARY

The Great Dry Farm Bean for the West

This variety has been raised by the Indians in arid tracts of the West for, perhaps, centuries. At any rate it survives and produces a crop where the rainfall is as low as 7 to 9 inches. It is not only a wonderful drought resister, but a hardy, rapid grower as well, maturing a crop in from 70 to 90 days. It produces where all others fail. Pkt. 10c; lb. 25c, Postpaid.

OTHER GOOD VARIETIES

MEXICAN PINTO—Decidedly rich in food value; extra heavy cropper.

Pink Eye—Large winter shell bean; white with pink spot at center.

WHITE NAVY—The well known small white Boston baking bean.

English or Broad Windsor—Immense size; known as the horse bean.

Any of above: Pkt. 10c; lb. 25c, Postpaid.

BEET—(TABLE VARIETIES)

1 oz. 50 ft. 4-6 lbs. 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 one a month up to the first of July, at which time we recommend making a large sowing to produce a supply of well grown roots for winter use. If the roots are gathered on the approach of cold weather and packed in slightly moist earth, they can either be kept in a cool cellar or pitted outside the same as potatoes or other root crops. In this manner they can be kept in perfect condition until spring.

After repeated comparative tests we recommend Crosby's Early Egyptian as the best first early for market gardeners. It is just as early as the old Extra Early Flat Egyptian, larger, of much finer texture and better color and for open ground culture much to be preferred. For all purposes and general planting the Detroit Dark Red is still the leader, though there is a probability this old favorite may be outclassed by the "New Crimson Globe," which we offer this year for the first time.

CROSBY'S EGYPTIAN

This is more globular in shape than the Extra Early 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. 15c; ¼ lb. 40c; lb. \$1.25, Postpaid.

DETROIT DARK RED

Extended experience has shown this variety to be the best deep red turnip beet, not only for market gardeners, but for the home garden. Its splendid shape and color of the roots, make it popular with everyone who plants it. Tops small, upright-growing, so that the rows may be close together; leaf-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. We believe that the stock of this variety which we offer will produce a crop more uniform in shape, color and quality than any other beet seed obtainable. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25, Postpaid.

NEW CRIMSON GLOBE

A perfect beet in all respects; brilliant crimson in color, globe-shaped, with a very smooth skin, and an exceedingly small tap-root, fine grained, sweet in flavor, and tender at all times. The foliage is small, admitting of close planting. Not only a market gardener's sort, but one of the best for the kitchen garden. Very close to the Detroit Dark Red, apparently a trifle earlier. Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50, Postpaid.

OTHER GOOD VARIETIES

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, deep blood-red, exceedingly sweet.

Half-Long Blood—Rich, glossy crimson.

Early Model—Perfectly globe-shaped; very early, deep blood-red.

Any of above: Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25 Postpaid.



Detroit Dark Red

BEET—FOR SUGAR

When planted for sugar crop, from six to eight pounds of seed will be required for an acre. Seed may be sown in drills twenty to thirty inches apart. When beets are up two or three inches high, they should be thinned out so as to stand from six to eight inches apart. Discourage cultivation after formation of roots has commenced. 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.

KLEIN WENZLEBEN—This variety is without question the best in cultivation; not the largest, but the richest in saccharine matter.

VILMORIN'S IMPROVED—A little smaller than Klein Wenzleben. A variety for sugar factories.

LANE'S IMPROVED SUGAR—A well known variety, valuable for feeding.

Any of above: Pkt. 5c; ¼ lb. 30c; lb. \$1.00, Postpaid. Ask for Special Prices on Quantities.

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 of a 1,000-bushel yield of oats, as far as feed value is concerned. At the present market price of \$10.00 per ton on Stock Beets, the money-value per acre would be from \$200.00 to \$600.00. Considering the small comparative cost of production we must say such a crop is worth while.

The statement above that the feeding value of Stock Beets almost equals that of an equal weight of grain, on the face of it, looks a "bit too thin," but experiments in feeding cattle, hogs and poultry have proved conclusively that when Mangels and Half-Sugar Beets are fed in conjunction with grain that the aid to assimilation and digestion is such that the real benefit derived from a half grain and half root ration more than equals a full grain ration. In this connection, of course, they really could truly be so rated.

Now that the price of grain is so high there is no surer way in the world for the Stock and Dairy Farmer to cut down his feed bill and increase the annual profits than to plant a liberal acreage to Stock Beets. In European countries it is a rare thing to find a farm where a substantial portion is not devoted to the culture of Stock Beets. The Stock Beet has made it possible for Holland and Denmark to become famous for dairy products. Our own northern and eastern states are fast awakening to the possibilities and are increasing the acreage by leaps and bounds. It is time for us in the West to wake up! Get busy! and "cop the dollars."

If you are unable to begin with a five or ten acre planting put in all you do have available. You will wish you had planted a larger field, next winter when you check up the results of your experiment.

Seeding and Cultivation—Where Stock Beets are extensively grown, the seed should be sown with a machine. Small fields may be sown with a hand drill, which will do good work and is very satisfactory. Do not crowd the rows because much of the root grows above the surface and plenty of space should be allowed for a horse and cultivator. Two to three feet apart is about right.

Freezing injures beet plants. Therefore, seed should not be sown until the ground is warm and the weather fully settled, say about the latter part of April.

The quantity of seed required per acre will vary somewhat with the variety; about 8 to 10 lbs. is the usual amount sown. It pays to be generous with the seed and insure a good stand of plants. Shallow planting is desirable because the seed germinates more quickly and a larger proportion will make vigorous plants than when planted deeply. One-half to one-inch of well packed earth is sufficient covering for Beet Seed, when there is a good supply of moisture in the sub-soil. Deeper planting will be required on sand lands or when the soil is dry. Thin plants to nine inches apart in the row.

Too much importance cannot be attached to the Character of the Seed. Our tests at Centerville show a marked difference in strains of apparently the same variety. We have, therefore, confined our purchases to the heaviest-yielding types, producing the largest amount of food value per acre. Our experiments prove that P.-W.'s Giant Sludstrup, Giant Half-Sugar, and Mammoth Long Red Mangel are the most desirable types for our conditions. If we were selecting but one single variety we would choose P.-W.'s Giant Sludstrup as the leader.



Giant Half-Sugar Mangel

BEETS FOR STOCK FEEDING—Continued



A Field of P.-W.'s Giant Sludstrup Half Sugar Mangel. Without Doubt the Best Stock Beet in the World.

P.-W.'s GIANT SLUDSTRUP

Wonderful Yields, Easy Harvested and Richest in Food Value

Imported by us six years ago from Denmark. After thorough comparative tests we do not hesitate to place this wonderful variety at the head of the list. It grows cylindrical in shape and largely out of the ground; easily harvested, and shape prevents it being broken in handling. Crops 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. No other crop can match it.

Price: Pkt. 5c; $\frac{1}{4}$ lb. 25c; lb. 85c, Postpaid. Not prepaid 10 lbs. \$7.50.

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 much as 70 tons per acre. The flesh is not so rich in sugar as P.-W.'s Giant Sludstrup, yet the prodigious yield almost compensates for this deficiency. 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.

Pkt. 5c; $\frac{1}{4}$ lb. 25c; lb. 85c, Postpaid. Not prepaid, 10 lbs. \$7.50.

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 because of this and their shape the crop can be harvested and stored at less expense. We are certain that every one who plants this variety and grows it with care will be much pleased.

Pkt. 5c; $\frac{1}{4}$ lb. 25c; lb. 85c, Postpaid. Not Prepaid 10 lbs. \$7.50.

OTHER GOOD VARIETIES

Danish Red Giant Eckendorf—Is of cylindrical form and grows above the surface. Very heavy cropper.
Danish Taaroje—Ovoid shape, reddish-yellow. Grows more above the surface than P.-W.'s Giant Sludstrup. Preferred for very heavy soil.

Golden Tankard—Flesh yellow, thus differing from other varieties; sheep prefer it; heavy yielder.

Royal Giant or Half-Sugar Rose—Similar to Giant Sugar, except color of skin, which is bright rose above ground, white below.

Yellow Globe—Large globular roots; good keeper, adapted for shallow soils.

Gate Post—Large yellow mangel, flesh white.

Price any of above: Pkt. 5c; $\frac{1}{4}$ lb. 25c; lb. 80c, Postpaid. Not Prepaid, 10 lbs. \$7.00.

WRITE FOR SPECIAL PRICE LIST ON QUANTITIES

BROCCOLI

Should be treated the same as cauliflower, which it resembles. In fact it is practically a coarse summer cauliflower, more divided in the head, grows larger and taller and is hardier and easier to grow. Plant and cultivate the same as cabbage or kale.

EARLY LARGE WHITE—The best variety. Heads white and large. Pkt. 5c; oz. 40c; $\frac{1}{4}$ lb. \$1.25; lb. \$4.00.

BRUSSEL 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.

Culture—Sow and treat the same as cabbage, which see for cultural directions.

30c; $\frac{1}{4}$ lb. 90c; lb. \$3.00, Postpaid.

AMAGER MARKET—Excellent market variety; sprouts thickly set, growing about 2 inches in diameter. Pkt. 10c; oz. 30c; $\frac{1}{4}$ lb. 90c; lb. \$3.00, Postpaid.

CABBAGE

1 oz. 1,500 Plants; ½ lb. to Transplant an Acre.

There is perhaps no division of the vegetable family where good seed is so important to success as in the case of Cabbage and Cauliflower. This fact, coupled with the special interest in this of our Mr. Walton, who has charge of this department, possibly accounts for the extra precaution exercised in the exhaustive tests and careful selection of our stocks. As previously stated, Mr. Walton was a market gardener for a number of years before engaging in the seed business and no one can appreciate the value of the right quality seed than a successful market gardener. The difference in cost between dependable strains from specialists and cheap stuff from doubtful sources, is so slight that no wise planter would consider it for a moment.

As with all other seeds our selection of Cabbage stocks are positively from the best sources of supply, and the best strains obtainable, as proved by our own tests.

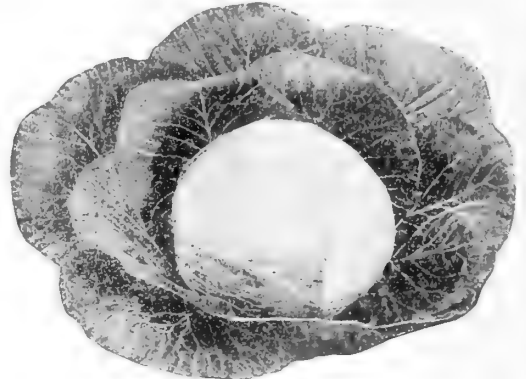
Culture—Cabbage does best in rich, moist, well prepared soil; extra care should be taken in working it deeply as most varieties of Cabbage do not thrive in shallow soils. For the early varieties (in the Mountain States and similar climatic conditions) sow in hotbeds in the late winter or very early in 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 3 feet between rows would be better. The Fall and Winter Varieties can be handled in the same way or if the seed bed 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.

About Pests—If bothered with cabbage worms use Corona Dry Aresenate of Lead and for the cabbage louse or Aphid, Black Leaf 40 is effective. (See Insecticides, Pages 93-95.)

Cabbage Plants—See Page 32.

EXTRA EARLY VARIETIES COPENHAGEN MARKET

We offered this splendid variety for the first time in 1913 and it certainly has more than fulfilled our expectations, we said then as soon as it became generally known, it would supplant the smaller Extra Early Varieties. Repeated comparative tests show it to be as sure a header and within one or two days as early as the famous old Early Jersey Wakefield. For all practical purposes, therefore, it is just as early. 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 yielder, as are all Cabbages from Denmark, and an excellent keeper. Our stock of Copenhagen Market comes to us direct from the originator. see cut. Pkt. 15c; oz. 75c; 2 oz. \$1.35; ¼ lb. \$2.50; lb. \$7.50, Postpaid.



Copenhagen Market

P.-W.'s EARLY JERSEY WAKEFIELD

We assure our market gardener customers our strain of Jersey Wakefield meets every requirement in point of earliness and of 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 sized, very solid, pointed heads of excellent quality. Undoubtedly the best Extra Early pointed headed Cabbage, either for home or market. Pkt. 10c; oz. 50c; ¼ lb. \$1.75; lb. \$5.00, Postpaid.

OTHER EXTRA EARLY VARIETIES

Charleston, or Large Wakefield—Large, solid heads of fine quality.

Early Express, or Lightning—Very early; small, conical heads.

Early Winnigstadt—Medium sized, conical shaped heads; very hard.

Any of above: Pkt. 10c; oz. 50c; ¼ lb. \$1.75; lb. \$5.00, Postpaid.



P.-W.'s Early Jersey Wakefield

SECOND EARLY OR SUMMER VARIETIES

P.-W.'s SUMMER BALL HEAD

The Leading Summer Variety

This is so finely bred and true to type that in a field of twenty acres every head appears alike. We recommend it as a perfect Cabbage in every respect, not only being the largest size, but of handsome color and of the finest quality. It is probably the safest variety for the amateur planter, as it does well at all seasons, and one is almost sure of getting a crop, no matter when planted. Pkt. 15c; oz. 75c; ¼ lb. \$2.50; lb. \$7.50, Postpaid.

ENKHUIZEN GLORY

A Great Favorite Second Early

This variety is very sure heading and of excellent quality. The plants are of vigorous growth, with large, rather spreading outer leaves which are noticeably curved and frilled. The heads are globular or very nearly round, very solid and of large size for so early a variety. Pkt. 15c; oz. 75c; 2 oz. \$1.35; ¼ lb. \$2.50; lb. \$7.50, Postpaid.

OTHER GOOD VARIETIES

All Seasons—A general favorite in this section; heads of good size and fine quality.

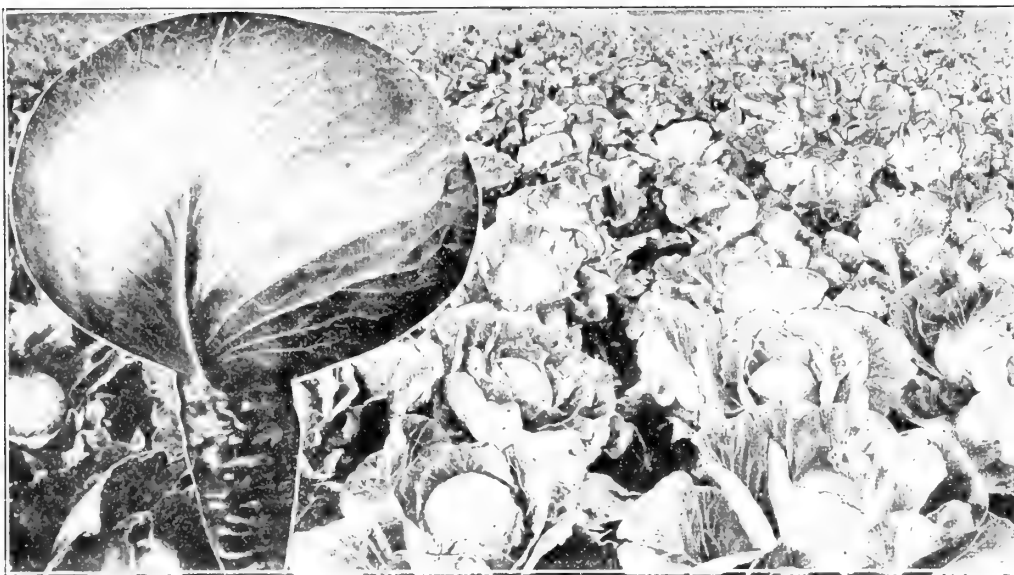
Fotter's Improved Brunswick—Heads large, flat and solid; a sure header.

Succession—Desirable for medium early or main crop.

Volga—This variety is of recent introduction and has much merit. It is early in maturing and makes large, round heads, very solid.

All Head Early—The best of the flat-head early summer Cabbages. Heads roundish-flat, very solid and grows uniform in size and form.

Any of above: Pkt. 10c; oz. 50c; ¼ lb. \$1.75; lb. \$5.00.



P.-W.'s Short Stemmed Danish Ball Head or Holland Cabbage

CABBAGE—FALL AND WINTER VARIETIES

DANISH BALL HEAD (or Hollander)

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. Because of its "great solidity" of head, and its unequalled keeping and shipping qualities, Danish Ball Head has supplanted nearly all other varieties for winter use. 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. 60c; ¼ lb. \$1.75; lb. \$6.00, Postpaid.

DANISH ROUND HEAD

Sweet flavor and crisp, tender texture. The great weight of the heads is commented upon by every one who has seen them. Hard as a bullet and heavy as lead," is the usual comment, which very aptly describes this variety. Danish Round Head has a little less foliage than the Danish Ball Head, which is perhaps and advantage in resisting blight or mould in damp situations. Pkt. 10c; oz. 60c; ¼ lb. \$1.75; lb. \$6.00, Postpaid.

CABBAGE PLANTS—See Page 32.

For larger quantities than here quoted send post card for Special Price List.

CHICORY—Sow the seed 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, of either garden or field culture. When the 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.

Large Rooted Madgeburg.—Pkt. 5c; oz. 35c; ¼ lb. \$1.00; lb. \$3.50, Postpaid.

CHIVES, Allium Schoenoprasum—An onion-like plant used as a salad and for flavoring purposes. One sowing will answer for about three years. Pkt. 10c; ¼ oz. 30c; oz. \$1.00, Postpaid. See Page 32 for Plants.

COLLARDS—Sow seeds the same as for late cabbage plants. The crop of green may be grown directly in the seed rows, or the plants 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.

Creole or Southern—Cabbage greens, used as a substitute for cabbage in the south. Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50, Postpaid.

CORN SALAD—Sow in spring in drills one 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. 5c; oz. 25c; ¼ lb. 70c, 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 PEPPERGRASS.—Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. \$1.10, Postpaid.

WATER CRESS.—Pkt. 10c; oz. 60c; ¼ lb. \$1.75, Postpaid.

DANISH BALL HEAD

Long Stemmed Strain

Our tests show this to be almost identical in appearance, quality, texture and habits of growth with the Short Stemmed, except the height of the stems, which are from 10 to 12 inches, while the Short Stemmed strain is only 3 to 5 inches. This feature makes this type a little more desirable for very moist climates and heavy muck lands as the under leaves do not touch the ground and are therefore not so apt to blight or rust. It is from 10 days to 2 weeks later than the Short Stemmed strain. Pkt. 10c; oz. 60c; ¼ lb. \$1.75; lb. \$6.00, Postpaid.

OTHER GOOD VARIETIES

AUTUMN KING or WORLD BEATER—A beautiful winter variety of vigorous growth and extra large, solid heads of bluish green. Pkt. 10c; oz. 60c; ¼ lb. \$1.75; lb. \$6.00, Postpaid.

PREMIUM LATE FLAT DUTCH—One of the largest late varieties. Pkt. 10c; oz. 40c; ¼ lb. \$1.25; lb. \$4.00 Postpaid.

MAMMOTH RED ROCK—The largest and surest heading Red Cabbage; deep red color; very hard and solid. Pkt. 10c; oz. 50c; ¼ lb. \$1.65; lb. \$5.00, Postpaid.

MARVIN'S SAVOY or "CRUMPLED LEAF"—It is almost a sure header; produces large, solid heads; fine for summer and fall use. Especially desired for boiling and cold slaw. Pkt. 10c; oz. 50c; ¼ lb. \$1.65; lb. \$5.00, Postpaid.



CARROTS (TABLE USE)

1 oz. 150 Feet; 4 to 6 lbs. per Acre.

Sow 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.

The Carrot is one of the most wholesome and nutritious of our garden roots, deserving to be more extensively used.

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 the private garden, while its great productiveness makes it very desirable as a field sort. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00.

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 a very heavy cropper. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00, Postpaid.

OX HEART (or Guerande)

Very distinct and desirable, smooth and handsome, very thick and blunt-rooted, about three and one-half inches thick at shoulder and four and one-half inches long; a rapid grower and of fine quality; color, orange-red; a good all-season Carrot. Easily harvested and does better on more shallow soils than the other varieties. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00, Postpaid.

EARLY FRENCH or PARISIAN FORCING—This is the earliest Carrot grown; small orange-red, globular shaped root. Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.35, Postpaid.

RED St. VALLERY—Sometimes called Pointed Danvers. It is an intermediate between Danvers Half Long and Long Orange. Rich, reddish orange color, tender and sweet; good for table or stock. Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. \$1.00, Postpaid.

Early Scarlet Horn or Short Horn—Well known small early, bunching variety. Pkt. 10c; ¼ lb. 35c; lb. \$1.00, Postpaid.

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 thing considered. If a yellow carrot is wanted **Improved Long Orange** will give good returns.

IMPROVED SHORT WHITE

This is the best and most productive for stock feeding. It is very early, an excellent keeper when properly stored. It is thick at the shoulder and tapers rather quickly, being from six to eight inches in length. Color, green at crown, white below. Flesh white, solid and crisp and of excellent quality.

WHITE BELGIAN—A very productive, white-fleshed variety for stock feeding.

IMPROVED LONG ORANGE—Roots long, thickest near the crown, tapering regularly to a point; color deep orange. Immense yielder.

MASTODON—Favorite white, good yielder.

YELLOW BELGIAN—Same as White Belgian, excepting color.



A Field of Chantenay Carrots in Full Bloom at our Centerville Seed Farm

Price any of above: Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. 85c, Postpaid.

GET SPECIAL PRICE LIST ON LARGER QUANTITIES THAN QUOTED IN THIS CATALOG

POP CORN

Same cultural directions as Sweet Corn.

WHITE PEARL—Large, smooth white grains.

WHITE RICE—The best of home or market. Ears short, grains pointed, resembling rice. Sometimes called "Squirrel Tooth." None superior.

....Any of above: Pkt. 10c; lb. 25c, Postpaid.

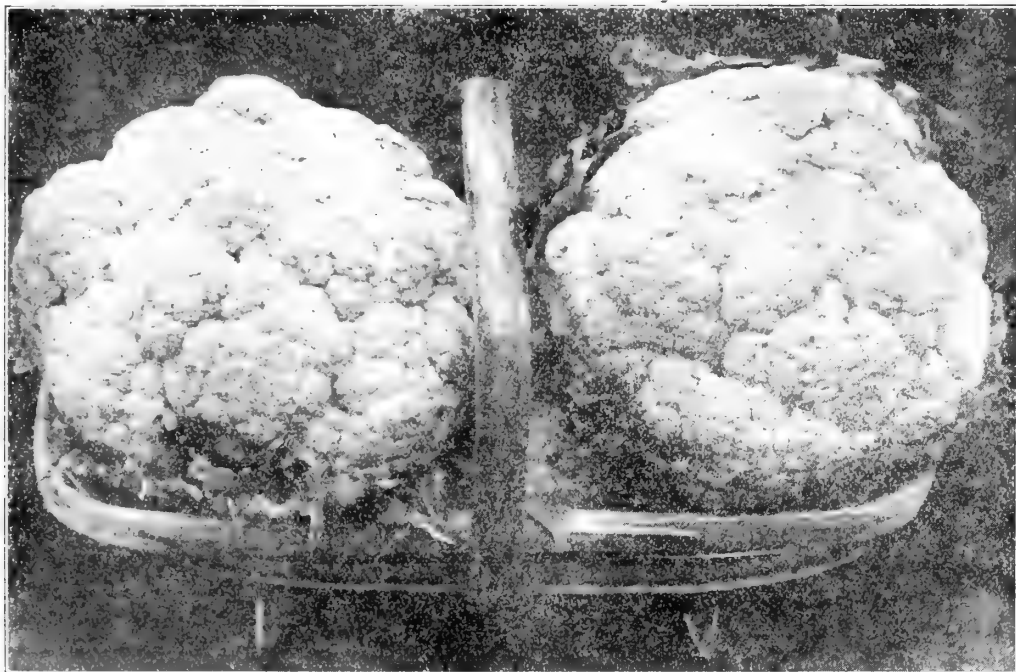
DANDELION

An early growing plant now much esteemed for greens, which are cooked like mustard or spinach. Sow the seed in May or June on good rich soil, and thoroughly cultivate, when the leaves are ready to cut the following spring. An ounce will sow 200 feet of row.

Improved Large Leaved—The largest leaved and best cutting variety. Pkt. 10c; oz. 50c; ¼ lb. \$1.25, Postpaid.

CAULIFLOWER

It is easy to grow in the garden, providing the soil is made rich and porous. 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 hot-beds 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. Transplanted 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. When heading, tie the outside leaves closely over the head to protect it from the sun. One ounce of seed produces 1,500 to 2,000 plants. It requires about 10,000 plants for an acre.



P.-W.'s PERFECTION CAULIFLOWER

We obtained this grand new strain from a Danish specialist. Our tests show it to be the peer of all yet developed. It is adapted for either early or late fall use. 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. Truly a perfect Cauliflower in all respects, adapted equally well for market or home use. You will never regret trying it out this year; it's a "sure winner." Pkt. 20c; ¼ oz. \$1.25; oz. \$4.50; ¼ lb. \$16.00, Postpaid.

ERFURT EARLIEST DWARF

This variety will stand the test with any extra early sort. It is very dwarf in habit, producing pure white heads of great solidity and finest quality desirable forcing. Pkt. 10c; ¼ oz. 70c; oz. \$2.50; ¼ lb. \$9.00, Postpaid.

EGG PLANT

1 oz. 1,000 to 2,000 Plants.

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 as where cool nights prevail, as in places where nights are warm. It needs a warm climate to insure quick and uninterrupted growth.

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 whole fruit. The fruits develop quickly, so the entire crop can be gathered before there is any danger of frost. Pkt. 5c; oz. 70c; 2 oz. \$1.25; ¼ lb. \$2.50; lb. \$7.00, Postpaid.

NEW YORK IMPROVED LARGE PURPLE—The fruit of this variety is very large and of fine quality, and its extreme productiveness makes it a very profitable sort for market gardeners. Plants large, spreading foliage of light green, fruit very large and oval; coloring splendid dark purple. Pkt. 5c; oz. 70c; 2 oz. \$1.25; ¼ lb. \$2.50; lb. \$7.00 Postpaid.

P.-W.'s DANISH GIANT Dry Weather Cauliflower

The merits of this variety are recognized by increasing sale every year. Heads are pure white and of fine quality. In growth, size and other characteristics very similar 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 about a week later than Extra Early Erfurt. Pkt. 20c; ¼ oz. 90c; oz. \$3.00; ¼ lb. \$10.00, Postpaid.

EARLY SNOWBALL

The well known standby which has been so long a favorite both of the home and market gardener. It is still just as good as ever. Our stock comes from the world's best cauliflower specialists and is equal to any in the market. From careful comparative tests we know "whereof we speak." Pkt. 20c; ¼ oz. 90c; oz. \$3.00; ¼ lb. \$10.00, Postpaid.

CELERY

One ounce will produce from 5,000 to 10,000 plants.

For early summer, Celery sow seed of the self-blanching sort in flats under glass during February, and prick out, singly or in sections of row, into other flats, frames, or in nursery row in the open, selecting soil in the highest state of cultivation. In May to June, set the plants in very rich and well prepared land, six inches apart in the rows, and rows three to four feet apart. Give thorough and clean cultivation, and blanch out by means of boards set up against the rows. For later and winter Celery, start seed of standard sorts either in flats, as for early, only a little later, or directly into open ground. Make the rows for plants one foot apart; sow seed shallow and firm well. The rows in which the plants are to be set are four to five feet apart. Blanch by earthing up gradually clear to within a few inches of tips of leaves. For winter storage, take up the plants with roots, and place upright on wet soil in a dark cellar or root-house, packing closely.

P.-W.'s GOLDEN CRISP CELERY

The Far-Famed Utah Celery So Much in Demand Everywhere

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. 10c; oz. \$1.00; ¼ lb. \$3.00; lb. \$10.00, Postpaid.

GOLDEN SELF BLANCHING

The best of early self-blanching varieties. Of quick growth, easy self-blanching character, combined with handsome appearance and crisp, sweet flavor. The plants are of a compact growth, of broad, thick stocks, being from 18 to 20 inches in height, and form a large, handsome bunch. A market garden favorite everywhere. French grown seed. Pkt. 15c; oz. 85c; ¼ lb. 2.85; lb. \$8.50, Postpaid.

American Grown.—Pkt. 10c; oz. 40c; ¼ lb. \$1.15; lb. \$3.50, Postpaid.

OTHER GOOD VARIETIES

Giant Pascal—A superior keeping sort; large thick, solid, round stalks, blanching golden yellow; crisp and fine.

Dwarf Golden Heart—Large heart; solid, round stalks, blanching golden yellow; crisp and fine.

Perfection Heartwell—Excellent large green variety. Stalks grow long and thick, very compact, crisp.

WHITE PLUME—Unsurpassed for fall and early winter use, requiring very little earthing up to blanch.

WINTER QUEEN—Medium height, broad, light green stocks, very solid, tender and crisp; blanches perfectly.

Any of above: Pkt. 5c; oz. 25c; ¼ lb. 80c; lb. \$2.50, Postpaid.

CELERIAC (Turnip Rooted Celery)

Large Smooth Prague—An improved form of the Turnip-Rooted Celery. Roots large, round and smooth, and free from side roots; a profitable variety for market gardeners. Sow seed same as Celery, transplant into rows two feet apart and about six to eight inches in the row. No earthing up is required for Celeriac, as it is the roots which are the edible portion of the vegetable. Pkt. 5c; oz. 30c; ¼ lb. 90c; lb. \$2.75, Postpaid.

ENDIVE

1 oz. 300 ft.; 4 to 5 lbs. per Acre.

A salad vegetable which is becoming very valuable for winter use. Seed should be sown in June or July, in rows and thinned to about six inches apart. When quite well grown, the outer leaves should be tied as to blanch the inner leaves and heart. It is more palatable after frost, being a little bitter if used in the summer.

WHITE CURLED—Plant moderately dense, with divided leaves which are very light in color, even the outer ones being nearly white. Considered by many the most beautiful sort.

GREEN CURLED—Very curly. The mid-rib being wide and whitish, with the outer edges very much indented and curled, forming a very attractive plant.

Any of above: Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25, Postpaid.

GARLIC—See page 25.

HORSERADISH—See Page 32.

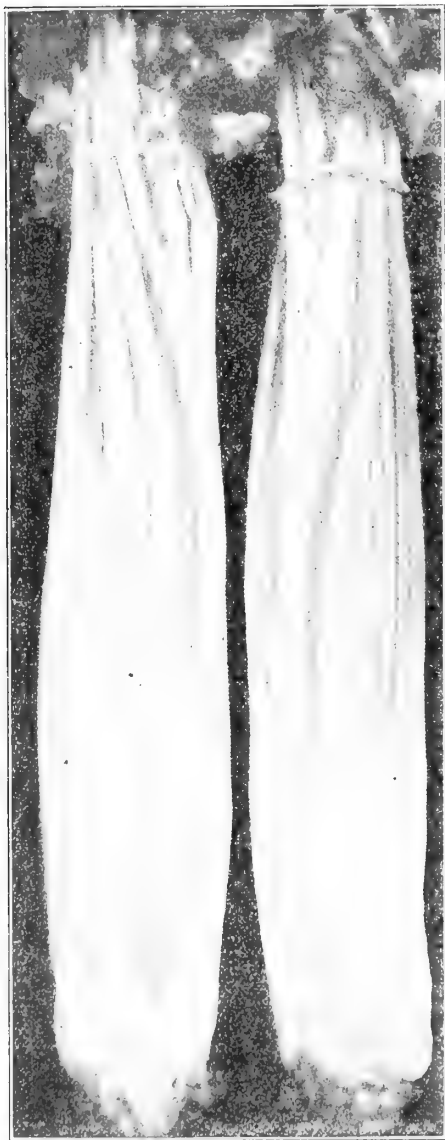
KALE OR BORECOLE

A species of Cabbage. Forming a mass of leaves, some varieties being very beautiful and curly. The leaves are cooked as greens. The plant is very hardy and is not injured by frosts. It is well to sow in September, in the same manner as Spinach; still it can be grown very late in the season; young shoots start out very early in the spring from the old stumps, and are very desirable for cooking, making very excellent greens.

DWARFED CURLED SCOTCH—Grows very low and compact, with large, bright deep green leaves curled, cut and crimped, resembling somewhat a bunch of moss. There are not a few who cultivate this plant simply for beauty.

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.

Price, any of above: Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00, Postpaid.

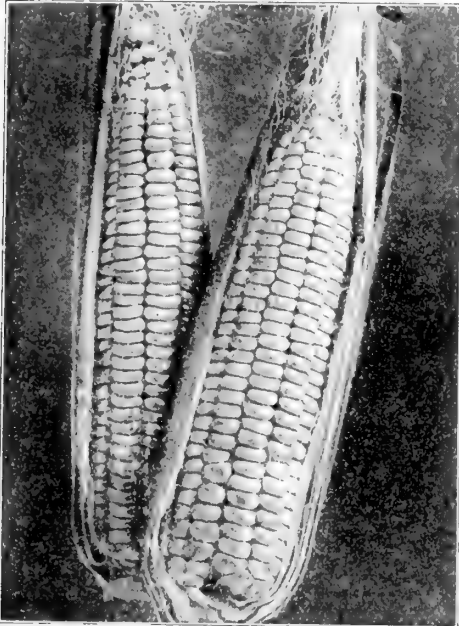


P.-W.'s Golden Crisp

BROAD LEAVED BATAVIAN—Broad, more or less twisted and waved green leaves with thick white mid-ribs. The inner leaves form a fairly firm head which blanches nearly white and is crisp, tender and of fine flavor. Unsurpassed for salads.

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, 7 or 8 kernels to a hill; hoe often, and draw dirt to the stems; thin to 4 stalks, and break off side shoots. Use plenty of old, fine manure. For succession plant every two or three weeks until last of July.



P.-W.'s Golden Rod

HOME GARDEN SELECTION FOR VARIETY AND SUCCESSION

We suggest the following sorts to be planted at the same time:

Aristocrat P.-W.'s Golden Rod
Country Gentleman
One Pkt. each of above for 25c,
Postpaid.

MAIN CROP VARIETIES

P.-W.'s NARROW GRAINED EVERGREEN

This is a most desirable addition to the second early or main crop family of Sweet Corn. Our tests show it to be three or four days earlier than the well known Stowell's 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. Pkt. 10c; lb. 35c, Postpaid. Not Prepaid, 10 lbs. \$2.50.

COUNTRY GENTLEMAN

Grand old "stand-by" for main crop, or canning. It produces three to four ears to each stalk. The ears are 7 to 8 inches long, cob small and densely covered with long, slender white grains without row formation. Deliciously sweet and tender. Pkt. 10c; lb. 40c Postpaid. Not Prepaid, 10 lbs. \$2.75.

For FIELD AND SILO CORN see Pages 39-40.

KOHL RABI

This plant forms a firm bulb above the ground and bears short leaves. 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 to 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—It is the most desirable for general use. It is very early and has small tops. Color light silvery-green. Bulbs of medium size and of best quality.

Price, any of above: Pkt. 5c; oz. 30c; ¼ lb. \$1.00; lb. \$3.00, Postpaid.

If you wish quantities larger than quoted ask for Special List.

EARLY VARIETIES

P. W.'s GOLDEN ROD

This best of all yellow varieties is a cross between Stowell's Evergreen and Golden Bantam, and it possesses many of the merits of both parents with other merits exclusively its own. The plants, sturdy, healthy and leafy, grow 6 to 7 feet high and bear almost invariably on each stalk two fine ears 8 to 10 inches in length, filled to the very tips with 12 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 on account of the thick, protecting husks which also check attacks from insects, worms and smut. Pkt. 10c; lb. 40c, Postpaid. Not Prepaid, 10 lbs. \$2.50.

ARISTOCRAT

The Big Eared Extra Early Sugar Corn

A new extra early variety, ripening with the Cory; stalks grow 4 to 5 feet high and ears are of large size, measuring 8 to 10 inches in length, 8 rowed. The grains are extremely sweet, and, being decidedly broad, allow of easy scoring with a knife preparatory to buttering when eating from the cob. The best in our estimation of the early pink or red cob varieties. Very productive. Excellent for market purposes. Pkt. 10c; lb. 35c, Postpaid. Not Prepaid, 10 lbs. \$2.50.

GOLDEN BANTAM

Very popular extra early, golden-yellow. Stalks grow about four feet in height, producing 8-rowed ears, 6 to 7 inches long. Deliciously sweet and tender. Pkt. 10c; lb. 35c, Postpaid. Not Prepaid, 10 lbs. \$2.50.

OTHER WELL KNOWN EARLIES

Extra Early Adams—Not a Sugar Corn, but grown for table use because of its earliness.

EARLY MAMMOTH WHITE CORY—Stalks short; ears set quite low, of fair size. Very early.

EARLY MINNESOTA—Ears about 8 inches long; early; kernels broad, sweet and tender.

GOLDEN CREAM—A very fine corn on the order of Golden Bantam and following that popular sort in maturity.

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.

Kendel's Giant—A large eared early sort; on the order of Howling Mob, but while a trifle earlier, will not average so large an ear; ears 8 to 9 inches long, 12-rowed.

P.-W.'s Extra Early—Large ears, 8 inches long, of the finest quality, free from worms, only one week later than the dwarf early varieties. The fodder grows five and six feet high. Not a true Sugar Corn.

Price, any of above: Pkt. 10c; lb. 35c, Postpaid. Not prepaid, 10 lbs. \$2.25.

OTHER GOOD SORTS

Black Mexican—Grains deep bluish-purple of delicious quality; medium early.

Crosby's Early—An old standard second-early variety, of good medium size and good quality.

DAVIS COUNTY EXCELSIOR—A very valuable second-early variety. Ears large, cobs small, and grains almost pure white. A heavy yielder. Very sweet.

Early Evergreen—Similar to Stowell's Evergreen, but earlier.

STOWELL'S EVERGREEN—Grown more than any other sort. Ears large, with deep, sugary grains.

Price, any of above: Pkt. 10c; lb. 35c, Postpaid. Not Prepaid, 10 lbs. \$2.25.

For FIELD AND SILO CORN see Pages 39-40.

Early Purple Vienna—An early variety, with a bright purple bulb, leaves and stems green tinged with purple.

Large Green—Most productive; bulbs large greenish-white; used mostly for stock feeding.

CUCUMBERS

1 oz. 75 Hills; 2 to 3 lbs. per Acre

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, 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 earing, every day or at least every other day. Leave none to ripen if you want a full crop.



P.-W.'s Klondike White Spine

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. The present specimen was discovered originally in a field of "Davis Perfect," and was recognized as being distinct from the original. The strain has now become thoroughly "fixed," so there is no perceptible variation in large acreages. It is 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. There is no doubt but what market gardeners will grow this to the exclusion of all others when they once give it a trial. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.50, Postpaid.

DAVIS 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 picked; fruit is exceptionally long, smooth and tapering at both ends; flesh crisp, solid, with few seeds. Very productive market variety. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.35, Postpaid.

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. 40c; lb. \$1.30, Postpaid.

OTHER GOOD VARIETIES

Arlington White Spine—Of medium size and good color; excellent under glass.

BOSTON PICKLING—Of uniform size; dark green, tender and productive.

Early Cluster—Makes a rapid growth and is very productive. Fruits are short and produced in clusters. Color dark green and the quality is good.

Early Frame, or Short Green—Productive, strong and vigorous, fruits straight but smaller at ends, bright green color; crisp and tender.

Improved Long Green—The leading long growing sort, and excellent for pickles.

P.-W.'s FORCING WHITE SPINE—Improved through careful selection: for forcing in hothouses and frames.

Price, any of above: Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. \$1.10, Postpaid.

LEEK

A species of onion, which does not form a bulb, but is used for its mild and delicious root, stem and neck. It can be planted in rows, and the young plants thinned to about four inches. When well grown, put up with earth to get a long white stem. 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.

American Flag—Long, large stems, sweet and white when properly blanched; vigorous grower one of the old stand-bys.

Either of above: Pkt. 5c; oz. 30c; ¼ lb. 75c, lb. \$2.75 Postpaid.

MEDICINAL OR POT HERBS

Herbs delight in rich, mellow soil. Sow seeds early in spring in shallow drill one foot apart. When up a few inches thin out to proper distance or transplant. They should be cut on a dry day, just before they come into full blossom, tied in bunches and hung up or spread thinly on the floor where they can dry quickly.

	Postpaid Pkt.	Oz.		Postpaid Pkt.	Oz.
Anise (Pimpinella Anisum)—Seeds aromatic.....	5c	25c	Lavender—True. For oil and distilled water	5c	50c
Caraway (Carum Carui)—Used in flavoring liquors and bread	5c	20c	Marjoram—Sweet. Used in seasoning.....	5c	30c
Catnip (Nepeta Cataria)—Has medicinal qualities.....	5c	35c	Rosemary—Yields an aromatic oil and water.....	5c	50c
Chervil—Double curled; used for garnishing.....	5c	30c	Sage—Common. A culinary herb; also used in medicine	5c	50c
Coriander (Coriandrum Sativum)—Seeds aromatic.....	5c	20c	Savory (Satureja Montana)—Winter. Used as a culinary herb	5c	40c
Dill—Seeds used for flavoring vinegar	5c	20c	Thyme (Thymus Vulgaris)—Broad leaved English. Used as a seasoning	5c	50c
Horchound—Has medicinal qualities	5c	40c			

LETTUCE

1 oz. 3,000 Plants: 4 to 5 lbs. per Acre

There is so great a difference in localities in regard to culture of Lettuce, that it is hard to get a uniform rule for culture. 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 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.



New York or Los Angeles Market

HEADING OR CABBAGE TYPES

NEW YORK (Los Angeles Market)

The Leading Summer Curly Head Lettuce Either for Home or Market

It produces immense heads, often 13 to 16 inches across, and weighing enormously. The interior blanches beautifully, creamy-white, crisp, tender, delicious and is absolutely free from any trace of bitterness. It is a very large, robust growing variety, rooting deeply, resisting hot, dry weather, very slow to run to seed and a sure header under most trying conditions. The outer color is of a distinct apple-green. As a standard hot weather summer lettuce it is in every way desirable and has no equal, but is not recommended for forcing. (See cut). Prices: Pkt. 5c; oz. 20c; ¼ lb. 65c; lb. \$2.00, Postpaid.

P.-W.'s EXTRA EARLY

The Quickest Growing Head Lettuce; Best for Forcing

This splendid variety forms fine, hard heads of medium size within a few weeks after planting. The color is a light green with a slight brownish tint on the head. The leaves are smooth, crisp, rich and deliciously palatable. Unquestionably the best smooth leaved butter head lettuce grown. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25, Postpaid.

COS OR ROMAINE

Trianon—This is the best of this type. Forms a large light green plant with the head well folded and quite solid. The flavor is different from ordinary lettuces and esteemed by many. Either tie the plants to blanch them, or plant them closely, 5 inches apart. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25, Postpaid.

FOR LARGER QUANTITIES THAN QUOTED GET SPECIAL LIST

OTHER GOOD SORTS

Big Boston—Highly recommended for outside; similar to old Boston Market, but much larger in size.

Deacon—Has very few waste outside leaves, grows very solid and of a 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 outdoors; heads of medium size; yellowish-green in color; very early.

ICE BERG—Large crisp, tender head. Outside leaves light green, tinged with brown. Stands hot weather wonderfully well.

Any of above: Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25, Postpaid.

CURLED OR LOOSE LEAVED VARIETIES

Black Seeded Simpson—One of the best; leaves are large, thin and exceedingly tender.

Early Curled Simpson—A popular early sort; forming a large loose head.

GRAND RAPIDS—The most popular variety for greenhouse planting.

Prizehead—Large, loose headed sort; leaves tinged with brown; very heavy.

Price, any of above: Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25, Postpaid.

MUSKMELONS

One oz. 50 Hills; 2 to 3 lbs. per Acre

Melons thrive best in a light, rich soil. Plant early in May, when the ground has become warm, hills 5 to 6 feet apart each way for Muskmelons, 8 to 10 feet for Watermelons, and plant in each 12 to 15 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 hot bed, and when warm enough to 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 93 and 95.

GREEN FLESHED VARIETIES

® P.-W.'s DELICIOUS GOLD LINED ROCKY FORD

An Improved Strain of the Old Standard Rocky Ford
or Netted Gem

This comes directly from the originator at Rocky Ford. The immense success shows it to be the coming leader of Green Fleshed Melons. 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. Color of fresh is green, except a tinge of yellow at center. Seed selected from uniform specimens, the pick of the crop. Pkt. 10c; oz. 15c; ¼ lb. 45c; lb. \$1.50, Postpaid.

HONEY DEW (Improved Cassaba)

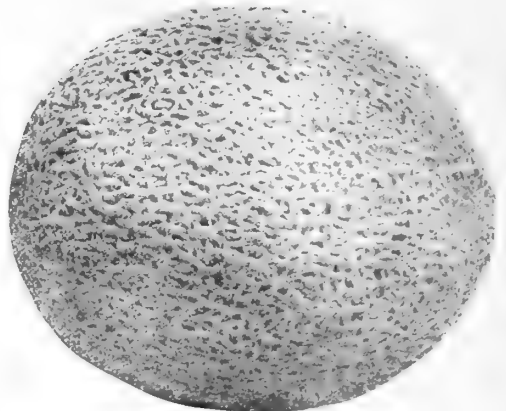
Unlike the ordinary muskmelon, the outer skin is smooth and hard, nearly white, turning from six to ten pounds each, round to oval in shape, extremely thick meated and have a very small seed cavity; flesh is light green, very solid and of rich honey-like flavor, luscious and juicy, much more so than any variety of muskmelon. An excellent keeping melon, and fruits may be laid away for use late in the fall. Pkt. 10c; oz. 25c; ¼ lb. 80c; lb. \$2.50, Postpaid.

ROCKY FORD (or Netted Gem)

The Most Widely Cultivated Canteloupe in the West
by the Market Gardeners

Hundreds of carloads are shipped to the "big city" markets annually. It is of the Netted Gem type. Oval in shape, slightly ribbed, averaging from four and one-half to five inches in length; of a rich flavor and very fine and smooth grain. Flesh is of a light green color throughout when ripe. Seed from Regular Field Run of Melons after "rogues" have been eliminated: Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00, Postpaid.

GROWER'S STOCK SEED—In 1 lb. Sealed Bags, \$1.35, Postpaid.



P.-W.'s Gold Lined Rocky Ford

OTHER GOOD GREEN FLESHED VARIETIES

Anne Arundel—Oval; heavily netted; green fleshed; solid; grand shipper.

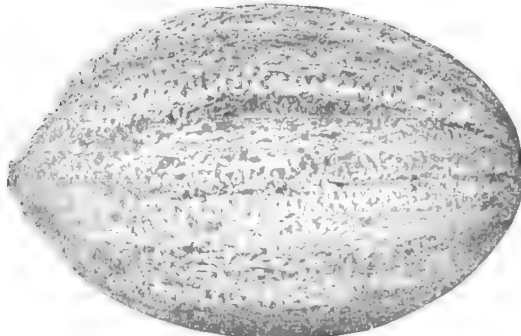
EXTRA EARLY HACKENSACK—Hardy; prolific; large, round; deeply ribbed, coarsely netted; green flesh; delicious.

Eden Gem—Immensely prolific, heavily netted, flesh light green; excellent quality.

Pine Apple—A Rocky Ford type in all respects, except its distinctive pine apple flavor.

Price, any of above: Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00, Postpaid.

SALMON FLESHED VARIETIES



Burrell's Gem

BURRELL'S GEM

Extensively Grown for Market

Equally good for the home garden, unquestionably the best salmon fleshed variety. Similar in appearance to its parent "Defender." It is easily crated, medium size; oval in shape, slightly ribbed, covered close with net. The flesh is firm, fine grained, rich deep yellow; vine is vigorous and very productive.

Regular Stock: Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00, Postpaid.

Growers Stock, Seed in Sealed 1-lb. Bags: \$1.35, Postpaid.

DEFENDER

This well known type is just as valuable as ever. It is of medium size, oval shaped, ribbed and well netted; flesh deep salmon and of fine flavor. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.10, Postpaid.

MUSHROOMS

Mushrooms may be grown by anyone having a supply of fresh manure and shed or cellar or under a greenhouse bench, where a temperature of 50 or 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.

Pure Culture Spawn—Requires one brick of spawn for about 9 square feet of bed. One brick, 45c; 2 bricks, 80c; 5 bricks, \$1.75, Postpaid.

Full cultural directions with every order.

MUSTARD

1 oz. 50 ft. 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.

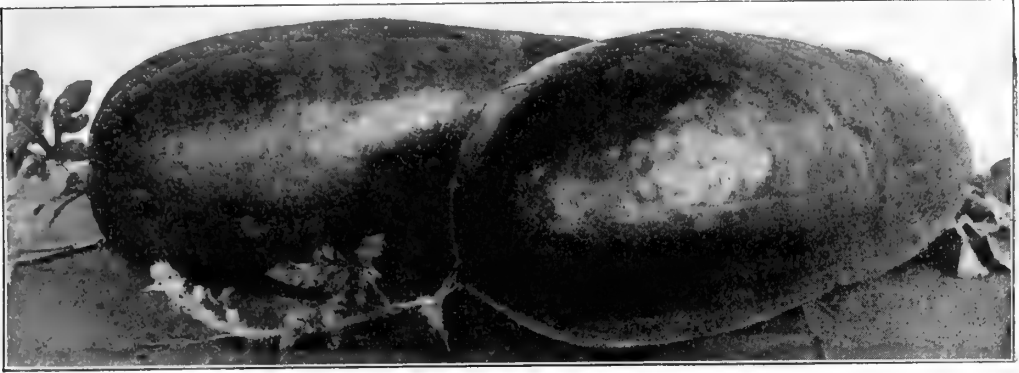
Giant Southern Curled—Curled leaf, large.

Price of any of above: Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 90c, Postpaid.

Ford Hook Fancy—Beautiful dark green leaves.

White London—An English favorite.

For Prices on Larger Quantities than Quoted in This Catalog Get Our Special List.



P.-W.'s Kleckley Sweets Watermelon

WATERMELONS

1 oz. 30 Hills; 4 to 5 lbs. per Acre

See direction given under Muskmelons.

P.-W.'s KLECKLEY SWEETS (Or Monte Cristo)

The Best Melon for Home Garden or Near-by Markets. There is no melon superior in quality to this strain of Kleckley Sweets. 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. For the home garden and local market it should always be given a place. This melon is very much in demand on the Salt Lake market. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb. \$1.25; sealed 1-lb. bags, \$1.75, Postpaid.

TOM WATSON

The Leading Melon for Shipping to Distant Markets

It will endure rougher handling than "Kleckley's Sweets." It grows 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. We have a very fine selected stock of this melon that will surely please our market gardener customers. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 35c, lb. \$1.00. Extra selected stock seed in 1-lb. sealed bags, \$1.75, Postpaid.

OTHER GOOD WELL KNOWN VARIETIES

Cuban Queen—Large oval; striped dark and light green; flesh red; late sort.

Citron—Red seeded. Small round fruits; for preserves only.

HALBERT HONEY—Oblong; dark green skin, thin rind, crimson flesh, luscious flavor.

Kob's Gem—Short, thick, very large dark green, marbled lighter; flesh red; good shipper.

McIver's Wonderful Sugar—One of the sweetest melons—medium size, striped, flesh red, stringless.

New National—Pale green, darker green markings, flesh red, stringless.

Price, any of above: Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00, Prepaid.

OKRA OR GUMBO

1 oz. 50 ft. 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 from ten to twelve inches. They should be well manured. They can also be started in a hot bed 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—The pods are large, perfectly round and smooth and attractive; of superior flavor and tenderness. Plants comparatively dwarf and of compact branching growth. This is the best for all purposes.

Either of above: Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00, Postpaid.

TWO VALUABLE BOOKS

To be sent free to our customers on orders of \$5.00 and over and either one will be sent with order of \$3.00 or more

MAKING THE GARDEN PAY

YOUR FLOWER GARDEN

Is the title of a most valuable booklet containing helpful hints, modern garden plans and cultural directions to assist the beginner in making the garden a success.

Is another most interesting booklet brimful of helpful suggestions for the home flower garden.

Ask for it when you send in your order.

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. Flesh is red and extremely firm, in fact, almost as hard as citron—very brittle and deliciously sweet. The melon is round shaped and the skin is a very light green, almost white. It is a good drouth resister and does well in most 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. 50c; lb. \$1.50, Postpaid.

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. 15c; $\frac{1}{4}$ lb. 40c; lb. \$1.25, Postpaid.

OTHER GOOD WELL KNOWN VARIETIES

Phinney's Early—Very early; medium size, stripes light and dark mottled, flesh pink; delicious.

Rocky Ford—Burrell's strain, identical with Kleckley's Sweets.

True Dixie—Prolific yielder; dark green with stripes of lighter green.

Gray Monarch—Long melon; rind mottled light gray-green; flesh bright crimson; excellent.

Sweetheart—Medium early, large size, round to oblong thick, tough rind; good shipper; color light green, slightly veined darker; flesh red.

ONIONS

1 Oz., 100 Feet, 4-6 lbs. per Acre.

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 to three inches apart in row. 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.



P.-W.'s OHIO YELLOW GLOBE ONION

Unquestionably the Yellow Onion for General Culture

It is similar to the Yellow Globe Danvers in shape, round, a little depressed at top and bottom, medium size, but remarkably solid, and heavy, producing as much weight per acre as almost any variety grown. The skin is a beautiful yellow, tops ripen down close, necks small. One of the surest keepers grown. Flesh is an attractive sparkling white of mild and pleasant flavor. It forms a bulb very early in the season, so that it may be used practically the entire summer, ripening up crisp and solid in the fall. The tops die off entirely leaving fine appearing uniform shaped bulbs without neck. Under favorable conditions, from 900 to 1,000 bushels is not an uncommon yield per acre.

From our trials we can highly recommend it for general crop. Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50, Postpaid.

AUSTRALIAN BROWN

The leading dark skinned onion for all purposes. It is the best keeper of any type that has come under our observation. For northern sections and high altitudes where the seasons are short No better success could be obtained with any other type. It matures extra early, resembles the Danvers in size and form, but is thicker through, yielding a large crop both of bulk and weight and matures much earlier. Skin reddish brown, flesh is always white, crisp, extremely solid and mild, sweet flavor. Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.25, Postpaid.

GIGANTIC GIBRALTAR

Truly a giant in size, can be grown successfully in districts where season is comparatively long, but we do not recommend it for the north and "high" valleys. It does splendidly in the vicinity of Salt Lake City.

An immense light yellow onion; fine grained, crisp, mild flavored and early. They not infrequently measure 18 inches around, and weigh two pounds. To attain its largest size it should be sown early in the spring in the hot-bed and later transplanted to open ground. The onion is very productive, is a good keeper for a large onion, and for those who like an onion raw, we recommend it highly on account of its mild and acceptable flavor. Market gardeners who grow this sort, box them and compete successfully with the imported "Spanish Onion." We believe when this variety is better known it will outrank some of the most popular sorts. Pkt. 5c; oz. 30c; ¼ lb. 90c; lb. \$3.00, Postpaid.

"An Onion a day keeps the doctor away." Onions produce both Health and Wealth. Plant a liberal acreage this year.

OTHER GOOD DARK AND YELLOW SKINNED SORTS

	Postpaid Prices		Pkt. oz.	¼lb.	lb.
RED WETHERFIELD.—Though well flattened, the solid onions are thick through, skin is a deep glossy, purplish red. Flesh white	5c	25c	\$0.80	\$2.35	
AMERICAN GROWN PRIZETAKER.—Very large nearly round, skin light yellow. Flesh pure white in color, crisp and mild flavor	5c	25c	0.80	2.50	
SOUTHPORT YELLOW GLOBE.—The flesh is snow-white, firm, mild and juicy, skin light golden yellow. Popular for family use or market	5c	25c	0.75	2.25	
YELLOW GLOBE DANVERS—A very handsome, round globe-shaped variety, of large size, ripens early	5c	25c	0.75	2.25	
YELLOW FLAT DANVERS.—Largely planted. Flesh fine grained; mild	5c	25c	0.75	2.25	
YELLOW STRASBURG.—Bright yellow, bulbs somewhat flattened; flesh white and mild	5c	25c	0.75	2.25	
BERMUDA RED.—Hugh flat, pale red, early and productive; grown largely in Bermuda and southern districts. Our seed is from Teneriffe	5c	35c	1.15	3.50	
BERMUDA YELLOW.—Same as Red except skin is a pale yellow. Teneriffe grown seed	5c	35c	1.15	3.50	
SOUTHPORT LARGE RED GLOBE.—The finest type and most popular of the red onions. The bulbs are distinctly globe-shaped, with a small neck, and are excellent keepers; color a deep purplish-red. We have an unequalled strain of this variety	5c	25c	0.75	2.25	

ONIONS—CONTINUED

P.-W.'s SOUTHPORT WHITE GLOBE ONION

The Best Bunching Onion in the List; Unquestionably the Best All-Purpose White Onion for the Mountain States and All Districts with Similar Climatic Conditions

It is a true globe form; pure white, hard and small neck. Ripening very early and evenly. A splendid keeper. It grows to a large size, averaging 7½ to 9 inches in circumference; is very solid and heavy, flesh purest white and fine grained; has a very mild, delicate flavor. It is an extremely heavy yielder. We recommend this variety, especially to our market gardener customers, who desire a bunch onion. After thoroughly testing this with other white varieties, we pronounce it far ahead of any other for this purpose. It holds its tops longer and comes into market as early as the Pearl or White Queen. We have been able to secure a very selected strain of this excellent onion. No market gardener or onion grower can afford to plant inferior seed. Pkt. 5c; oz. 30c; ¼ lb. \$1.00; lb. \$3.00, Postpaid.

CRYSTAL WHITE WAX

Popular Market Onion for the South and Southwest

We have secured a very selected stock of seed direct from the most critical grower on the Island of Teneriffe. The Crystal White is a very large white onion of the Bermuda type, a remarkably good shipper and an excellent keeper for this type. The sweet, mild flavor and large size makes it a ready seller on any market. Market growers in sections where this variety is adapted will make no mistake in giving it a trial. Pkt. 5c; oz. 50c; ¼ lb. \$1.60; lb. \$5.00, Postpaid.

OTHER GOOD WHITE VARIETIES

	Prices Postpaid	Pkt.	Oz.	¼ lb.	Lb.
EXTRA EARLY BARLETTA—Old-time favorite with market gardeners; two weeks earlier than Early White Queen. From one inch to one and one-half inch in diameter and three-fourths of an inch in thickness	5c	40c	\$1.30	\$4.00	
EXTRA EARLY PEARL—One of the earliest; mild flavor, good keeper. Sometimes grows five to six inches in diameter	5c	40c	1.30	4.00	
EARLY WHITE QUEEN—An extra early; valuable for pickling; bulbs about an inch in diameter	5c	40c	1.30	4.00	
MAMMOTH SILVER KING—Large, attractive form; flattened but quite thick through; average diameter of from five to seven inches; flesh snow-white, sweet and tender	5c	30c	1.00	3.00	
ROUND SILVER SKIN (WHITE PORTUGAL)—Very early, round; fresh, crisp and tender; an excellent sort for bunching or pickles	5c	35c	1.15	3.50	
SILVER BELL—Similar type and season to Barletta, but larger	5c	40c	1.30	4.00	



Harvesting Onion Sets at Our Centerville Seed Farm

ONION SETS

A great speciality with us. We produce several carloads at our own farm in Centerville. The remarkable firmness and 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. Where an early market is sought or where the seasons are short this is a distinct advantage.

Great care is exercised in cleaning and grading, so that nothing is sent out but sound, healthy, vigorous sets that produce results worth while.

Culture—Soil requirements are the same as with onion seed. Plant the sets 3 to 4 inches apart in the row, depending on the variety and 12 inches apart between the rows and 2 to 3 inches deep. It requires from 250 to 350 lbs. for an acre.

	Postpaid Lb.	Not Prepaid Lb.	Not Prepaid 10 Lbs.
BROWN ONION SETS	30c	20c	\$1.75
YELLOW ONION SETS	30c	20c	1.75
WHITE ONION SETS	35c	25c	2.25
POTATO ONION SETS	50c	40c	
GARLIC SETS	45c	35c	
WHITE MULTIPLIER	50c	40c	

ASK FOR PRICE LIST ON QUANTITIES

PARSLEY

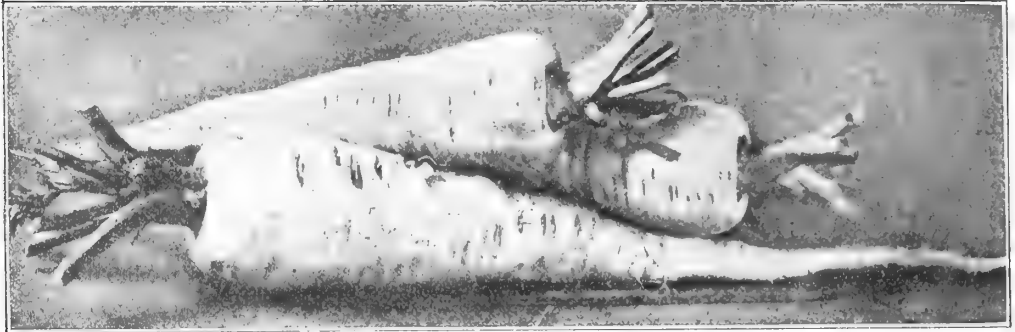
1 oz. 500 Plants

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.

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.

Price, either of above: Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. \$1.00, Postpaid.



Parsnip Guernsey or Hollow Crown

PARSNIPS

1 oz. 100 ft. 5 to 8 lbs. per Acre.

A well-known vegetable for table use. It is also very good stock food and quite as nutritious as carrots. It prefers very wet soil, and will thrive where carrots will not grow. A sandy soil is preferred since the roots are very long, and are difficult to dig in stiff soil. Sow the seed in the spring in 12 to 18 inch drills, using one ounce to 100 feet. In the field sow in rows twelve inches apart.

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 18 to 20 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. 15c; ¼ lb. 35c; lb. \$1.00, Postpaid.

PEPPERS

1 oz. 500 Plants. ½ lb. per Acre

Peppers do best in hot climates, but can be grown quite successfully in most places. They require very rich soil or seed germinates slowly. They should be sown in hot beds 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.

For PEPPER PLANTS see Page 32.

® P.-W. CHINESE GIANT RED PEPPER

This is a very large, deep red variety. Almost twice the size of either Ruby King or Bull Nose. It is about four or five inches thick at the top and about six inches long. Though it may not be so immensely productive for so large a pepper, yet its enormous size and magnificent appearance makes it sell readily. The plants are vigorous in growth and of stocky habit, sometimes more than two feet in height. They are well branched and thoroughly set with enormous fruits, frequently one-half dozen peppers touching each other as if in a single bunch. The strong growth of the plant enables them to mature the fruit only slightly later than the Ruby King. They make an excellent salad, sliced and served like tomatoes, the flesh being extremely mild. Pkt. 10c; ½ oz. 35c; oz. 60c; ¼ lb. \$2.00, Postpaid.



P.-W.'s Chinese Giant

POOR SEEDS WOULD BE COSTLY EVEN IF
THEY WERE GIVEN TO YOU.

OTHER GOOD VARIETIES

GIANT CRIMSON—About the size of Chinese Giant, similar in appearance; ripens earlier; very fine.

LARGE BELL or BULL NOSE—Early, large, bright red.

LONG RED CAYENNE—A late variety; small, bright scarlet, cone-shaped, pungent pods; as much used for pickling when green as when ripe.

NEAPOLITAN—Earlier than other large peppers; thick-meat and unusually mild and sweet; flesh and skin bright red when ripe.

RED CHILI—Small, bright red peppers, very hot and pungent; generally used for making pepper sauce; very prolific.

RUBY GIANT—A cross between Ruby King and Chinese Giant; similar in appearance; ripens earlier; very fine.

RUBY KING—Fruits are large, bright, glossy red; very mild, sweet flavor, and can be sliced and eaten with vinegar like tomatoes. The best variety for making mangoes, and most widely planted in the Rocky Mountain States.

Price, any of above: Pkt. 10c; ½ oz. 35c; oz. 55c; ¼ lb. \$1.75, Postpaid.

PEAS

1 lb. ft. of row. .100 lbs. per acre.

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 stocks found anywhere. Our market gardener customers were especially delighted with our last year stocks, and we can assure them this year's well measure up to our past standards. Most varieties are short crop and supply limited. Our advice is to order early to avoid disappointment in the varieties of your choice.

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 feet 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.



P.-W.'s Dwarf Gradus

PREMIUM GEM (or McLean's Little Gem).—Similar to American Wonder. Pkt. 10c; lb. 45c; 2 lbs. 80c, Postpaid. Not Prepaid. lb. 35c; 10 lbs. \$3.25.

THOS LAXTON.—52 days. Pods large, long and deep green in color; seed wrinkled, sweet and of fine flavor; two or three days later, but more productive than Gradus. Pkt. 10c; lb. 50c; 2 lbs. 90c, Postpaid. Not Prepaid. lb. 40c; 10 lbs. \$3.75.

SECOND EARLY AND MAIN CROP VARIETIES

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 largest 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. 50c; 2 lbs. 90c, Postpaid. Not Prepaid. lb. 40c; 10 lbs. \$3.75.

P.-W.'s NEW DWARF DEFIANCE

This is our selection for the most desirable all purpose main crop variety, either for the home garden or market. It grows about half the height of the Alderman. The vines are sturdy and vigorous, deep green foliage and heavily laden with pods 5 inches long, very broad, slightly curved and pointed and containing 8 to 10 very large, medium light green peas of high quality. A superb, productive main crop sort. Pkt. 10c; lb. 50c; 2 lbs. 90c, Postpaid. Not Prepaid. lb. 40c; 10 lbs. \$3.75.

FIRST EARLY VARIETIES

P.-W.'s DWARF GRADUS OR LAXTONIAN

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.

The peas are of exquisite flavor and mature early. All the planters who have tried Dwarf Gradus consider it superior to either the old Gradus or Thomas Laxton, and consider it to be the best of all the early dwarf sorts.

From our own observations, at our trial grounds and the combined experiences of market gardens 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. 50c; 2 lbs. 90c, Postpaid. Not Prepaid. lb. 40c; 10 lbs. \$3.75.

P.-W.'s DWARF PRIZE

This handsome new wrinkled pea is so hardy that it may safely be planted as early as the hard-seeded "Extra Earlys." 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. 45c; 2 lbs. 85c, Postpaid. Not Prepaid. lb. 35c; 10 lbs. \$3.25.

OTHER GOOD VARIETIES

ALASKA.—49 days, 2½ feet. Pods small. Pkt. 10c; lb. 35c; 2 lbs. 60c, Postpaid. Not Prepaid. 10 lbs. \$2.50.

AMERICAN WONDER.—Vines about nine inches high covered with well filled pods containing nine to ten exceedingly large, sweet tender peas. Pkt. 10c; lb. 45c; 2 lbs. 80c, Postpaid. Not Prepaid, lb. 35c; 10 lbs. \$3.25.

GRADUS OR PROSPERITY (Selected Strain).—Forty-nine days; 3½ feet. This is an extra early wrinkled pea, ready for market as soon as the Alaska and requires no staking. Pods large and well filled with large sweet peas. Pkt. 10c; lb. 50c; 2 lbs. 90c, Postpaid. Not Prepaid, 10 lbs. \$3.50.

NOTT'S EXCELSIOR.—An excellent early dwarf pea for garden or market. Larger and more productive than the American Wonder. Pkt. 10c; lb. 45c; 2 lbs. 80c, Postpaid. Not Prepaid, lb. 35c; 10 lbs. \$3.25.

OTHER GOOD SORTS

Bliss Everbearing.—3 feet. A prolific and continuous-bearing pea. lb. 40c; 2 lbs. 70c, Postpaid. Not Prepaid, lb. 30c; 10 lbs. \$2.75.

Dwarf Telephone (Carter's Daisy).—55 days. Pods average 3 to 5 inches, containing 7 to 9 peas. Quality fine. Lb. 2 lbs. 90c, Postpaid. Not Prepaid, lb. 40c; 10 lbs. \$3.50.

P.-W.'s Dark Podded Telephone.—This is an improved strain of the deservedly popular Telephone. Lb. 50c; 2 lbs. 90c, Postpaid. Not Prepaid, lb. 40c; 10 lbs. \$3.75.

Stratagem.—Very large, best quality. Height 1½ feet Old stand-by. Lb. 50c; 2 lbs. 90c, Postpaid. Not Prepaid. lb. 40c; 10 lbs. \$3.50.

Yorkshire Hero.—Height 2½ feet. Very productive; fine flavor. lb. 50c; 2 lbs. 90c, Postpaid. Not Prepaid, lb. 40c; 10 lbs. \$3.50.

Horsford Market Garden.—About 3 feet. Very popular canning variety. Pkt. 10c; lb. 40c; 2 lbs. 70c, Postpaid. Not Prepaid, lb. 30c; 10 lbs. \$2.75.

Mammoth Melting Sugar.—This is best edible podded sort. When half grown the entire pod may be cooked, same as snap beans. Pkt. 10c; lb. 50c; 2 lbs. 90c, Postpaid. Not Prepaid, lb. 40c; 10 lbs. \$3.75.



Last year planters received as much as \$1,000 per acre for potato crop. Get some of those dollars for yourself this year.

POTATOES

700 to 1200 lbs. per Acre

For early potatoes, which mature in eight to ten weeks from planting, the soil must be particularly rich. A rich clover sod, 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.

The Seed Potatoes we send out will be not only strictly true to name, but hand-sorted, clean, healthy and vigorous.

Change Your Seed—There is a profit as well as satisfaction in planting our seed, for, not only is it 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 VARIETIES

BLISS TRIUMPH—Very popular early market variety, especially in the East. It matures about one week to ten days before Early Ohio. As the skin is red it does not show bruises readily and can, therefore, be shipped before it is ripe. This is a big item to the market grower. Our tests show the yield about with the Ohio.

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 stock.

EUREKA—A remarkable drouth and blight resister. The tubers are round, slightly flattened, white and mealy; no core or black specks. Quality unsurpassed.

EARLY ROSE—True stock and just as good as when it was first introduced; still a standard.

IRISH COBBLER—An extra early variety, maturing about with the Bliss Triumph and Ohio. Color is pure white; good size, with clean, smooth skin.

Market is so variable, write for prices.

TREATMENT OF POTATOES FOR ROSETTE

Two ounces of Corrosive Sublimate or Mercuric Chloride. Dissolve in one gallon of hot water. After same is thoroughly dissolved, add 14 gallons of cold water.

Use only in wooden vessels—rank poison. Use care about handling after treatment.

DIRECTIONS FOR DIPPING

Put in solution either loose or in sacks and allow to remain for two hours. Then remove to clean place, where there is no danger of disease germs.

Fifteen gallons of solution is sufficient to treat as many potatoes, as the solution will cover four separate times. Treat only clean stock.

MAIN CROP VARIETIES

PEERLESS—The old standard for main crop; too well known to need description. Or stock is unexcelled.

RURAL NEW YORKER—A valuable variety of large size; very smooth and a great cropper; in quality unexcelled. It is the best late long keeper, and we recommend it highly.

CARMAN—Excellent large, white main crop variety, eyes are few and shallow; good keeper.

PUMPKIN

3 to 4 lbs. per Acre. One Ounce Will Plant 50 Hills.

Plant in April or May, among corn or in the garden, in hills 8 or 10 feet apart, and otherwise treat in the same manner as melons.

CHEESE—The most popular for pies and table use; large, flat-round; creamy-yellow skin; thick, orange flesh of fine quality; a splendid keeper. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.00, Postpaid.

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; lb. \$1.00, Postpaid.

KENTUCKY FIELD—Large, round-flattened, creamy-yellow skin and flesh. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00, Postpaid.

KING OF MAMMOTH or JUMBO—This strain produces the biggest pumpkin grown, sometimes measuring six feet in circumference and weighing 200 to 250 pounds. Outside color deep orange-yellow, flesh very thick, fine grained, tender, or bright yellow color, and of excellent quality for pies and other uses. Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50, Postpaid.

SUGAR—A handsome and productive small pumpkin, 10 to 12 inches in diameter; round-flattened, skin orange, flesh deep yellow, fine grained and very sweet. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.10, Postpaid.

Get Our Special List for Larger Quantities Than Quoted in This Catalog.

RADISH

1 Oz. 50 ft. 10 to 12 lbs. per Acre

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 of crop they should be sown about every ten days. During the hot months of summer the winter radishes will do better than the early sorts, which get stringy and pithy. Winter radishes can be stored in winter the same as potatoes and other roots, and furnish an acceptable relish through the winter months.

There is no crop that will bring quicker returns for the market gardener. Select your warmest, lightest soil and plant so as to get into market when prices are at the top. The leading variety for this purpose is "P.-W.'s Sparkler"; or if you wish an all scarlet, use "P.-W.'s Earliest." For family use our recommendations are: P.-W.'s Sparkler for early or succession; Icicle for second early; and Celestial for winter use.



P.-W.'s Sparkler Radish

EARLY TURNIP-SHAPED VARIETIES

P.-W.'s SPARKLER RADISH

The Leader for Market

The cut gives an idea of the shape of this attractive radish. The color is scarlet and white. It is extremely quick to mature, being ready for the table in 20 days from the time of sowing the seed. It is invaluable for forcing under glass, as well as for growth in the open air. The skin is very smooth, and its clear color gives it an appetizing appearance on the table. Its flavor is excellent, and its qualities high in all respects. Market gardeners find it a quick selling sort at good prices, always above ordinary sorts, and it is no less satisfactory in the private or home garden. Selected stock seed. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25, Postpaid.

EXTRA EARLY SCARLET—Deep scarlet; tender, mild and crisp; quick-growing; tops small.

P.-W.'s EARLIEST—Attains a good size without getting pithy or hollow; flesh firm, crisp and of the mildest flavor. One week earlier than White Tipped.

P.-W.'s SCARLET TURNIP WHITE TIPPED—Well known market variety.

FRENCH BREAKFAST—A general favorite for forcing and outside use. Oval form, bright scarlet color, tipped with white.

Price, except where noted, any of above: Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. \$1.00, Postpaid.

Get Special Price List on Larger Quantities.

LONG VARIETIES

ICICLE—White, slender and tapering in shape. It quickly grown to market size; is crisp, brittle, mild and sweet. Quite as good when an inch in diameter as when only half an inch.

LONG SCARLET SHORT TOP—Bright carmine; flesh brittle and firm. About six inches long.

WHITE STRASBURG—Half-long and thick; skin and flesh pure white.

WHITE VIENNA—Snow-white; flesh crisp, tender and brittle; of rapid growth.

Price, any of above: Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. \$1.00, Postpaid.

WINTER VARIETIES

Chinese Rose—Half-long; flesh pink, solid, of excellent quality.

Long Black Spanish—Roots black; the flesh is white and slightly pungent.

Round Black Spanish—Globe-shaped; white-fleshed; piquant flavor.

CELESTIAL or WHITE CHINESE—Pure white, firm, tender.

Price, any above: Pkt. 5c; oz. 15c; Z lb. 40c; lb. \$1.10, Postpaid.

TAKE NO CHANCES—GET OUR TESTED SEEDS.

RHUBARB OR PIE PLANT

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.

VICTORIA—Very large and tender. The best variety to plant and the one most generally used. Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00, Postpaid.

For RHUBARB ROOTS see Page 32.

SALSIFY OR VEGETABLE OYSTER

One Ounce for 50 ft. of Drill; 8 to 10 lbs. per Acre

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 apart.

MAMMOTH SANDWICH ISLAND—Grows to a very large size and resembles a good-sized parsnip. Mild and delicately flavored; very popular. Pkt. 5c; oz. 25c; ¼ lb. 85c; lb. \$2.50, Postpaid.

SWISS CHARD (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. Later the leaves grow very large with broad, flat, pure white stems, and mid-ribs, which may be cooked like asparagus or made into very good pickles. An ounce of seed is sufficient for a medium sized family.

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. Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50, Postpaid.

SPINACH

1 oz. 100 ft.; 10 to 12 lbs. per Acre

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 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.

Planting Spinach is the easiest and surest way to produce those "delicious greens," so highly prized in the early spring. If you have never grown Spinach before you have overlooked one of the most desirable vegetables. Be sure to include it this year in your list. The great favorite for the Mountain States is the "Bloomsdale Savoy," which we consider the most desirable for all purposes.

P.-W.'s BLOOMSDALE SAVOY—The plants are extremely hardy and of good size. The leaves are very thick and blistered. Its hardiness and thickness of leaf permit safe long-distance shipping. A great favorite. Our strain is carefully grown and has secured and kept the trade of the largest growers in the Rocky Mountain States.

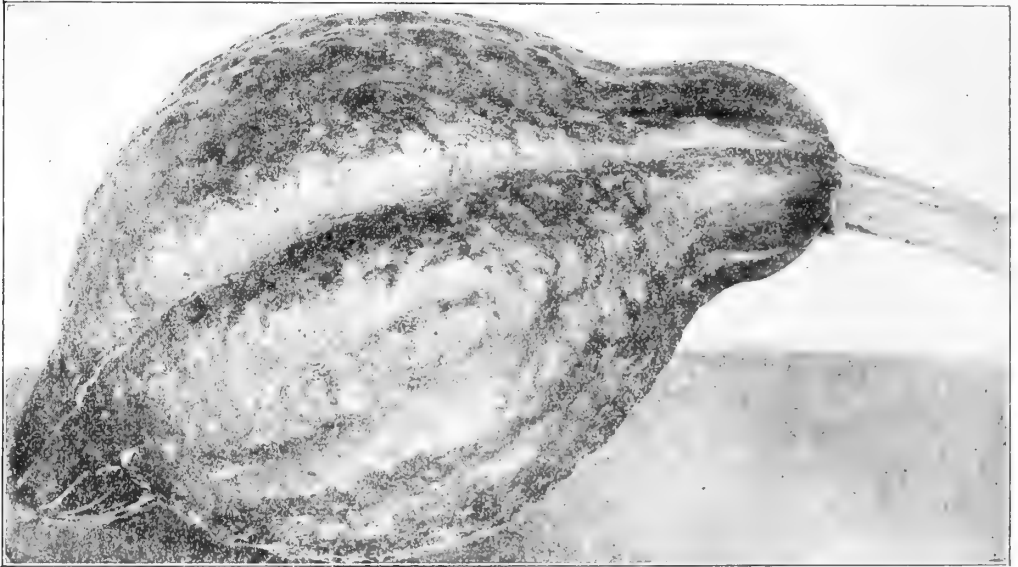
Long Standing—A deep green variety with rather elongated and smooth leaves. Stands a long time without running to seed.

Price any of above: Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c, Postpaid. ASK FOR QUANTITY PRICES.

Victoria—Remarkably fine texture, of deepest green color, heavily crimped, thick, fleshy leaves, deep red stem.

Prickly Winter—A long standing late maturing sort, plant very large, vigorous and hardy; leaves round, thick, medium sized and dark green.

Viroflay—For either spring or fall sowing. Plant of upright growth; leaves are very large, broad, thick and arrow-shaped with a four inch petiole, much crumpled.



Chicago Warted Hubbard

SQUASH

1 Oz. 100 feet; 2 to 3 lbs. per Acre

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. Eight to ten seeds should be sown in each hill; thinning out after they have attained their rough leaves and danger from bugs is over, leaving from three to four of the best plants in each hill. In gathering winter squashes, it is important to protect the stems, since if broken off the fruit will not keep so well.

WINTER VARIETIES

CHICAGO WARTED HUBBARD (The Great American Favorite)—This is one of the best in quality of all the winter sorts. It is attractive on the market and a ready seller. Very dark green and flesh is dry and sweet. Very hard shell, which insures long keeping qualities. It is considered by many an improvement on the old Hubbard. Pkt. 5c; oz. 20c; ¼ lb. 65c; lb. \$1.75, Postpaid.

Pike's Peak or Sibley—Large oval fruits tapering at the blossom end; skin smooth and dark olive-green in color; flesh golden-yellow and of very best quality. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50 Postpaid.

Red or Golden Hubbard—Identical with Chicago Warted Hubbard, except in color of skin. Pkt. 5c; oz. 20c; ¼ lb. 65c; lb. \$1.75, Postpaid.

Essex Hybrid—An early quick growing variety, with a very hard shell. Skin of an orange-red. Flesh thick and hard, of a yellow or pinkish color. Flavor excellent. Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. \$1.25, Postpaid.

Hubbard—Most popular winter sort; excellent keeper; Pkt. 5c; oz. 20c; ¼ lb. 65c; lb. \$1.75, Postpaid.

Mammoth Chili—The flesh is yellow and very thick. The quality is good and nutritious. It usually grows to enormous weight. Pkt. 5c; oz. 20c; ¼ lb. 65c; lb. \$2.00, Postpaid.

Utah Field Giant—The jumbo of all squashes, often weighing 150 pounds. Splendid for stock feeding. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

SUMMER VARIETIES

Early White Bush (Scalloped)—An early variety, flat, creamy white scalloped squash, four to six inches in diameter; of bushy habit and rather dwarf.

Long White Marrow—The skin is a greenish-white. Flesh white, soft and of rich flavor.

Yellow Summer Crookneck—This is a golden-yellow variety, thickly warted; eighteen inches; brittle and tender.

Vegetable Marrow—Skin greenish yellow; flesh white. Any of above: Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25, Postpaid.

Get Special Price List on Quantities

TOMATO

1 oz. 1,000 Plants; 2 oz. per Acre

For early plants sow in hot beds 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. Sufficient plants for a small garden can be grown in a small box or a large flower pot, by placing it in a sunny window in a warm room or kitchen. 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.



"John Baer" Tomato

EARLY VARIETIES "JOHN BAER" TOMATO

New introduction. "John Baer" Tomatoes produce perfect, solid, high crown, beautiful, brilliant red shipping tomatoes, in 30 days from potted plants if the roots are undisturbed when set out. Our Trial Ground tests show that it is not only remarkably early, but it is also an enormous crop, producing 50 to 100 perfect large sized tomatoes to a plant. The fruit contains very few seeds; is extremely solid and meaty and of deliciously mild, sweet flavor. Entirely free from blight, no cracks, no wrinkles, no one-sided or scarred fruit and even when dead ripe "John Baer" will not burst; for a market tomato it will surely replace all comers. Pkt. 10c; oz. 35c; ¼ lb. \$1.25; lb. \$4.00.

P.-W.'s EXTRA EARLY EARLIANA

The Popular Extra Early for Home Garden or Market

Extremely early, of particularly fine quality, which is very rare in an extra early tomato, the flesh being remarkably solid and containing very few seeds. These qualities have made it particularly useful for a first crop variety. Where no more than one sort is grown the wide-awake planter has his list headed with Earliana. The strain of Earliana we are offering has been specially selected for earliness. Pkt. 5c; oz. 35c; ¼ lb. 90c; lb. \$3.25, Postpaid.

OTHER GOOD EARLY SORTS

ACME—An old, well-known early variety, medium in size, smooth, solid and prolific; color purplish-pink.

BEAUTY—Early, prolific; medium sized, smooth and solid; color, purplish-red; fruits until late in the season; the best of the "purple" varieties.

BONNY BEST—Very productive variety; fruits are round, somewhat flattened at stem end and are produced in abundance. The color is scarlet.

JUNE PINK—Resembles "Earliana" in every respect, except for color. The best early purple or pink in the list.

CHALK'S EARLY JEWEL—One of the best early varieties; about a week later than Earliana. The fruit of Jewel, however, averages larger; is uniformly smooth.

EARLY DETROIT—Fruit exceptionally uniform in size; nearly globe-shaped, heavy, smooth and well adapted for shipping. Color purplish-pink.

Price, any of above: Pkt. 5c; oz. 35c; ¼ lb. 90c; lb. \$3.25, Postpaid.

MAIN CROP VARIETIES

P.-W.'s NEW STONE

The Best Main Crop and Canner's Tomato

This is a splendid main crop variety. By some this has been called the King of Livingston kinds, which are the best types of large, smooth, solid, meaty tomatoes. If asked to select but one main crop, market sort, we should advise this. Color, fine scarlet. Stem set high, core small and shallow, so that little is lost when taken out of the fruit before slicing. If in doubt always take the New Stone. Pkt. 5c; oz. 35c; ¼ lb. 90c; lb. \$3.25, Postpaid.

P.-W.'s IMPERIAL

The Leading Main Crop Purplish-Pink for All Purposes in the Mountain States

Fruit is large, smooth and solid. It not only produces very early fruits, but it will hold out from early in the season to fall. It is also a splendid keeper. In color between a pink-purple and a glossy crimson. Pkt. 5c; oz. 40c; ¼ lb. \$1.15; lb. \$3.75, Postpaid.

See page 32 for Tomato Plants.

Our Tomato Seed is grown for us on contract by the most critical and painstaking grower in America. Our superior strains will meet the demand of the most exacting canner or market gardener.

OTHER GOOD MAIN CROP SORTS

DWARF CHAMPION—Good main crop, medium size, early, purplish-pink.

GREATER BALTIMORE—Large bright red, vigorous, compact and healthy grower; a heavy cropper; deep from stem to blossom end. Very firm and meaty; ripens evenly; free from ridges, cracks and blight. Recommended for canning or the home garden.

LANDRETH'S RED ROCK—Entirely free from cracks, always smooth; very small, deep depression at the stem end; a uniform bright red, brilliant color; desirable for canner's use.

LIVINGSTONE'S HUMMER—Fine globe shaped, like Livingston's Globe; bright scarlet in color; of good size; quite early and fine quality.

MATCHLESS—Very desirable large, smooth, red.

TROPHY IMPROVED—Large, smooth, solid, bright red

MY MARYLAND—Uniformly solid, smooth, bright red; very productive; second early or main crop.

Price, any of above: Pkt. 5c; oz. 35c; ¼ lb. 90c; lb. \$3.25, Postpaid.

SMALL FRUITED TOMATOES

These miniature Tomatoes are very delicious for preserving. No garden is quite complete without at least one of them.

Red Cherry—Bears clusters of bright red fruits the size of a cherry; prolific.

Red Pear-Shaped—Bright red fruits; pear shaped neck.

STRAWBERRY or HUSK TOMATO—Sometimes called "Ground Cherry." Small, yellow fruits enclosed in a husk; very sweet. Used extensively for preserves and pies.

Yellow Plum—Small, oval-shaped, yellow fruits.

Price, any of above: Pkt. 5c; oz. 45c; ¼ lb. \$1.25; lb. \$4.50, Postpaid.

TURNIPS

1 oz. 100 ft.; 2 lbs. per Acre

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.



Purple Top Globe Turnip

PURPLE TOP WHITE GLOBE TURNIP

The Best Flavored and Largest Yields Grown. Without an Equal for All Purposes

This most popular of all market turnips originated from the purple top flat turnip. The shape is globular and of good size, and in appearance it is the best looking of all varieties of white globe sort, having an uneven purple edging at the top. 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; 1/4 lb. 30c; lb. \$1.00, Postpaid.

Amber Globe—Best yellow fleshed sort; roots globular and of large size; skin yellow fleshed sort top tinged green.
EXTRA PURPLE TOP MILAN—Earliest turnip in cultivation; a week sooner than any other. Flat, smooth, of medium size, with bright purple top and few leaves. Flesh white and choice. Adapted to spring or fall. Pkt. 5c; oz. 20c; 1/4 lb. 65c; lb. \$2.00, Postpaid.

EXTRA EARLY WHITE MILAN—Similar to the above, but pure white. Pkt. 5c; oz. 20c; 1/4 lb. 65c; lb. \$2.00, Postpaid.

EARLY PURPLE TOP STRAP LEAF—A popular variety of quick growth; round, four to five inches in diameter; flesh white and of excellent quality. Price: See below.

EARLY WHITE EGG—An oval or egg-shaped variety with smooth, thin, white skin and snowy-white flesh; firm, mild and sweet. Price: See below.

EARLY SNOWBALL—Very early, of medium size, round as a ball and pure white skin and flesh. Price: See below.

EARLY WHITE FLAT DUTCH—A very early flat, white turnip of medium size and fine quality. Price: See below.

POMERINE WHITE GLOBE—One of the largest and most productive; roots often grow to weigh ten to twelve pounds, are globe-shaped, slightly flattened; skin smooth and white; for stock feeding. Price: See below.

Price, except where otherwise noted: Pkt. 5c; oz. 10c; 1/4 lb. 35c; lb. \$1.25, Postpaid.

Write for Special Price List on larger quantities.

RUTA-BAGA OR SWEDES

1 oz. 100 ft. 2-3 lbs. 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 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—This special strain of Ruta-baga is remarkable for uniform shape and fine quality and is also a splendid keeper. They grow to a large size. The skin is smooth and the flesh a beautiful yellow color and fine grained. The flavor is good, being very sweet and tender. Tops are short, which feature is very desirable. Pkt. 5c; oz. 10c; 1/4 lb. 35c; lb. \$1.25, Postpaid. Write for quantity prices.

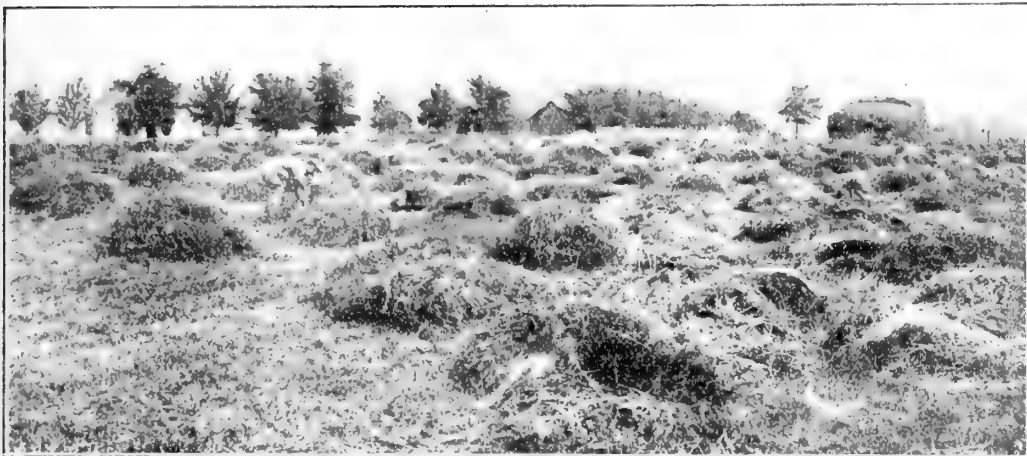
REMEMBER TURNIPS AND RUTA BAGAS ARE NOT ONLY "GOOD FOR MAN," BUT BEAST ALSO. CUT DOWN YOUR FEEDING BILL BY PLANTING A LIBERAL ACERAGE.

VEGETABLE PLANTS AND ROOTS

We have excellent facilities in this line. The plants are grown from selected seed at our own Greenhouses.

In ordering, please use our Plant Order Sheet, as all plant orders are filled from our Nursery Department. See Page 59 for full details and instructions. Your kindly co-operation will help us to give you better service. Where possible, we advise plant shipments to be made by Express.

	When Ready	Not Beyond 3rd Zone		By Express, not Prepaid	
		Postpaid Prices	Doz.	100	1000
EARLY CABBAGE —Early Jersey Wakefield, Copenhagen Market; good, stocky transplanted plants	April and May	40c \$2.30	35c \$2.00	\$2.00	\$12.00
Same Varieties As Above—Seed bed plants	April and May	1.25	1.00	6.00	6.00
LATE CABBAGE —Ball Head, Red Rock, Flat Dutch etc. Same Varieties—Seed bed plants	May	40c 2.00	30c 1.75	10.00	10.00
EARLY CELERY —Golden Self-Blanching; transplanted	May, June, July	1.25	1.00	6.00	6.00
LATE CELERY —Giant Pascal, Winter Queen, P.-W.'s Golden Crisp; transplanted	May and June	45c 2.25	30c 1.75	12.00	12.00
CAULIFLOWER —Snowball, P.-W.'s Danish Giant, P.-W.'s Perfection; transplanted	June and July	40c 2.00	30c 1.50	10.00	10.00
CAULIFLOWER —Same varieties as above; seed bed plants	April and May	45c 2.75	35c 2.50	15.00	15.00
EGG PLANT —N. Y. Purple, Black Beauty; transplanted	May and June	45c 2.00	35c 1.50	10.00	10.00
PEPPER —Chinese Giant, Ruby King, etc.; transplanted	May and June	45c 2.75	35c 2.50	20.00	20.00
TOMATO —Earliana and other standards; transplanted	May	40c 2.30	30c 2.00	17.50	17.50
TOMATO —Early and Main Crop as above; seed bed plants	May	1.25	1.00	7.50	7.50
FIELD GROWN ROOTS					
ASPARAGUS —1 year old, standard varieties	March and April	35c 1.75	25c 1.50	10.00	10.00
ASPARAGUS —2 year old, standard varieties	March and April	60c 3.00	35c 2.50	15.00	15.00
HORSE RADISH ROOTS —Strong divisions	March and April	60c 3.50	50c 3.00	20.00	20.00
RHUBARB —Victoria, mailing size, 2 or 3 eyes to each clump. Each 35c; \$3.00 per dozen, Postpaid. By Express or Freight—20c each; \$2.25 per dozen; \$15.00 per 100.					
CHIVES —35c per bunch; \$3.00 per dozen, Postpaid. Not Prepaid: 25c per bunch; \$2.50 per dozen.					



Timothy Crop Second Year from Planting.

GRASS SEEDS

Consistent with our policy to sell only the best we furnish only such grades that have been critically grown from highest germination and purity; this fact should be in mind when comparing prices with other sources of supply. **PRICES FLUCTUATE. WRITE FOR PRICES ON QUANTITIES.**

Bermuda Grass (Cynoden Dactylon)—Is a dwarf perennial plant and spreads by means of its long and many-jointed root stalks, and for this reason is hard to eradicate once it has secured a foothold; thrives during the hottest part of the year, and it will live under water for a long time. Makes durable lawn and is also used to hold embankments. The seed is very slow to germinate and requires heat and moisture. Sow 10 lbs. per acre. Should not be sown in climate where ground freezes as it will winter kill. **Lb. 75c, postpaid. Not prepaid, 10 lbs. \$5.50.**

BROMUS INERMIS (Hungarian Brome Grass)—It is a vigorous, hardy perennial, with strong creeping root; stock smooth, upright, leafy stems, one to four feet high, and loose, open seed heads four to eight inches long. In a few years it forms a very tough sod, which possesses remarkable drouth-resisting qualities. It is very hardy and not injured by severe spring and fall frost, when once established. Sow the seed broadcast, early in the spring, at a rate of twenty to thirty pounds per acre. Cover with harrow. Where ground is inaccessible for early spring, it is advisable to sow in the fall. **Lb. 55c, postpaid. Not prepaid, 10 lbs. \$4.50.**

Canadian Blue Grass (Poa Compressa)—Also called Flat Stock Poa. A flat stock meadow grass, distinct in color, grows one and one-half feet high, is a very valuable pasture grass. It thrives well on hard clay and poor soils. Very highly recommended for horses, cows and sheep. Sow 30 pounds per acre. **Lb. 35c, postpaid. Not prepaid, 10 lbs. \$2.25.**

Red Top (Agrostis Vulgaris)—It is a most valuable addition to sow with timothy and clover, and forms a close sward for pasturage. Reaches highest perfection in moist, rich soils. The whole seed, sow 25 pounds per acre. **Lb. 40c, postpaid. Not prepaid, 10 lbs. \$2.75.**

ORCHARD GRASS (Dactylis Glomerata)—No farmer should be without a small field of Orchard Grass, as in many respects it is superior to many other grasses. It stands the drouth, grows well in the shade, in wet or poor ground, and it splendid to prevent worn-out fields washing. This grass furnishes excellent pasturage for three weeks before any other, and after close grazing, a ten days' interval is sufficient for another growth. It makes a very heavy sod, and when well set remains for many years. When sown alone, sow from 20 to 25 pounds per acre. **Lb. 50c, postpaid. Not prepaid, 10 lbs. \$3.50.**

Kentucky Blue Grass—This makes the best, sweetest and most nutritious pasture for all kinds of stock. This grass is the first up in the spring and remains green until snow flies in the fall. The roots are so thick and stout that they form a tough sod. It will do well on almost any land. Sow in the fall or spring at the rate of 30 pounds per acre. **Lb. 50c, postpaid. Not prepaid, 10 lbs. \$3.75.**

Meadow Fesque, Randall or English Blue Grass—Excellent for hay and pasturage, particularly valuable for fall and winter pasturage. Grows 2 to 3 feet high, but not in tufts like orchard grass. Very nutritious and cattle thrive on it whether dry or green. Succeeds even in poor soil, and as the roots penetrate deep, from 12 to 15 inches, it takes extremely dry weather to affect it. Sow either in the spring or fall at the rate of 30 pounds to the acre, if sown by itself. **Lb. 55c, postpaid. Not prepaid, 10 lbs. \$4.50.**

TIMOTHY—Of hay grasses Timothy is one of the most popular, nutritious and salable. On clay or heavy loams, lowlands or in mountainous districts, provided there is an abundance of moisture, it produces the very best results. From 1½ to 3 tons of fine hay to the acre. Timothy alone, 12 pounds to the acre, or with clover, 10 pounds timothy and 6 pounds clover. **Lb. 35c, postpaid. Not prepaid, 10 lbs. \$2.00.**

Write for Quantity Prices. Samples cheerfully sent upon request.

DOLLARS IN PROFITS A WONDERFUL SOLUTION OF YOUR FEEDING PROBLEMS will be found in liberal acreages of **MANGELS**. See Pages 12 and 13 and **SIL** **CORN**, see Pages 39 and 40.

GRASS SEEDS—Continued

Prices are so variable. Write for quotations on quantities.



P.-W.'s Grass and Clover Mixtures Make Best Dairy Pastures

TALL MEADOW OAT GRASS (Avena Elatoir)—Yielding twice as much hay as Timothy or Orchard Grass, early as Orchard Grass, with more leaf and affording better grazing, it is not strange that this grass is becoming so popular. It will keep green all winter and all summer; the drought of midsummers or the cold of winter does not injure it. It starts growing very early in the spring, can be cut twice for hay; will yield good grazing until late in the fall. For hay, it should be cut while in bloom. It is best adapted for rather light and dry loamy uplands, but gives excellent results on nearly all soils and better results than any other grass on light, medium soils. Sown alone, use 30 lbs. to the acre, either spring or fall. **Lb. 55c, postpaid. Not prepaid, 10 lbs. \$4.25; 100 lbs. at market price.**

English of Perennial Rye Grass—This is becoming well known in this country as a valuable pasture grass which will bear frequent close cropping. Produces an abundance of foliage, which remains bright and green during the season. When sown by itself, sow 30 lbs. per acre either in the spring or fall. **Lb. 35c, postpaid. Not prepaid, 10 lbs. \$2.25; 100 lbs. at market price.**

Italian Rye Grass—This is, like the Perennial Rye Grass, valuable for pasture and also for hay. It thrives on rich, moist land, where from three to four cuttings may be made in a season. It grows very quickly and will stand

close pasturage. It will stand more overflow than other grass. About 24 lbs. of seed required to the acre. **Lb. 35c, postpaid. Not prepaid, 10 lbs. \$2.25; 100 lbs. at market price.**

WESTERN RYE GRASS (Canadian Bunch Grass)—This is sometimes called Slender Wheat Grass. It is the highly prized range bunch grass of the Canadian Northwest. This will be a most valuable addition to all the stock ranges throughout the entire West. It has been proved of value on soils impregnated with alkali, yielding good returns. Sow seed at the rate of 15 lbs. per acre if sown alone and at a depth of from 1 to 3 inches, depending upon soil and season. **Lb., 50c, postpaid. Not prepaid 10 lbs \$3.75; 100 lbs. at market price.**

MISCELLANEOUS PASTURE GRASSES

We have not sufficient call for the following grasses to always keep them in stock but we are in touch with reliable sources of supply and shall be pleased to quote prices upon request and procure them for you at any time: **Creeping Bent Grass, Crested Dogstail, Sheep's Fescue, Hard Fescue, Creeping Fescue, Tall Fescue, Rhode Island Bent and Wood Meadow Grass.**

P.-W.'s GRASS AND CLOVER SEED MIXTURES

For Permanent Meadows and Pastures

Our well-balanced mixtures are 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. We have aimed in these splendid combinations to supply such varieties that will form a deep-rooting turf and that will yield, year after year, the greatest amount of hay or furnish the most constant and abundant pasturage. To the dairyman or farmer who has lands adapted for pastures the value of a carefully prepared seed mixture can be hardly estimated. With these mixtures and with the proper kinds of dairy cows, it is possible to realize at least one hundred and fifty dollars per acre annually from every acre that has been carefully seeded and attended to.

The following mixtures will be found desirable and well proportioned for the kind of soils specified.

P.-W.'s MIXTURE No. 1. For upland Pasture under Irrigation—The main varieties of this combination are Kentucky Blue Grass, Perennial Rye Grass, Red Top, Orchard Grass, Tall Meadow Fescue, Red Clover, Lucerne and White Clover. Sow 25 lbs. per acre. **Lb. 40c, postpaid. Not prepaid, 10 lbs. \$2.75; 100 lbs. at market price.**

P.-W.'s MIXTURE No. 2. For Light, Sandy Soils—Consisting chiefly of Kentucky Blue Grass, Bromus Inermis, White Clover. Sow 80 lbs. per acre. **Lb. 45c, postpaid. Not prepaid, 10 lbs. \$3.25; 100 lbs., Market Price**

P.-W.'s MIXTURE No. 3. For low and moist soils—Consisting chiefly of Red Top, Perennial Rye Grass, Meadow Fescue, Timothy, Alsike Clover, White Clover, Orchard Grass. Sow 25 lbs. per acre. **Lb. 45c, postpaid. Not prepaid, 10 lbs. \$3.25; 100 lbs. at market price.**

P.-W.'s MIXTURE No. 4. For Marsh, Wet or Boggy Soils—Consists chiefly of Red Top, Perennial Rye Grass, Creeping Bent Grass, Alsike Clover. Sow 40 lbs. per acre. **Lb. 45c Postpaid. Not Prepaid, 10 lbs. \$3.25; 100 lbs., market price.**

If your soil does not come under any of the above classes, please write the particular character of your soil and we shall be pleased to name price of mixture best suited.



A typical Hay Crop from P.-W.'s Mountain Grown Dry Land Alfalfa Seed

ALFALFA OR LUCERNE

Prices subject to market changes. Write for quantity prices. Seamless bags at extra cost.

For all purposes the peer of all forage plants, especially for the entire Western states. Too well known in the West to need a description. In money feeding value per acre it has been estimated that Alfalfa is worth 45 per cent more than other clovers and 60 to 70 per cent more than Timothy. It produces from three to five crops per year and yields from 3 to 7 tons per acre, depending on soil, climatic conditions. Three pounds of Alfalfa Hay per day is a full ration for fattening lambs, five pounds for sheep and thirty-five pounds for steers. It contains as much protein as wheat bran and fed to dairy cows it maintains the milk flow equal to June Grass. Under favorable conditions one acre has been known to pasture 20 pigs for six months.

Pages could be written in praise of this wonder-plant, which has transformed thousands of acres of unproductive semi-arid lands (that otherwise would scarcely feed a ground squirrel) into profitable farms that are producing fortunes for their owners. Let us urge you who have never grown Alfalfa to plant a trial plot this year, otherwise you will be overlooking the most valuable forage plant known to modern agriculture.

Selection of Seed Is Most Important—Poor seed is a primary and great cause for a poor stand. In buying Alfalfa Seed the best obtainable is the cheapest. We have used the utmost care in the selection of our seed and can safely say it is as fine a seed as grows. It is selected from the best seed produced and must comply with our standards of purity and germination.

Sow the Seed So It Will Be Covered—Alfalfa Seed must be covered, not sown on the surface, as is sometimes done with grasses and clovers. It may be planted with drill or seeded broadcast by hand, hand seeder or wheelbarrow seeder. It is advisable to sow half the seed one way across the field and the other half at right angles to secure an even distribution; three-quarters inch is deep enough on heavy and one and one-half inch on light soils. Increased results can be secured by inoculation with "Farmogerm." See below.

Much more seed is required in the humid sections of the country than in the semi-arid and irrigated sections.

P.-W.'s MOUNTAIN GROWN DRY LAND ALFALFA SEED

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. It has a remarkable characteristic for rooting deeply in the soil, and in some instances it has been known to root as deeply as thirty feet. This feature alone makes it very hardy in arid regions. Although a prodigious yielder, it does not exhaust the soil, but rather improves the ground by the decay of the long roots, and converts it into rich ground, full of vegetable matter.

In dry land situations sow about 10 lbs. and on irrigated land 12 to 15 lbs. per acre. Lb. 75c, postpaid. Write for quantity prices.

GRIMM ALFALFA SEED

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 tap-root and that it makes underground creeping stems. These branching roots enable it to thrive on hardpan where the single tap-root of other varieties would fail to penetrate and enable it to spread and thicken up and increase to withstand close pasturing which would be very hard on other varieties. While we have this variety under competitive test we are not far enough along with it for verification of the superiority in the respects claimed. For customers who wish to try it out we can furnish the genuine Grimm; undoubtedly it is a very desirable strain. Sow 15 lbs. per acre. Lb. 90c, postpaid. Write for quantity prices.

SEED INOCULATION—FARMOGERM METHOD

Builds up the Soil and Increases the Yield.

This recognized standard of seed inoculants insures the growing of bigger crops by making poor soil good soil. It is always fresh—the only culture being sold in the bottles with the patented stopper which enables the bacteria to breathe air, insuring long life without deterioration.

FARMOGERM is a culture of only high-bred nitrogen-fixing bacteria. It replaces essential elements in the soil in an effective and economical manner.

FARMOGERM, used on your seed, furnishes Nitrates to the plants. It increases their growth and enriches the soil. When the seeds sprout the bacteria enters the root and makes large supplies of Nitrates, which benefit greatly the growing crop and the crops that follow. Soils can be built up to a high standard of fertility at small cost and little labor. Assures substantial saving in your fertilizer bill.

FARMOGERM means increase in all legume crops, such as Peas, Beans, Alfalfa, Clovers, Peanuts, Vetches. It makes possible the growing of two crops at the same time, each helping the other.

FARMOGERM is simple to apply, it being necessary only to fill the bottle three-quarters full of water, shake thoroughly to break up the jelly, sprinkle on the seed until all are moistened, permit the seed to dry, and then plant in the usual way.

FARMOGERM is sold in three sizes as follows: Bottles containing enough bacteria to inoculate seed for five acres, \$8.00; one acre \$2.00; garden size (quarter acre), 50c.

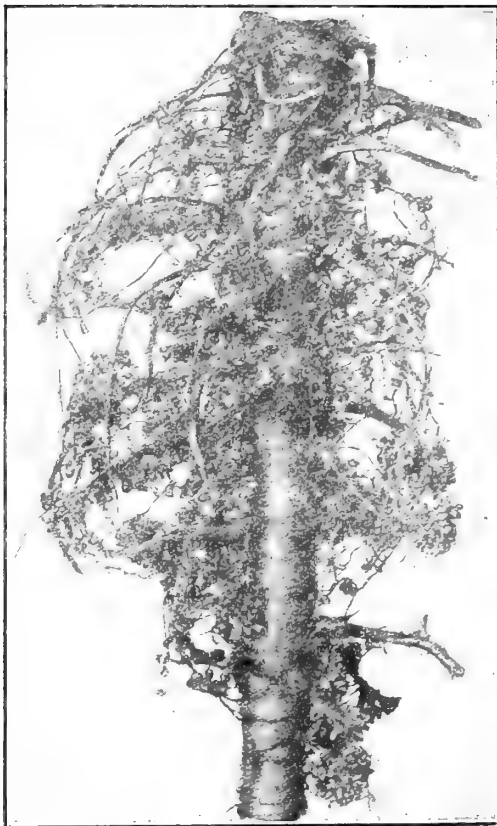
In ordering FARMOGERM specify the kind of seed you wish to inoculate.



POOR SEEDS ARE DEAR AT ANY PRICE. You get the Best when you buy P.-W.'s Mountain Grown. They are Hardier.

CLOVER SEEDS

Prices subject to market changes. Ask for quantity prices. Seamless bags at extra cost.



Showing Nitrogen Nodules on Root of Sweet Clover

YELLOW BLOSSOM (*Melilotus Officinalis*)—This variety belongs to the same family as White Blossom Sweet Clover but it is not so prolific in growth, will not produce so large a tonnage, does not grow quite so tall, but is from ten days to three weeks earlier.

The flowers are yellow instead of white. For bee pasture and fertilizing purposes, we believe it to be equally valuable, but for hay or pasture it is not so desirable. **Lb. 55c, postpaid. Not prepaid, 10 lbs. \$4.00.**

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 lasts longer, is harder, standing adverse conditions, both of summer and winter weather, better than the ordinary clovers, and is also better adapted for grazing purposes. It is somewhat similar in growth and appearance to Red Clover, but has a lighter colored bloom. Farmers have in recent years been sowing Swedish Alsike Clover in mixture, both with Red and the Mammoth and other grasses, claiming that it tends to insure good stands and better crops of clover than sowing the Red or the Mammoth alone, the quality of the hay thus produced is excellent. 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. 75c, postpaid. Not prepaid, 10 lbs. \$6.25.**

White Dutch Clover (*Trifolium Repens*)—See Lawn Seed. **Lb. 85c, postpaid. Not prepaid, 10 lbs. \$7.00.**

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. The first is usually cut when it is in blossom for hay; the last crop may be harvested for seed, cut for hay, or plowed under to add fertility to the soil. Sow either in the spring or fall, and if no other grasses are used, at the rate of from eight to fifteen pounds to the acre, according to quality of seed used and condition of the soil. **Lb. 80c, postpaid. Not prepaid, 10 lbs. \$6.50.**

As market conditions change almost daily, write for prices on quantities.

SWEET CLOVER

As a money maker-maker this has been rightfully named "Alfalfa's Twin Sister." Years ago here in the West this plant grew wild along the ditch banks and by-ways and was considered a pest. Simply because we were ignorant of its real worth. Today the country over it is much sought after and is giving alfalfa a hard run for first place in value among the entire list of farm crops.

Its value in the redemption of alkaline lands cannot be over-estimated. If you have land of this class get busy at once. Sweet Clover will be its salvation. It will not only reclaim your alkaline and worn-out soils, but at the same time will yield crops of pasturage, hay and seed ranging in value from \$75.00 to \$150.00 per acre.

It grows in a variety of soils—heavy, light wet or dry, almost anywhere except in acid soil.

Growers report extra large yields of corn and other crops following Sweet Clover.

Hay and Pasture—From many states come glowing reports of the value of Sweet Clover for hay and pasture. After acquiring the taste, stock often prefer it to other pasture.

It is usually possible to get one cutting of Sweet Clover the first year and two good hay crops the second; or hay and pasture, or one hay crop and one seed crop. It is a splendid feed, about equal to alfalfa.

Sow the seed at the rate of 10 to 15 pounds per acre, with a nurse crop of grain, or alone, in well prepared fields in April or May. Cover the seed very lightly. It may follow a cultivated crop by preparing the seedbed with surface-working implements. If the soil is plowed, this should be done several weeks before seeding. Sweet Clover requires a very firm, compact soil.

Sweet Clover is a legume having the same bacteria on its roots that grow on alfalfa. Consequently it supplies nitrogen to the soil and prepares the way for alfalfa. We recommend inoculation of the seed. See Farmogerm, Page 35.

WHITE BLOSSOM OR BOKHARA

This lives two years and then dies. It is the variety commonly referred to when "Sweet Clover" is mentioned and is the best for general use.

It is an erect branching biennial plant with woody stems, the first season growing 1½ to 3 feet high and developing a large root, in which is stored food material for the second season's growth. The growth the second season usually reaches a height of 4 to 7 feet. It bears flowers and seed the second season and then the plant dies, so it is readily controlled by cutting before it goes to seed, which will prevent any seed being self-sown. **Lb. 55c, postpaid. Not prepaid, 10 lbs. \$4.00. Ask for quantity prices.**



Medium Red Clover



A field of P.-W.'s Swedish Select Oats, without doubt the best variety for Western conditions.

FARM SEEDS

Prices do not include delivery, except where noted. Write for special quotations.

BARLEY

Sow 60 to 90 pounds per acre; on dry land 40 to 50 pounds.

CLUB or BREWER'S BARLEY—This is the staple variety for brewers. It is also good for feeding. 10 lbs. 60c; 100 lbs. at market price.

NAKED, BEARLESS or WHITE HULLESS—This is decidedly distinct from the malting variety, having no beard and shelling off its hull same as wheat. Is the best barley for feeding and is rapidly taking the place of spring rye. 10 lbs. 60c; 100 lbs. at market price.

BLUE or FEED BARLEY—This is a very hardy kind, producing very large, coarse, bearded heads and abundance of fodder. It is not used for brewing but makes the best green food. 10 lbs. 50c; 100 lbs. at market price.

EMMER OR SPELTZ

EMMER or SPELTZ—Is a valuable grain from Russia grown in the United States for several years. It is adapted to a wide range of soil and climate, and is of superior feeding value, yielding much more heavily than oats and barley. This grain grows tall, like rye, and matures as early as barley and yields from 40 to 80 bushels to the acre, and from four to six tons of straw hay. Tough and hardy, it stands drought better than any other grain, making it a sure crop. Prepare your land as you would for wheat or oats, and sow at the rate of 75 or 100 lbs. per acre. Sow very early in the spring or fall, and do not let it stand until it gets too ripe before cutting, as any grain that yields well, shells easily. In the green state it makes an excellent pasture. 10 lbs. 10c; 100 lbs. at market price.

FETERITA

FETERITA—Is 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. No variety of seed of any kind has ever sprung more suddenly into such popular favor. Feterita has taken the country by storm. 10 lbs. 15c; 100 lbs. at market price.

KAFFIR CORN

KAFFIR CORN—Is unsurpassed for dry alkali land, on which no better fodder and grain crop grows. Its great root system enables it to produce wonderfully in drought sections and breaks up new ground for other crops. Cattle relish the stalks, while the grain is a very valuable food for poultry. 10 lbs. 15c; 100 lbs. at market price.

MILLET

COMMON—Very early; abundant. 10 lbs. 10c; 100 lbs. at market price.

LIBERTY—A valuable fodder plant. Makes excellent hay. Sow 25 pounds to the acre. 10 lbs. \$1.50; 100 lbs. at market price.

BILLION DOLLAR GRASS or JAPANESE—Great claims are made for it as to productiveness and value as a forage plant. Superior to corn fodder in feeding for milk. Grows six to eight feet high. Sow forty pounds per acre. 10 lbs. \$1.50; 100 lbs. at market price.

OATS

SWEDISH SELECT—A very hardy variety specially recommended for the north. Owing to its great root development it withstands drought very well. The grain is short, plump, white and very heavy, averaging 40 pounds per bushel. 10 lbs. 50c; 100 lbs. at market price.

New Kherson—It is one of the earliest oats grown, and is sometimes called "90-day oats," as it has ripened crops in 90 to 90 days. It is the very best variety to grow in the mountains or in short season districts. 10 lbs. 50c; 100 lbs. at market price.

RAPE

DWARF ESSEX—The fattening properties of Rape are said to be very much better than those of clover. It also makes splendid green feed for poultry. Rape is best sown in drills, at the rate of three to five pounds per acre, or it can be sown broadcast, when from six to eight pounds per acre should be used. 10 lbs. \$1.75; 100 lbs. at market price.

RYE

Sow 60 to 80 pounds per acre; on dry land 30 to 40 pounds.

FALL or WINTER—It is a good crop for early fall or spring pasture, as it keeps green a long time in the fall, and starts growing again as soon as the weather gets a little warm. 10 lbs. 50c; 100 lbs. at market price.

LIBERTY RYE—Same habits of growth as regular Fall Rye., except much larger heads and kernels. It yields from 30 to 50 per cent larger crops than the ordinary variety. 10 lbs. 75c; 100 lbs. at market price.

Since the prices on all farm seeds fluctuate greatly always write for special quotations on quantities.



Harvesting Marquis Wheat on an irrigated farm in Southern Idaho. Note the rank growth.

SPRING WHEAT

Prices quoted, not prepaid. Sow 60 to 80 lbs. per acre on Irrigated and 40 to 45 lbs. on Dry Farms.

EARLY BART

This is a new variety of great promise for the Mountain States. It has been grown quite extensively in the Northwest. Supt. D. E. Stephens of the Oregon Agricultural Experiment Station has this to say about it:

"The Early Bart spring wheat has been one of our best spring wheats. Upon our recommendation, farmers here have been growing it for the past two years and are very well satisfied with it. In fact, the Early Bart has practically replaced the Pacific Bluestem wheat, which prior to two years ago was about the only variety of spring wheat grown here commercially. For a six-year period the Early Bart variety has exceeded the yield of the Pacific Bluestem on the station here by a little more than three bushels per acre."

Last year on our own Trial Grounds it proved the heaviest yielding variety. Another test conducted by A. E. Jensen on his farm near Moroni, Utah, under absolutely dry conditions Early Bart yielded thirty bushels per acre, while the two other varieties in the same plot, planted the same day, came through with less than twenty bushels per acre. With such a showing under the trying conditions of last year we have no hesitancy in recommending it as

NOTE—We carry the Standard Varieties of Fall Wheat.

the leading spring wheat to date, not only for the dry farm, but on irrigated farms as well. It is a large, white-berried, bearded variety of finest milling quality. 10 lbs. \$1.00; 100 lbs. at market price.

MARQUIS WHEAT

A variety produced by scientific cross-breeding of the old Calcutta and the frost-resisting Red Fyfe variety. First introduced by the Central Experiment Station in Ottawa, Canada, and has since rapidly displaced many other varieties in the Northwest and in Canada. In appearance Marquis Wheat is similar to Red Fyfe, but the heads as a rule are heavier and the stalks shorter, making it less likely to lodge. The kernel is flinty, a little darker red and more plump than the Fyfe. It is beardless, having smooth yellow chaff, but its most valuable feature lies in its earliness, as it matures a week or ten days earlier than Red Fyfe. Yields 40 to 50 bushels per acre. Price 10 lbs. 60c; 100 lbs. \$5.00.

ALL STANDARD VARIETIES, Blue Stem, Dicklow, Club, Sonora, etc. Sow 60 to 80 lbs. per acre on irrigated land; 40 to 50 on dry land. 10 lbs. 60c; 100 lbs. market price.

If our Fall Catalog does not reach you in time for your needs, write us.

SUDAN GRASS

Sudan is a tall, annual grass, reaching 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 like sorghum and millet and must be seeded each spring, so can never become a pest. It stools very freely, throwing out many stems from one crown.

It is easily cured and handled as a hay crop. The seed is retained well, there being very little loss from shattering. Stock of all kinds eat it readily and will leave any other hay for it. No baneful effects follow feeding it to stock. The food value is second only to alfalfa.

Here Sudan Grass is easily injured by frost and therefore should not be planted until all danger of frost is past.

For a combined hay and seed crop 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.

Broadcast seeding for a hay crop requires from 12 to 20 pounds per acre.

The yield of seed varies from 500 to 1,000 per acre. When cut for hay it yields an immense tonnage of excellent feeding quality. Price, 1 lb. 40c postpaid; 10 lbs. \$3.00, not prepaid.

SALT BUSH

Australian (*Atriplex semi-baccatum*). Will grow on alkaline soil. Much relished by stock, supplying the necessary salt. One pound of seed to the acre if sown broadcast; four ounces if transplanted. In cutting fodder be careful not to injure crown of the plants. Lb. 75c, postpaid.

SORGUM

Early Amber—Furnishes a large yield of most nutritive forage, which can be fed either green or cured, and will yield two or three cuttings a year, stooling out thicker each time it is cut. It grows ten to twelve feet high. Sow broadcast for forage at the rate of 60 pounds per acre. When sown in drills, sow at the rate to 10 pounds per acre in drills three and a half to four feet apart. Lb. 25c postpaid; Not prepaid, 10 lbs. \$1.25; 100 lbs. at market price.

CHINESE DRIP SORGUM—A splendid new variety, very prolific and vigorous, especially desirable for making molasses. Being a heavy cropper it is equally well adapted for fodder and ensilage. Don't fail giving it a trial. Lb. 30c, postpaid. Not prepaid, 10 lbs. \$1.75; 100 lbs. at market price.

SOJA BEANS

This produces enormous crops. It grows about four feet high and yields ten to twenty tons of green fodder per acre, or 20 to 40 bushels of beans.

It is especially valuable for ensilage in combination with fodder corn or Japanese Millet (two parts of millet to one part of Soja Beans), thus furnishing a complete balanced ration.

Soja Beans are great soil enrichers, adding humus and extracting nitrogen from the air.

Sow 40 to 50 pounds per acre. Price 25c per lb., postpaid; 100 lbs. at market price.

FIELD PEAS

Stock Growers, Dairy Farmers, Orchardists and Gardeners everywhere should be interested in this, one of the most useful for all purposes of any farm crop.

Time for Sowing—Being very hardy the fear of rotting in the ground is not considered. The majority sow in April, although a pea-hay crop can be obtained if sown as late as in July. Early sowing is best.

Quantity to Sow—When early sowing is made, 30 to 40 lbs. of seed per acre makes a crop that covers the ground and produces good tonnage. If late sowing is made, 60 to 80 lbs. per acre is advisable, as the crop does not get to mature growth. Thick sowing will aid in choking out weeds.

Harvesting—If wanted as a pea-hay the growth should be at the period when the supply of nutriment in milk is in the vine just forming the pod, cut and cured like ordinary hay. This makes finest feed for dairy cattle; in fact, lambs, sheep, hogs and cattle relish this hay. If peas are desired as dry grain, allow crop to mature and handle in shocks, threshing by machine, after thoroughly dry. The dry seed can be ground into a meal, or be fed whole.

We recommend treating the seed with a Farmogerm before planting. See Page 35.

CANADA FIELD—This is a small-seeded, very hardy pea, vigorous, thrifty, growing five to six feet, immensely productive. Hardy everywhere; can't be beat for all purposes. Lb. 20c, postpaid. Not prepaid, 10 lbs. \$1.00.

San Luis Valley—This Colorado stock pea is a hybrid. The seed has the appearance of a mixed sort, and is well acclimated, hardy, withstanding early frosts and growing until late fall, reaching a length of four to six feet. The vine continues to blossom as it grows, ripening peas on the lower branches and setting more pods above. They can be grown and do well at an altitude of 9,000 feet. Lb. 20c, postpaid. Not prepaid, 10 lbs. \$1.00; 100 lbs. at market price.

Ask for prices on quantities. Growing as we do Field Peas in large quantities, quality considered, we cannot be undersold.

SPRING VETCH

Plant alone or preferably with some cereal such as Rye, Wheat or Oats for a support. Valuable for both soiling and as a cover crop. Sow in spring at rate of 60 to 75 lbs. per acre. Additional value may be secured by treating seed with Farmogerm. See Page 35.

P.-W.'s SILO CORN

Five years ago silos were almost a novelty here in the Mountain States, but there has been such a marvelous awakening, especially among the dairy farmers, that it will soon be a rare thing to find an up-to-date dairyman in this section without one. The wonderful advantages of ensilage will not be confined alone to the dairyman, but as cattle and sheep raising becomes more generally confined to the farm, ensilage will be the one great solution of the feeding problem.

In general, the advantages of a silo are so many that it is a necessity on every farm where any livestock is kept. The best recommendation for the silo is the one all users give it, they don't see how they ever got along without it.

Of all the crops useful for ensilage, Corn is the most largely used and without doubt the most profitable. Alleviated to this situation we have made Ensilage Corn a specialty and we are now able to offer our customers the most profitable varieties adapted to the climatic conditions of various sections of the West. Write and tell us where you are going to plant and for what purpose and we can give you valuable advice as to the variety which will be the most profitable.

PLANTING AND HARVESTING FOR ENSILAGE

Planting—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 the 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. For fattening beef cattle the opposite is true; the more ears produced the greater the fattening properties and for that reason less seed should be sown per acre, giving it a better opportunity to mature. In either case the tonnage per acre will be about the same.

Cutting the Corn—The proper time to cut corn for silo filling is when the kernels are well dented and almost mature. The lower leaves are turning brown at this time but the stalks are still green and contain a large amount of succulence.

If cut immature and green, the silage will be sour and too laxative, neither does it have the feeding value of matured corn.

Caution—The blow pipe must be as nearly perpendicular as possible, so that the air will sift the material. If the pipe has much slant, the material will settle on the lower side and clog, the air passing over it instead of pushing it up.

Adding Water—If corn for any reason becomes over ripe and dry, excellent silage can still be made from it by adding water while it is being cut into the silo, a half a barrel to each load of corn.

Good silage can be made from frosted corn in the same way. In order to get a perfect distribution of water in the silage, it should be run through the blower with the silage. This can be done by running a steady stream into the blower by means of a small hose.

Packing the Silage—Thoroughly packing by tramping improves the quality of silage. This should be done thoroughly, close to the wall. The center will take care of itself.

The surface of the silage while the silo is being filled should be kept concave, that is lower in the center than at the walls. This will prevent an air space occurring between the wall and the silage from settling later.

Danger—When the corn is cut into the silo it soon begins to heat, which causes large quantities of carbonic acid gas to be given off. The gas being heavier than air collects in the silo and must be given a chance to flow out before any one is sent into the silo when work commences in the morning. This may be done by opening a door at the surface of the silage. Running in fresh material will soon mix up the gas with fresh air and make it safe.



CAPACITY OF SILOS

Height	Diameter	Tons Cap.
24 feet	12 feet	54
28 feet	12 feet	64
28 feet	14 feet	86
30 feet	14 feet	92
32 feet	16 feet	120
34 feet	16 feet	128
32 feet	18 feet	122
34 feet	18 feet	172
36 feet	18 feet	182

SILAGE FOR 200 DAYS

No. of Lbs. fed Animals to be fed	No. of head	Tons silage per day required
15	25	32.5
15	30	45.0
15	35	67.5
20	30	60.0
20	35	70.0
20	40	80.0
25	35	87.5
25	40	100.0
30	35	105.0



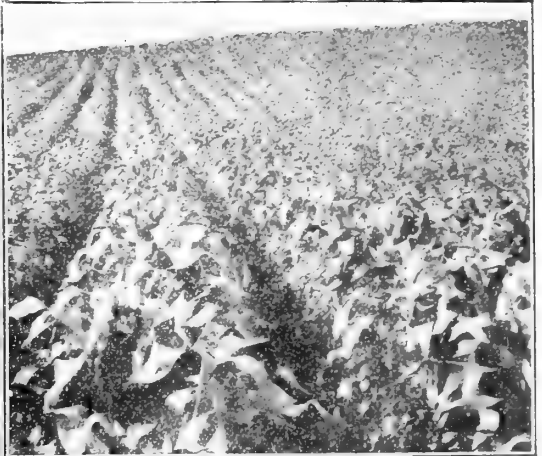
P.-W.'s Mountain States Silo Corn No. 1

P.-W.'s MOUNTAIN STATES SILO CORN NO. 1

"Once Sown, Always Grown"

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 corns in cultivation. It is our own selection from Improved Leaming and will mature its grain in 100 days, even under unfavorable conditions; and about 90 days where climatic conditions are suitable. So that planters in any section with a growing season of about 80 days between Spring and Fall frosts will be perfectly safe for ensilage with P.-W.'s Mountain States Silo Corn No. 1 under normal conditions and good soil it grows from 12 to 20 feet in height, producing an immense tonnage of fodder per acre. All things considered we are justified in saying it stands far above all other varieties for ensilage purposes in the West. You will never regret giving it a trial this year.

Cultural Directions—Page 39. For price see below.



P.-W.'s Mountain States Silo Corn No. 2

P.-W.'s MOUNTAIN STATES 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. This increased grain feature appeals strongly to those who are using ensilage for fattening cattle and sheep. Many dairymen also, who wish a stronger grain ration use it in preference to our No. 1. We recommend it especially for districts where the growing season is short, as it will mature on an average of about 10 days earlier. Thus the highland valleys through the entire West can safely produce ensilage from P.-W.'s Mountain States Silo Corn No. 2 where the period between frosts is not less than 70 days.

Cultural Directions—Page 39. For price see below.
Red Cob Ensilage—A pure white corn on a red cob. It is sweet, tender, juicy, has short joints and produces an abundance of foliage. Every dairy farmer should grow this sort for summer fodder; it will keep up the flow of milk during the hot weather when the grass is burnt up. For fodder sow in drills 3 feet apart, 60 pounds per acre, or if broadcast 120 pounds per acre. See below for price.

FIELD CORN

For grain, sow in hills 3 feet apart, 8 to 10 pounds per acre.



"Pride of the North" as it Grows in Idaho

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. Ears varying from eight to ten inches long. Usually eight to ten rowed, one to two ears on a stalk. Price, see below.

P.-W.'s IMPROVED LEAMING—This is one of the earliest large yellow Dent corns in cultivation, ripening in 90 to 100 days from planting. It is extra early, and not a hard flinty corn. The ears are large and handsome, with deep, large grains; orange color on red cob. It grows from 12 to 20 feet in height in good soils and yields immensely in fodder per acre. For an ensilage or fodder corn it has no equal to date that is so well adapted to the Rocky Mountain States. Price see below.

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. The ears average eight inches in length and are borne usually two on a stalk. The cobs are well filled and the individual kernels, plump and of good color; thoroughly matures in ninety days in a good location.

PRIDE OF THE NORTH—An exceptionally early Dent variety. Stalks of medium height with broad leaves. The ears, which average 8 to 10 inches in length, have from 12 to 16 rows. Grains long and deep yellow. For cold valleys where seasons are short it cannot be beat.

Price by mail postpaid, lb. 25c. Not prepaid, lb. 15c; 10 lbs. \$1.25. Ask for Quantity Prices.



P.-W.'s Lawn Seed Used for Utah State Capitol Grounds.

Thousands have admired the beautiful velvety appearance and marveled at the quick, thrifty growth.

LAWN SEED

The ground should be well spaded and thoroughly 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 to 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 sow a little oats with the lawn seed to protect the tender grass from the intense heat of the sun. The weeds and fowl grass, which most soils produce, can be kept down and destroyed by repeated mowing. The seed offered on this page has been most carefully selected and none better can be obtained anywhere.

P.-W.'s VELVET GREEN LAWN MIXTURE

The best lawn seed experience can suggest of that money can buy. Produces a beautiful, permanent lawn in four to six weeks. The most important thing to consider in selecting seeds for lawn grass is to obtain proper mixture of several varieties, for two reasons: First, each variety is at its best during a certain part of the season. By properly choosing early, medium and late grasses a smooth, even green lawn is assured from early spring to late autumn. Second, a given area can support only so many grass plants of one kind, for they all absorb the same sort of food, but if several varieties are sown the same area will support many more plants, as different sorts live on various elements in the soil. This will give a much thicker and more luxurious turf all over the lawn. With these facts in mind, our P.-W.'s Velvet Green Lawn Seed is scientifically combined. Our experience has given us an intimate knowledge of grasses, their habits and requirements. In P.-W.'s Velvet Green Grass Seed are included only the very best varieties—pure, clean and free from fowl seed. Sow at rate of one pound to 200 square feet. Price: 60c per lb.; 3 lbs. \$1.65, postpaid. Not prepaid, 10 lbs. \$4.50.

KENTUCKY BLUE GRASS

Our stock is extra fancy re-cleaned heavy seed. The purest and cleanest obtainable anywhere. A perfect lawn grass. Price: 55c per lb.; 3 lbs. \$1.50, postpaid. Not prepaid, 10 lbs. \$4.00.

WHITE CLOVER

First class re-cleaned pure seed. Specially selected for lawn use. Price 85c per lb., postpaid. Not prepaid, 10 lbs. \$7.50.

FERTILIZERS FOR LAWN AND GARDEN

GROZ-IT PULVERIZED MANURE—A highly concentrated, pulverized, natural animal manure, packed in sacks, light, dry, odorless, free from seeds and all foreign matter, with a plant food value of many times that of ordinary manure. It will not burn your plants, no matter in what quantities you use it—but it is so strong a little goes a long way. Good for anything that grows. Price 5c per lb.; 50 lbs. \$1.75; 100 lbs. \$2.75, not prepaid.

WIZARD—Close and painstaking study for years has enabled the manufacturer to give you a meritorious Fertilizer; saving you time, labor, expense and trouble. One 25 pound bag is equal to 100 pounds of the ordinary chemical fertilizer. Full directions with each order. Price: 25-lb. bag \$2.50; 2 lb. package 35c, not prepaid.

BONE MEAL—This is an excellent fertilizer; safe for all plant life, and very effective. Price: 1 lb. 10c; 50 lbs. \$2.00; 100 lbs. \$3.50.

FLOWER SEED DEPARTMENT



*Beds of Geraniums, Ageratums,
Centaureas, and Sweet Alyssum,
at our Centerville, Trial Grounds.*

A FEW CULTURAL HINTS

There is perhaps nothing one can do that would add more beauty to the home and surroundings for as little cost and trouble as a well cared-for garden. Only those who have tried cultivating a little patch of ground in the rear of the house know how much pleasure is really to be found in the work, and to what extent it entices one out of doors. Any one whose work does not keep him indoors from dawn until dark can try the experiment. An hour or two each day in the summer will transform the most unpromising ground into a thing of beauty, and the expense is trifling.

To those who have never planted Flower Seeds before the suggestions here offered may be helpful. The directions given are based on the average climatic conditions that prevail in the Mountain States. Our customers living elsewhere can readily adapt them to their own localities.

Seeds Planted Out-of-Doors—For most of the ordinary annual flowers, such as Sweet Alyssum, Calliopsis, Marigold, Mignonette, Nasturtiums, etc., the simplest method is to sow directly out-of-doors, when danger of frost is over, in the space they are intended to flower. The ground should be dug and raked fine on the surface. Sow the seeds evenly and thinly, either in lines or in beds, covering them over four times their size and firming the soil over them. Should they come up too thickly, as most of them will likely do, thin out so that the plants will stand from four to twelve inches apart, according to the variety. This plan is also adaptable to many varieties usually started indoors, such as Asters, Verbenas, Stocks, etc., but as a rule their germination is more certain under glass, as they begin to flower much easier when started indoors. The extra trouble is well repaid by their increased bloom period.

Indoor Planting—For all flower seeds which should be started indoors, and this includes some of our best flowers, such as Heliotrope, Lobelia, Salvia, Verbena, etc., the best plan is to use seed pans or small boxes, which should be filled to the depth of an inch with broken pots, coal ashes, or any rough material. The upper inch should be nice sifted soil, composed, if possible, of about one-third each of sand, leaf mould and light garden loam. Press firmly and evenly and water thoroughly the day before sowing. Sow seeds thinly over the surface, covering about one-eighth inch, pressing firmly. Cover with a pane of glass or one or two thicknesses of newspaper to prevent too rapid evaporation of the moisture, and keep an even temperature of 60 or 70 degrees. Water carefully. A single watering or too frequent watering usually leads to failure. Take off the glass after the seeds have germinated. When the seedlings are large enough to handle, they should be transplanted into similar boxes, an inch apart each way, or put into small pots and kept there until time to plant in the open ground. At all times they should have an abundance of air.

When to Plant Hardy Perennials—The seeds of most hardy perennials may be sown at any time from January to October. Early sowings should be made indoors in boxes in the same manner as described above. Or they may be sown out-of-doors in the spring, after frost has past, and transplanted into their flowering places in early autumn or the following spring. Many varieties succeed best sown in autumn, in which case they should be sown in a cold frame, transplanting them to their permanent quarters the following spring. Our aim is to secure the very best strains obtainable, both for home and foreign growth, adaptable to our intermountain region. And we have spared neither pains nor expense with this object in view.

TO AVOID WORDY DESCRIPTIONS AND TO SAVE SPACE AND TIME, WE HAVE USED THE FOLLOWING SIGNS; AT A GLANCE, THEREFORE, ANY VARIETY SO CHARACTERIZED CAN BE PROPERLY CLASSIFIED.

- * Annuals—These attain full growth from seed, flower and die first year.
- † Biennials—These grow from seed the first year, bloom and die the next, though some varieties bloom the first year, if sown early.
- ‡ Perennials—If sown early, sometimes bloom the first year, but all continue to live and bloom year after year without reseeding.
- § Greenhouse Plants—Start inside and cultivate in pots, or else, transplant outside when danger of frost is over.
- ¶ Stove Plants—To be grown inside all the year round for pots only.
- § Climbing Plants.

P.-W.'s "BIG FOUR" FLOWER SEED COLLECTIONS

The collections offered below are made up of only tried and choice varieties, carefully selected to furnish varied, profuse and continuous display of flower throughout the season. As they are put up in advance of our rush season, no changes can be allowed at the reduced prices at which they are sold. Like all other seeds we send out under P.-W.'s label, these seeds are fresh and of highest purity and germination. Cannot fail to please you in every way.

Collection No. 1

ANNUAL FLOWER SEEDS

FOR GARDENS, BEDS, BORDERS, ETC.

1 Pkt. Each of Kinds Enumerated Below \$1.00 Postpaid
(Regular Price \$1.50)

Ageratum—Compact bushes, 8-in. high, blue flowers.
Alyssum, Little Gem—An improved white Sweet Alyssum.
Aster, P.-W.'s Giant Branching—Mixed colors.
Calliopsis, Golden Wave—Large flowers, freely produced.
Candytuft—Hyacinth-like spikes of white flowers.
Celosia—Brilliantly showy.
Cosmos, Giant-Flowering—Mixed; fall-flowering, fine.
Dianthus, Double Pink—Colors, edged and marbled.
Escholtzia, Golden West—California Poppies.
Hollyhock, Annual Ever-Blooming—Mixed colors.
Larkspur, Giant Hyacinth-Flowered—Large showy spikes.
Marigold—Mixed; improved African.
Mignonette—Large spikes of fragrant flowers.
Nasturtiums, Giant Flowering Dwarf—Various colors.
Petunia, Large Flowering, Single Mixed—Blotched, striped.
Phlox Drummondii, Large Flowering, Mixed—Improved.
Poppy, Giant Double, Brilliant Mixture—Immense flowers.
Salvia, Scarlet Sage—Vivid scarlet.
Scabiosa, Double—Mixed colors, large-flowering.
Stocks, Large-Flowering Dwarf, Double, 10 Weeks—Mixed.
Sweet Peas, Giant Spencer—Mixed.
Verbena, Mammoth, Mixed—Large flowers.
Zinnia, Large Double—Mixed colors, immense flowers.

Collection No. 3

HARDY PERENNIAL FLOWER SEEDS

FOR GARDENS, BORDERS AND GROUPS

1 Pkt. Each of Kinds Enumerated Below \$1.00 Postpaid
(Regular Price \$1.50)

Achilles Ptarmica, fl. pl.—Double white flowers, profuse.
Alyssum Saxatile Compacta—Spring-blooming.
Aquilegia of Columbine, Hybrids—Beautiful new colors.
Asters, Hardy—Improved Michalemas Daisies.
Canterbury Bells—The "Cup and Saucer" type.
Candytuft Gibraltar—Rose and white, hardy.
Coreopsis Lanceolata, Harvest Moon—Golden-yellow.
Delphinium, Large Single Hybrids—Mixed colors.
Dianthus Plumarius, Double Mixed—Grass Pinks.
Digitalis Gulxinodioides, Mixed—Foxglove, various colors.
Gaillardia Grandiflora, Mixed—Red, yellow, etc.
Hollyhock, Double, Mixed Colors—Beautiful colors.
Pansies, Finest Mixed—Beautiful colors.
Poppy, Hardy Oriental Hybrids, Mixed—Immense flowers.
Pyrethrum, Large-Flowering Hybrids, Mixed—Beautiful blue.
Scabiosa Caucasia—Saucer-shaped.
Sweet William, Large-Flowering, Single—Mixed.
Wall-Flower, Double, Mixed Colors—Fragrant flowers.

Collection No. 4

SEEDS OF CLIMBING ANNUALS

1 Pkt. Each of Kinds Enumerated Below for 50c Postpaid
Baloon Vine—White flowers, 10 feet.
Canary-Bird Vine—Yellow butterfly-like flowers, 15 feet.
Cobaea Scandens—Beautiful rich blue flowers, 20 feet.
Cypress Vine, Mixed—Feathery foliage, star-shaped flowers.
Dolichos—Wistaria-like clusters crimson flowers, 10 feet.
Humulus, Variegated—Foliage striped, 20 feet.
Moon Flower Vine—Immense white flowers, 50 to 75 feet.
Morning Glory, Imp. Jap., Mixed—Magnificent colors.
Nasturtium, Climbing, Mixed Colors—New colors, 10 feet.
Sweet Peas, Grandiflora, Mixed—Finest strain.

Collection No. 2

SEEDS OF HARDY CLIMBERS

(For Permanent Positions)

1 Pkt. Each of Kinds Enumerated Below 25c Postpaid

Ampelopsis Veitchii (Boston Ivy)—Clings to walls, etc.
Aristolochia Sipho—Dutchman's Pipe Vine.
Bignonia Grandiflora—Trumpet Creeper, 40 feet.
Clematis Paniculata—Mass of white star-like flowers.
Kudzu Vine—Grows rapidly, pea shaped, purple flowers.
Lathyrus Latifolius (Everlasting Pea)—Mixed colors.

AIDS IN SELECTING FLOWER SEEDS FOR SPECIAL PURPOSES

BACKGROUNDS AND BORDERS

Large Showy Annuals

Amaranthus	Poppy (Tall)
Celosia Plumosa	Ricinus
Cosmos	Salvia
Larkspur	Sunflower
Marigold (Tall)	Zinnia

Dwarfer Sorts

Alyssum (Hardy)	Dianthus
Candytuft (Hardy)	Myosotis
Carnation	Pansy
Daisy, Double	Pinks (Hardy)
Godetia	Sweet William
	Violet

EDGING, WALKS ETC.

Ageratum	Myosotis
Alyssum	Phlox, Dwarf
Asters, Dwarf	Pinks, Chinese
Candytuft	Pyrethrum
Dusty Miller (Centaurea)	Sweet Pea, Cupid
Lobelia Comp.	Nasturtium, Dwarf
Marigold, Dwarf	Zinnia, Dwarf

FOLIAGE

Amaranthus	Kochia
Canna	Marvel of Peru
Centaurea can.	Pyrethrum Aure
Centaurea Gymnoc.	Ricinus
Coleus	

CUTTING

Acroclinum	Marigold
Antirrhinum	Matricaria
Aquilegia	Mignonette
Aster	Myosotis
Calendula	Nasturtium
Callisopsis	Pansy
Centaurea	Phlox
Campanula	Poppy
Carnation	Pyrethrum
Chrysanthemum	Salpiglossis
Coreopsis	Scabiosa
Cosmos	Schizanthus
Dahlia	Stock
Denphinium	Sweet Pea
Dianthus	Sweet William
Each-scholtzia	Sweet Sultan
Gaillardia	Verbena
Helianthus	Wallflower
Larkspur	Zinnia

PLANTS SUITABLE FOR POTS

THAT MAY BE GROWN

FROM SEEDS

Ageratum	Heliotrope
Antirrhinum (Dwarf)	Mignonette
Asters (Dwarf)	Myosotis
Begonias	Nasturtium (Dwarf)
Carnation	Petunia
Cineraria	Primroses
Coleus	Stocks
Cyclamen	

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
Calosia	Portulaca
Chrysanthemum	Salvia Splen.
Convolvulus	Stocks
Minor	
Coreopsis	Verbena
Dahlia	Zinnia
Dianthus	

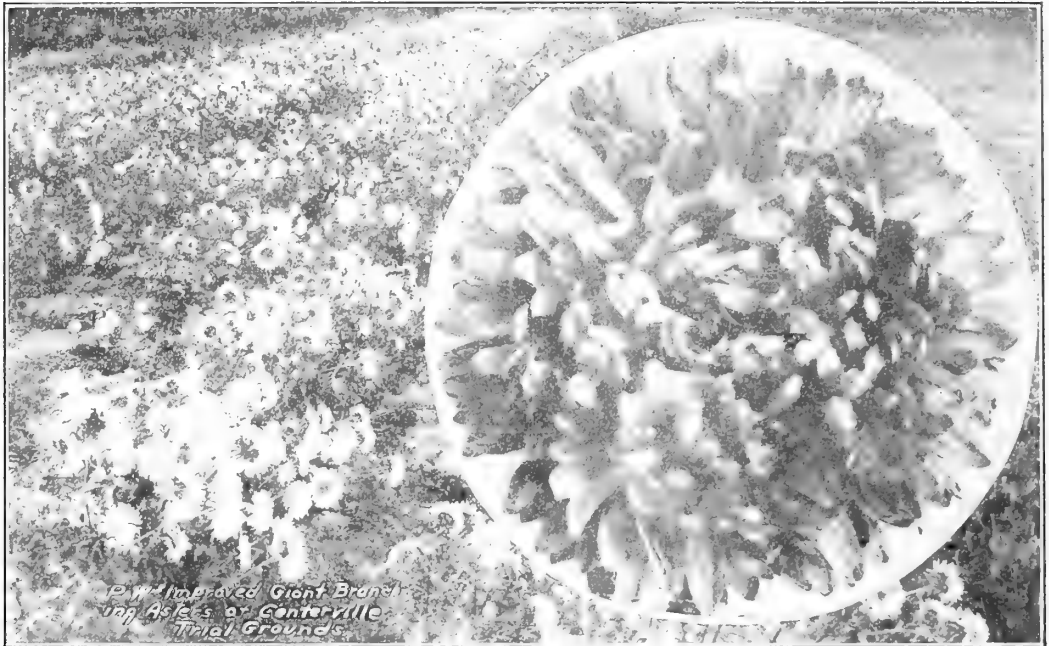
PARTLY SHADY PLACES

Aconitum	Digitalis
Antirrhinum	Hardy Primrose
Aquilegia	Matricaria
Begonia, Tuber	Myosotis
Bellis	Poppies (Hardy)
Canterbury Bells	Schizanthus
Coreopsis (Hardy)	Pansy
Cowslip	Violet
Delphinium	

DROOPING PLANTS FOR VASES, HANGING BASKETS, VERANDA, BOXES, ETC.

Alyssum	Nasturtium
Lobelia	Smilax
Petunia	

IN OUR FLOWER SEED DEPARTMENT, as in all other divisions of our Seed Business, the most painstaking care is exercised to inform ourselves fully as to purity, germination and genuineness of every lot of seed offered, so that our customers can depend that every packet of seed received under our label is thoroughly dependable and will handsomely repay for cultivation. Prices quoted on all Flower Seed are Postpaid.



ASTERS*

Of our list of flowers from seed there is now none more popular and generally satisfactory than the Aster, and during the past few years it has grown greatly in the public esteem owing to the great improvements which have been made. For late summer and fall display it has no equal owing to the rich colors of its perfectly double flowers, its numerous forms and free-blooming. Sow seed early and give deep, rich soil, with plenty of mulching.

For best results sow seed early indoors, then transplant to open ground.

IMPROVER GIANT CREGO*

This flower is giant in size, many blossoms six inches across. The petals are nearly double the length of the older varieties and are twisted and curled into a very fluffy effect. Considered by many the best Aster yet introduced. In our estimation they supercede the Ostrich Feather, which we have discontinued.

The plants are of strong-branching growth and usually attain a height of from two to two and one-half feet. The delightful flowers are borne in abundance from late August until the end of September.

White Shell Pink Crimson Dark Blue Purple
Each of the above: $\frac{1}{4}$ oz. 35c; pkt. 10c.
All colors mixed: Pkt. 10c; $\frac{1}{4}$ oz. 30c.

KING*

The habit is similar to the popular Giant Branching, vigorous in growth, long stems. In form petals somewhat resemble the quilled varieties, but are much larger and broader, those in the center being curled and incurved, completely covering the crown. In shape and size the bloom is round, full and very large.

White Pink Rose Crimson Violet Lavender
Each of above: Pkt. 10c; $\frac{1}{4}$ oz. 30c.
All colors mixed: Pkt. 10c; $\frac{1}{4}$ oz. 25c.

PAEONY-FLOWERED*

A mid-season variety which in vigor or growth, habit, size and all other qualities which go to make up a first-class Aster is unequalled. The plants grow about 18 inches high, every flower being borne on a long stem, making them valuable for cutting or bedding. Mixed: Pkt. 10c; $\frac{1}{4}$ oz. 30c.

HARDY ASTER (Perennial)‡

Michaelmas Daisies. Single flowering, hardy herbaceous plants thriving in any good garden soil. If sown early in the spring they will flower the first season. Pkt. 10c; $\frac{1}{4}$ oz. 50c.

Abronia (Umbrellata Grandiflora).*† Six inches. Very pretty trailing Sand Verbena, with numerous clusters of sweet scented rosy-lilac flowers. Does well in poor soil. Pkt. 10c; $\frac{1}{4}$ oz. 50c.

P.-W.'s GIANT BRANCHING

Giants in size, marvels of beauty. The plants are compact and bushy, from 24 to 30 inches high, and produce from 20 to 30 blossoms each. These are borne on strong, stiff stems, are from three to five inches in diameter; in form, shape and color resembling chrysanthemums. We offer them in distinct shades of color. Autumn flowering.

White Lavender Light Blue
Flesh Pink Crimson Purple

Each of above: Pkt. 10c; $\frac{1}{4}$ oz. 25c.
All colors mixed: Pkt. 10c; $\frac{1}{4}$ oz. 20c.

QUEEN OF THE MARKET*

The earliest flowering first-class Aster, coming into flower in July, or fully three weeks in advance of the general run; of branching habit; flowers of good size and borne on long stems, making them exceedingly valuable for cutting; excellent for growing under glass; one foot.

White Lavender Light Blue
Flesh Pink Crimson Purple

Each of above: Pkt. 10c; $\frac{1}{4}$ oz. 25c.
All colors mixed: Pkt. 10c; $\frac{1}{4}$ oz. 20c.

P.-W.'s SPECIAL MIXTURE DWARF ASTERS*

This is comprised of distinct and most desirable varieties of Early Dwarf Asters. The effect will surely please. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

P.-W.'s SPECIAL MIXTURE OF TALL ASTERS

Made up of many varieties and colors of tall growing asters, specially combined to give a succession from early summer until late fall. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

Acanthus (Latifolius).‡ Three feet. Handsome decorative plant; broad, deeply cut foliage; beautiful for solitary plants in lawn or for grouping with other plants. Pkt. 10c; oz. 40c.

Achillea (The Pearl)‡ Three feet. From spring until frost covered with heads of purest white flowers; very double. Useful for cut flowers. Sow seeds early. Pkt. 15c.

Aconitum (Napellus)‡ Three feet. Monkshood. Long spikes of curiously shaped blue flowers. Plant in shrubbery or shady places of the garden. Pkt. 5c; ¼ oz. 25c.

Acroclinium*—"Everlasting," growing about 15 inches high, bearing lovely white or rose-pink flowers, which, when cut in the bud state can be dried and used in winter bouquets. A nice thing to grow in a mixed border aside from its use as an everlasting.

Double Mixed. Pkt. 5c; ¼ oz. 30c.

Single Mixed. Pkt. 5c; ¼ oz. 20c.

Adonis (Aestivalis)‡—One foot. Flos Adonis. Pretty little plant with feathery fresh green foliage, dotted with innumerable small blood-red flowers. Pkt. 5c; ½ oz. 25c.

AGERATUM*

One of the best summer blooming plants grown from seed. They are rapid growers, early and constant bloomers. Set the dwarf sorts 10 inches apart and they soon make a low mass of charming blue or white.

Mexicanum—Swanley blue. Eight inch. dwarf. Fine for edgings. Pkt. 5c; ¼ oz. 35c.

Album (White)—Pkt. 5c; ¼ oz. 25c.

All colors mixed. Pkt. 5c; ¼ oz. 20c.

ALLYSUM (Mad-Wort)

Pretty little plants for beds, vases, baskets, edgings or rockwork; blooming profusely all summer; useful also for winter flowering. Very sweetly scented.

LITTLE GEM or **CARPET of SNOW**—Of dwarf, compact habit, four to six inches in height. It begins to bloom when quite small, and the plants are a solid mass of white from spring to late in autumn, and undoubtedly the best white flowering edging plant in the list. Pkt. 5c; ½ oz. 35c; oz. 50c.

Sweet Allysum (A. Martinum)*—Of trailing habit; flowers white. Pkt. 5c; ½ oz. 20c; oz. 35c.

Saxatile Compactum (Basket of Gold)‡—Showy golden-yellow flowers; hardy perennials; blooms the first season if sown early indoors; excellent for rockwork; one foot. Pkt. 5c; ½ oz. 25c.

AMARANTHUS*

Brilliant foliaged, growing about three feet high. All are useful in borders of tall plants or for the center of large beds. They thrive best in a hot, sunny location, not too rich soil, and given sufficient room to develop their full beauty.

Tri-Color (Joseph's Coat)—Pkt. 5c; ¼ oz. 25c.

Caudatus (Love Lies Bleeding)—Pkt. 5c; ¼ oz. 15c.

Cruentus (Prince Feather)—Pkt. 5c; ¼ oz. 15c.

AMPELOPSIS (Veitchi)†‡

The well-known Boston or Japanese Ivy. See description on plant pages. Pkt. 5c; ¼ oz. 15c.

ANTIRRHINUM (Snapdragon)*

One of the most valuable flowers which can readily be grown from seed. We offer two distinct types, the large-flowering, tall-growing, or giant, and the equally large-flowered, half-dwarf variety, practically the same colors being offered in both the Giant and Half-Dwarf sorts. Seed sown out of doors the first week of May come into bloom early in July, remaining in full flower until November. For earlier flowering, they may be started indoors or in a frame in March, transplanting them to the open when weather is suitable.

TALL GIANT FLOWERING—20 to 30 inches.

Scarlet White Yellow Pink

Each of above. Pkt. 10c; ¼ oz. 25c.

Tall Giants—Mixed colors. Pkt. 10c; ¼ oz. 20c.

HALF-DWARF GIANT FLOWERING—About 18 inches.

Scarlet White Yellow Pink

Each of above. Pkt. 10c; ¼ oz. 30c.

All colors mixed. Pkt. 10c; ¼ oz. 25c.

AQUILEGIA (Columbine)‡

Charming hardy plants, bearing in countless numbers through May and June exquisite clear blue, white, rose, yellow, purple and striped blossoms. For planting in permanent borders or edges of shrubbery is one of the best.

Double Varieties—Mixed. Pkt. 5c; ¼ oz. 25c.

Single Varieties—Mixed. Pkt. 5c; ¼ oz. 20c.

ARISTOLOCHIA SIPHO (Dutchman's Pipe)‡‡

A noble foliage plant, and when trained against a house or trellis, the effect is matchless. Its small flowers resemble the "Pitcher Plant." Thirty seeds 10c.



Canterbury Bells

BALLOON VINE*‡

Ten feet. Thrives in light soil. One of the prettiest climbers. Remarkable for its inflated membranaceous capsules, containing the seed. It is sometimes called Love-in-a-Puff. Flowers white. Pkt. 5c; ½ oz. 20c.

BALSAM (Lady's Slipper)*

An old and favorite garden flower, producing its gorgeous masses of beautiful brilliant-colored double flowers in the greatest profusion; of easy culture; succeeds in a good rich soil; tender annuals. Two feet.

Double Camelia Flowered—Finest mixed. Pkt. 5c; ¼ oz. 25c.

BEGONIA SEMPERFLORENS*‡

Twelve inches high. Of the greatest value for bedding; the flowers, although small, are of brilliant colors and borne in great profusion from summer to autumn. Seedlings of spring bloom in summer, while seedlings of summer make valuable decorative plants for the greenhouse during winter.

All colors mixed. Pkt. 10c; ¼ oz. \$1.00.

BEGONIA (Tuberous Rooted) ‡‡

Eight to twelve inches. The newer forms of Begonias are among the most brilliantly beautiful of flowering plants. Seed should be sown in February or March in pots on a surface of fine soil. The plants will give an abundance of bloom the first year, and at the end of the season they may be dried off by withholding water, the tubers kept in a dry place, free from frost and planted the following spring, when they will bloom more freely than ever.

Double—Mixed. Pkt. 25c.

Single—Mixed. Pkt. 25c.

BIGNONIA RADICANS (Trumpet Vine)*‡

Magnificent, hardy, deciduous climber, with brilliant flowers deserving a first place as an ornament and effective covering for walls, houses, etc. Hardy perennial. Height 20 to 30 feet. Pkt. 5c; ¼ oz. 25c.

CALIOPSIS*

Showy and beautiful free-flowering annuals, of the easiest culture, doing well in any sunny position, blooming all summer and excellent for cutting and massing.

Golden Wave (Drummondii)—Large, rich, golden-yellow flowers. A border of this looks like a line of gold. Pkt. 5c; ¼ oz. 20c.

All Sorts and Colors—Mixed. Pkt. 5c; ½ oz. 20c.

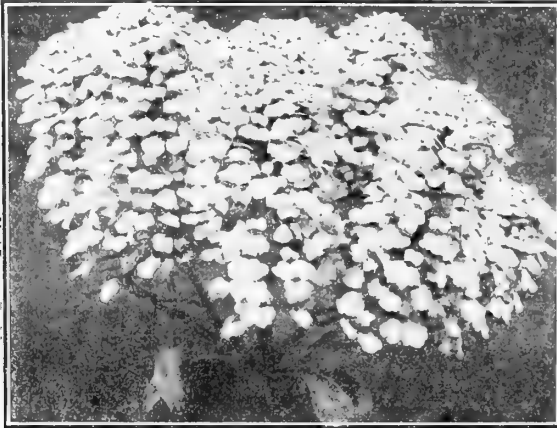
CALENDULA (Pot Marigold)*

A perpetual bloomer, the flowers are oriental in color and exhibit every shade of yellow from ivory to deepest orange. It is the old-fashioned Mammoth "Marigold," and without doubt one of the showiest hardy garden annuals. It blooms from early summer until frost. One foot high. Valuable for pot culture, blooming freely through the winter.

ORANGE KING—Very large double flowers of orange-red. Pkt. 5c; ½ oz. 20c.

All Double—Mixed. Pkt. 5c; ½ oz. 15c.

California Poppy—See Esch-scholtzia.



Giant Hyacinth Candytuft

CANARY BIRD VINE*§

Fifteen to twenty feet. Clean, handsome foliage, with an abundance of bright, canary-yellow blossoms; good rambler and fine for stumps, rockeries, etc.; excellent window vine for winter. Pkt. 5c; ½ oz. 25c.

CANDYTUFT*

A hardy annual, growing about six to eighteen inches high, according to the variety. The blossoms are borne on variously long spikes, and the newer varieties are quite large, flowering and very fragrant.

Umbellata Crimson—Rich deep shade. Pkt. 5c; ½ oz. 20c.
Umbellata Pink—Deep rose-pink. Pkt. 5c; ½ oz. 20c.
Giant Hyacinth-Flowered (White). One foot. The flower heads are of immense size. Pkt. 5c; ½ oz. 35c.
 All colors and Types Mixed—Pkt. 5c; ½ oz. 20c.
Gibraltaria‡—Lilac shading off to white. Pkt. 10c; ½ oz. \$1.00.
Sempervirens‡—Pure white. Pkt. 10c; ½ oz. \$15.0.

**CARDINAL CLIMBER*§
(Ipomoea Quamoclit Hybridia)**

Very attractive, strong and rapid grower, attaining a height of twenty-five feet with beautiful fern-like cardinal red flowers from midsummer to frost. The flowers are about 1 inch in diameter and are borne in clusters five to seven blooms each. It delights in a warm, sunny situation and good, rich soil. The seed should be soaked in water a few hours before sowing and not planted outside until about May 1st. One pkt. of 25 seeds, 15c.

CANNA (Giant-Flowered)¶

Two and a half to eight feet. Few people know these tropical plants can be easily grown from seed and bloom the first summer if sown before April. Pierce the seed in one spot with a file and soak in lukewarm water for 24 hours before sowing. Pkt. 5c; ½ oz. 25c.

CANTERBURY BELLS (Campanula), Medium†

A hardy biennial, blooming the second year from seed. Of easy culture, but preferring rich, moist soil. Grows about three feet high and bears double and single varieties of blue, white, purple and red flowers.

Single—Mixed. Pkt. 5c; ½ oz. 10c.
 Double—Mixed. Pkt. 10c; 1-16 oz. 20c.

CARNATIONS*

Carnations are general favorites for their delicious fragrance and richness of color. They are indispensable, both for greenhouse culture in winter and for the garden in summer. The Marguerite and Chabaud's type are the best for summer flowering.

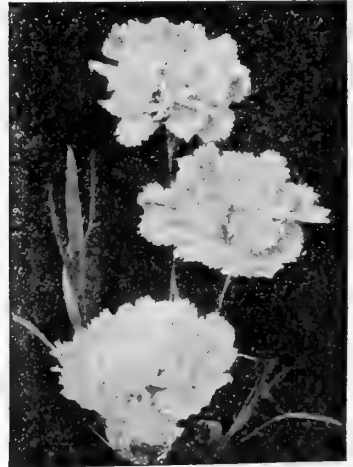
Chabaud's Everblooming—Raised by a famous French specialist. Blooms in five months after being sown, and continues to flower in the greatest profusion indefinitely. Pkt. 10c; ¼ oz. 50c.

Marguerite—These are deservedly the most popular Carnations with the amateur, as they begin flowering in a few weeks from time of sowing. The strain offered is of extra fine quality, producing on long, strong stems an abundance of large, double, beautifully fringed, highly-scented flowers. All colors, mixed; the finest strain. Pkt. 10c; ¼ oz. 40c.

CASTOR BEAN (Ricinus)*

Tall, majestic plants for lawns, with leaves of glossy scarlet, or of green, prickly fruit. Tender annual; six to fifteen feet high.

Zanzibarenis—A large-leaved variety, deep green and bronze. Pkt. 5c; oz. 20c.
 Mixed Many Sorts—Pkt. 5c; oz. 15c.



Marguerite Carnations

COBAEA (Scandens Cathedral Bells)*§

Thirty feet. One of the handsomest and rapid growing climbers. The flowers are bell-shaped and of a purplish-lilac when fully grown. It is a very prolific bloomer and vigorous in vines and flowers. It is very free from insect pests. Pkt. 5c; ¼ oz. 30c.

CELOSIA

Cristata*—Crested Dwarf Varieties. Eight inches. These plants are extremely valuable for formal bedding. The flowers appear in the shape of coxcombs, hence the name, out of a rosette of green or brown leaves. Mixed. Pkt. 5c; ¼ oz. 30c.

PLUMOSA THOMPSONI MAGNIFICA*—The choicest strain of all the ostrich plume Celosias. The plants grow to about three feet in height, forming pyramidal bushes branching out in candelabra shape and the massive plumes wave attractively above the foliage. The color ranges from clearest yellow to darkest blood-red. Mixed colors. Pkt. 10c; ¼ oz. 30c.

CENTAUREA

Cyanus* (Bachelor Button). Two feet. Well known favorite found in nearly every garden. Also known as Blue Bottle, Ragged Sailor or Cornflower. It is not a pretentious plant, but will always charm by its simple beauty.

All Colors Mixed—Pkt. 5c; ½ oz. 20c.

Double Mixed—Pkt. 10c; ¼ oz. 30c.

Giant Sweet Sultan (Centaurea Imperialis)*—Two and a half feet. Strong, bushy plants; flowers fragrant; about twice the size of Centaurea Cyanus, ranging in colors from pure white through pink to purple.

Mixed—Pkt. 5c; ¼ oz. 25c.

Gymnocarpa (Dusty Miller)‡¶ Ten inches. Foliage finely cut of silvery gray color. Used for bedding. Pkt. 10c; ¼ oz. 50c.

CLEMATIS (Large-Flowering Mixed)*§

Beautiful climber with lovely flowers, blue, white and purple, etc. Hardy, can remain in permanent situation. Pkt. 10c; ¼ oz. 75c.

CHRYSANTHEMUMS—Annual Varieties*

Two feet. Showy and effective garden varieties, extensively grown for cut flowers. The hardy annuals are summer-flowering border plants and quite distinct from the hardy perennial varieties.

Inodorum Plenissimum (Double White)—Two feet high, fine feathery foliage, pure white, intensely double flowers, produced for midsummer till frost; splendid for cutting. Pkt. 10c; ¼ oz. 40c.

Coronarum Double Mixed—Yellow, white, etc. Pkt. 5c; ¼ oz. 15c.

Single Mixed (Painted Daisies)—Many colors. Pkt. 5c; ¼ oz. 15c.

Mammoth Chinese and Japanese Varieties Mixed—If the seed is sown in February or March and properly treated, the plants will bloom profusely next fall. 100 seeds 15c.

Annual Varieties Mixed—The choicest Carinatum and Coronarium varieties, both single and double. Pkt. 5c; ¼ oz. 15c.



New Giant Double Crested Cosmos

COLEUS¶

It is one of the most beautiful of our variegated perennial foliage plants for the greenhouse or garden decoration, ribbon-beds, etc. Of rapid growth and easy culture. Tender perennial. Height, one to two feet.
New Hybrids—Mixed. Pkt. 25c.
Columbine—See Aquilegia.

COREOPSIS LANCEOLATA‡

Two and one-half feet. Golden Glory. A beautiful, hardy sort, blooming from seed the first year. Very large yellow flowers of great elegance. The plants are covered with flowers the entire summer. **Pkt. 10c; ¼ oz. 20c.**

COSMOS*

Three to six feet high; finely cut foliage. From September until November each plant is covered with hundreds of showy blossoms, two inches in diameter, pure white, flesh color, charming light pink and deep rose in color.
Giant Flowered—Mixed. Pkt. 5c; ¼ oz. 20c.
Early Giant-Flowering Hybrids—Mixed. Pkt. 5c; ¼ oz. 20c.

NEW GIANT DOUBLE CRESTED COSMOS—This most beautiful novelty is a valued addition to any garden. A great number of the flowers come almost entirely double, while others, as shown by the above cut, have the double frilled disc in the center. In either form they are most striking. We have them in the three colors:
Rosy-Crimson Deep Pink Pure White
Each of Above—Pkt. 15c.

COWSLIP

See Primula Veris.

CYCLAMEN (Alpine Violets)¶¶

One foot. This beautiful pot plant, flowering from seed the first year, is well known, but the public does not realize the same may be successfully raised from seed with little care.
Persicum—Mixed. Persian Violets. 20 seeds for 10c.
Giant Flowered—Mixed. .20 seeds 25c; 10 seeds 15c.

CYPRESS VINE (Ipomoea Quamaclit)*§

Ten feet. For training upon a light ornamental trellis the Cypress Vine cannot be excelled. It has a profusion of scarlet or white star-shaped blossoms, and its finely cut foliage is particularly adapted to ornamental work.
Mixed—White and Scarlet. Pkt. 5c; ½ oz. 25c.



Mammoth Double Daisy (Monstroza)

DAHLIA*

Plant them in a shallow box or pan early in March or April; transplant them carefully as their growth demands, and keep the soil moderately moist. When all the danger from frost is over, plant them in the bed or border in the garden, and from then on they will prove no more trouble than if the tubers had been used instead of seeds.
Double Best—Mixed. Pkt. 15c; ¼ oz. 75c.
Double Cactus Flowered—Mixed. With twisted and curled petals. Pkt. 15c; ¼ oz. 75c.

DAISY (Bellis Perennis)‡

Eight inches. Giant double. Greatly improved varieties of the popular "Double Daisies," admirably adapted for edgings, borders and low beds, and also well suited for growing in pots. Daisies are easily grown from spring sown seed and come into flower in a very short time. The flowers are white, pink, red and variegated. Not all will come double from seed. **Finest Double Mixed. .Pkt. 10c; ¼ oz. 50c.**
Monstroza, Double Mixed—Flowers are giants in size; borne on long, stiff stems; excellent for cutting. Pkt. 15c.

SHASTA DAISY‡

Alaska—Our experiments have proved this to be much larger and in our estimation, more desirable in every respect, than the Burbank Hybrid, which we have discontinued. The flowers are rarely less than 5 inches across, of the purest glistening white, with broad over-lapping petals, and borne on long strong stems; a beautiful cut flower, remaining in good condition a week or more. **Pkt. 10c; ¼ oz. 40c.**

DIGITALIS (Foxglove)‡‡

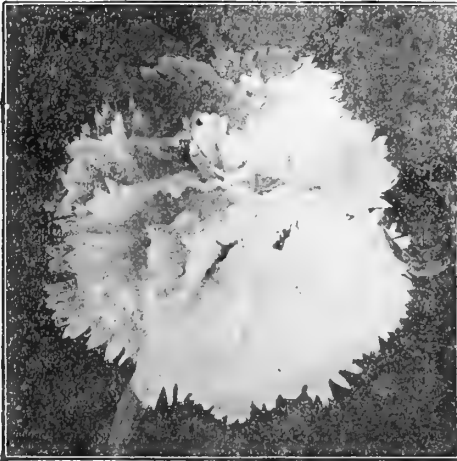
Three to five feet. Handsome and highly ornamental hardy plants of stately growth, succeeding under almost all conditions, and with but little attention will give a wealth of flowers during June and July. They are now used extensively with good effect for naturalizing in shrubberies, the edge of woods and other shady places.
Gloxineiflora Mixed—All colors. Pkt. 5c; ¼ oz. 30c.

DOLICHOS (Hyacinth Bean)*§

Ten feet. A rapid growing annual climber, flowers freely in erect racemes, followed by ornamental seed pods. Sweet scented.
All Colors Mixed—Pkt. 5c; oz. 20c.

MR. BUSY MAN:

What about that back yard that was such an eyesore all last summer? A few cents invested in flower seed and a little healthful exercise will transform it this year into a source of pride and beauty. Order the seeds now, if you haven't time to make your own selection you'll find something that just fits your needs on Page 43.



Double Fringed Pink

DIANTHUS—(or Pinks)**Annual Varieties***

The family of pinks is unrivaled for brilliancy and rich variety of color; blooming profusely until late in the autumn, rendering them one of the most satisfactory of all our annuals for garden decoration. Height about one foot.

Chinesis Fl. Pl. (China or Indian Pink)—Blooms in clusters, flowers very double and in a large range of bright colors. Pkt. 5c; ¼ oz. 25c.

Lacinatus Fl. Pl. (Double Fringed Pink)—Large double, shows flowers with fringed edges, in a great variety of colors, including beautifully striped sorts, mixed colors. Pkt. 5c; ¼ oz. 40c.

P.-W.'s Special Mixture of Double Pinks—Selection of the best double pinks in cultivation. Flowers ranging in color through all the brightest and most brilliant shades, plain edges and fringed. Pkt. 10c; ¼ oz. 50c.

Special Mixture of Single Pinks—Choicest sorts in cultivation. The flowers are extraordinarily large, of handsome form and embrace the most beautiful colors, ranging from white to the most delicate pink and deep glowing crimson. For beds and cut flowers. Pkt. 10c; ¼ oz. 35c.

Perennial Varieties

Plumarius, Clove or Grass Pinks—Ten inches. These very desirable, sweet-scented, low-growing, early-blooming and free-flowering, hardy garden pinks are unequalled for the border of beds, automobile drives.

Single Mixed—Delicately fringed flowers. Pkt. 5c; ¼ oz. 20c.

Flore Pleno, Double, Mixed (Pheasant's Eye)—Pkt. 10c; ¼ oz. \$1.00.

ESCH-SHCOLTZIA (California Poppy, Gold Cups)*

Very attractive annuals for beds, edgings or masses; profuse flowering, fine cut, glaucous foliage; in bloom from June to frost. One foot.

California—Bright yellow. Pkt. 5c; oz. 50c.

Alba—Pure white. Pkt. 5c; oz. 50c.

Single, Mixed—All colors. Pkt. 5c; oz. 40c.

Double Mixed—All colors. Pkt. 5c; oz. 50c.

NEW LARGE-FLOWERING ESCHOLTZIA—New large flowering erect type containing a large percentage of new shades in Escholtzias and includes soft pink, scarlet, chrome copper-red, claret and royal purple. Our mixture is the finest obtainable. Pkt. 10c; ¼ oz. 40c.

FORGET-ME-NOT (Myosotis Alpestris)‡

This beautiful little flower is too well known to require description and recommendation. The delicate blue flowers appear all summer. Height six inches. Hardy perennial. Pkt. 10c; ¼ oz. 20c.

FOUR-O'CLOCK (Marvel of Peru)*

Beautiful summer-blooming annuals of bushy habit, two feet high, each plant bearing throughout the summer; hundreds of large flowers of white, yellow, crimson and striped.

Mixed Colors—Pkt. 5c; oz. 25c.

GALLARDIA (BLANKET FLOWER)**Annual Varieties***

One and a half feet. 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.

Picta—Single mixed. Pkt. 5c; ¼ oz. 20c.

Lorenziana—Double Perfection mixed. Pkt. 5c; ¼ oz. 30c.

GALLIARDIA (Perennial Varieties)‡

Two feet. These are undoubtedly among the choicest of hardy perennials; the flowers are large, very numerous, excellent for cutting and of the most brilliant shades of orange, crimson, scarlet, vermilion, and very often a combination of all these colors in one flower.

Grandiflora—Mixed. Pkt. 10c; ¼ oz. 20c.

GODETIA*

One and a half foot. Remarkable for their widely opened flowers of satiny texture and delicate and lovely shades of color, fine for shady places.

Many Sorts and Colors—Mixed. Pkt. 5c; ½ oz. 30c.

Dwarf Sorts—Mixed. Neat globular bushes about 10 inches in height. Pkt. 5c; ¼ oz. 25c.

Golden Feather—See Pyrethrum.

GOLDEN ROD (Solidago)‡

Two feet. American national flower. Pkt. 5c; ¼ oz. 50c.

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. 5c; ½ oz. 20c.

Gypsophila Paniculata‡ (Baby's Breath)—Two feet. White flowers, smaller than the annual varieties, producing a veil-like mist over the plant. Pkt. 5c; ¼ oz. 25c.

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. 5c; ½ oz. 20c.

All Varieties—Mixed. Pkt. 5c; ½ oz. 20c.

GRASSES (Ornamental Mixed)

Two to five feet. These are most useful for winter bouquets. Enormous quantities of them are annually grown in Europe and exported to the United States where they are made up into bouquets with Everlasting flowers. They are easily grown in any soil. Pkt. 10c; ¼ oz. 40c.

HELIANTHUS (Sunflower)*

Remarkable for its steady growth and decorative effect in the garden. The old original Mammoth Russian variety now has a numerous company, showing various traits. Some are dwarf, some double, some single, and the leaves are gray and green. Excellent for cutting.

Double Chrysanthemum Flowered—Six feet. Golden yellow flowers. Pkt. 5c; oz. 20c.

Russian Mammoth—Single. Of gigantic dimensions, both flowers and stalk. Oz. 10c.

HELICHRYSUM (Everlasting)

Sometimes called Straw Flower. Large, full, double daisy-like flower heads with prominent centers and stiff overlapping scales, produced in various shades of bright yellow and scarlet on stems of good length. Desirable as dried specimens and for use in making winter bouquets. For this purpose the flowers should be gathered when on the point of expanding.

Sow early in spring; thin to one foot apart each way. Hardy annual; two to two and one-half feet high.

Monstrum. Fl. Pl.—Mixed. Largest double flowers. Pkt. 10c; ¼ oz. 25c.

HELIOTROPE (Cherry Pie)

Two feet. A half-hardy perennial, flowering during the whole season. Its delightful perfume makes it a most desirable bouquet flower, a splendid bedding plant, or can be trained as a greenhouse climber. Seed started indoors in the spring will make fine plants for summer blooming. Can also be sown outdoors in May.

Finest Mixed—Pkt. 10c; ¾ oz. 50c.

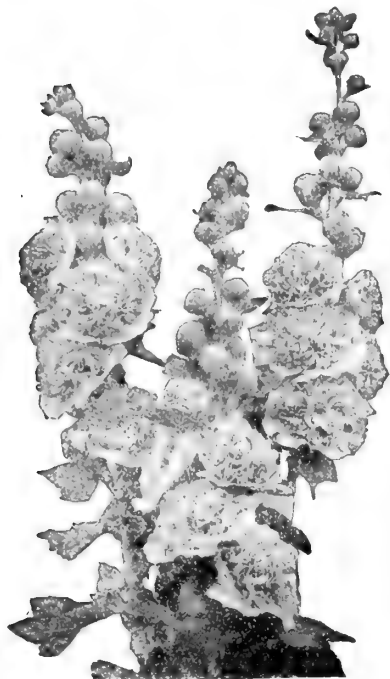
HUMULUS JAPONICUS (Japanese Hop)*§

Twenty feet. One of the most rapid growing ornamental climbers; green leaved. Pkt. 5c; ¼ oz. 10c.

Variegatus—A variegated variety of the above. The leaves are beautifully marbled and splashed with silvery-white light and dark green; very effective for screens, arbors, trellises, etc. Pkt. 10c; ¼ oz. 20c.

Hyacinth (Bean)—See Dolichos.

*Annuals. †Biennials. ‡Greenhouse Plants. §Perennials. ||Stove Plants. §Climbing Plants.



Double Hollyhock

HOLLYHOCK ‡

Five feet. A hardy perennial of upright, stately growth, five to eight feet high. The very double varieties are the most desirable, but the newer semi-double, fringed types are also very popular.

Double Mixed—Choicest Imported Collection. Pkt. 10c; ¼ oz. 25c.

Semi-Double—Flowers with fringed edges. Pkt. 10c; ¼ oz. 50c.

ICE PLANT*

Six inches. Suitable of rock work, hanging baskets, etc. Foliage thick, frosted and waxlike. Pkt. 5c; ¼ oz. 20c.

JOB'S TEARS (Coix Lachryma)*

Curious ornamental grass, with broad, corn-like leaves and seeds of a light slate color. Valuable for winter bouquets with everlasting flowers. Strings of handsome beads are made from the seeds. Hardy annual. Three feet high. Pkt. 5c; oz. 15c.

KOCHIA TRICHOPHYLLA (Mexican Fire Bush or Summer Cypress)*

A quick-growing foliage or hedge plant, remarkably symmetrical and attractive throughout summer and fall. About two and one-half feet high. Pkt. 5c; oz. 40c.

LAVENDER (Lavandula Vera) ‡

Well known, sweet-scented, hardy perennials, should be extensively grown in the mixed border; 3 feet. Pkt. 10c; ¼ oz. 25c.

**LARKSPUR (Delphinium) ‡
(Perennial Varieties)**

The hardy varieties are of bewitching beauty in the perennial border or among shrubs. The brilliant flower spikes can be seen from quite a distance and are strikingly effective. If sown early many of the varieties will bloom the first year. The plants will bloom almost continually if the flowers are removed as they fade.

Chinese Album Grandiflorum—White. Two feet. The stems have many lateral branches with large single flowers. Leaves deeply lacinated. Pkt. 5c; ¼ oz. 20c.

Chinese Azureum Grandiflorum—Blue. Pkt. 5c; ¼ oz. 20c.

Formosum—Three feet. Deep blue, white eye, open spike. Pkt. 10c; ¼ oz. 45c.



Larkspur Giant Hyacinth, Flowered

Belladonna Hybrids—Mixed, all colors from pale to deep blue; finest of all. Pkt. 20c; ¼ oz. 50c.

LARKSPUR*

The Annual Larkspur is one of the handsomest and most useful of plant and for large gardens is invaluable.

Double Dwarf Rocket Mixed—Beautiful spikes of double flowers in many shades. Hardy annual. One foot high. Pkt. 5c; ¼ oz. 15c.

Tall Hyacinth, Flowered, Mixed (Consolida Fl. Pl.)—Flowers double, borne on spikes about fifteen inches long. Colors: Rose, white and shades of blue. Hardy annual. Two feet high. Pkt. 5c; ¼ oz. 20c.

LOBELIA*

The following dwarf and trailing varieties of this popular and beautiful flowering plant will be found most desirable for pot culture, edgings, hanging-baskets, etc., blooming profusely from June to November. The hardy perennial varieties, producing beautiful spikes of handsome flowers.

Crystal Palace Compacta—Rich, deep dark foliage; the finest dark blue for bedding. Pkt. 10c; ¼ oz. 75c.

Mixed Compacta Varieties—All colors. Pkt. 5c; ¼ oz. 50c.

MARIGOLD*

Tall, 5 feet; dwarf, 10 inches. The African and French Marigolds are old favorite free-flowering annuals of easy culture; both are extremely effective. The former have uniformly large yellow or orange colored flowers and are well adapted for large beds or mixed borders; the latter are dwarfier in growth, with beautifully striped flowers, and better suited for bedding purposes of for pot culture; they succeed best in a light soil, with full exposure to the sun.

Dwarf French Double Mixed Low bushes covered with small flowers. Pkt. 5c; ½ oz. 30c.

Dwarf African Mixed (Pride of the Garden)*—Fifteen inches. Immense double flowers, golden yellow, compact dwarf habit, forming dense bushes. Pkt. 5c; oz. 30c.

Tall African Varieties

ORANGE BALL—Mammoth double flower, deep orange, very showy. Pkt. 10c; ¼ oz. 30c.

Tall African Double Mixed—Pkt. 5c; ½ oz. 30c.

Matholia—See stocks.

Marvel of Peru—See Four-o'clock.

*Annuals. †Biennials. ‡Greenhouse Plants. ‡Perennials. ‡Stove Plants. ‡Climbing Plants.

MATRICARIA (Alba Plenissima)‡*

Three feet. Feverfew. Net, small, double white flowers, well adapted for bedding and cutting. They are perennials in mild climates, but in our latitude are treated best as biennials or annuals. Pkt. 10c; ¼ oz. 35c.

MIGNONETTE*

A well known fragrant favorite, and no garden is complete without a bed of Mignonette. Sowings made in April and again in July will keep up a succession from early summer till frost; can also be grown in pots for winter and early spring flowering.

Matchet—Stout flower stalks bearing massive spikes of delicately scented, red flowers. Pkt. 5c; ¼ oz. 35c.

Sweet Scented (Reseda Odorata)—The good, old-fashioned sweet Mignonette. Pkt. 5c; oz. 25c.

MORNING GLORY (Convolvulus Major)*

A hardy climbing annual, growing about ten feet long. Flowers are well known and exist in a great variety of colors, tints and markings. Fully expanded only in the mornings. Of easy culture, quick growth, and valuable in every garden.

Tall or Climbing Varieties—Mixed. Pkt. 5c; oz. 30c.

Imperial Japanese—These are beyond question the handsomest of all Morning Glories. Of the easiest culture; can be sown in the open ground in a sunny situation when the weather has become warm and settled. The flowers are of gigantic size, and the colorings range from snow-white to black-purple, with all the possible intermediate shades; there is also an endless number having flowers in spotted, marbled, striped, flaked, splashed, etc. Pkt. 5c; oz. 30c.

MOONFLOWER (Ipomea Grandiflora)§ 20 Feet

Beautiful rapid annual climbers. Foliage very dense and in some kinds of remarkable shape. The flowers in their wide range of delicate coloring, are poised on slender stems. Many of the sorts open only when the sun rises, others when the sun sets. Some are fragrant. Seeds should be soaked in warm water for 24 hours before sowing to assist rapid germination. The seeds, about the size of a pea, should be notched with a file before soaking. Best Mixed. Pkt. 10c; ¼ oz. 20c.

NICOTIANA**Sweet Scented Tobacco Plant**

Long and free-blooming annuals of the tobacco family with tubular-shaped, fragrant flowers. The plants are of rapid growth and present a glorious effect in the garden, especially if planted in groups, blooming continuously until autumn.

Sandere Hybrids—Very showy mixture which includes many beautiful flowers. Three feet. Pkt. 10c; ½ oz. 25c.

NIGELLA Mixed (Love in the Mist)*

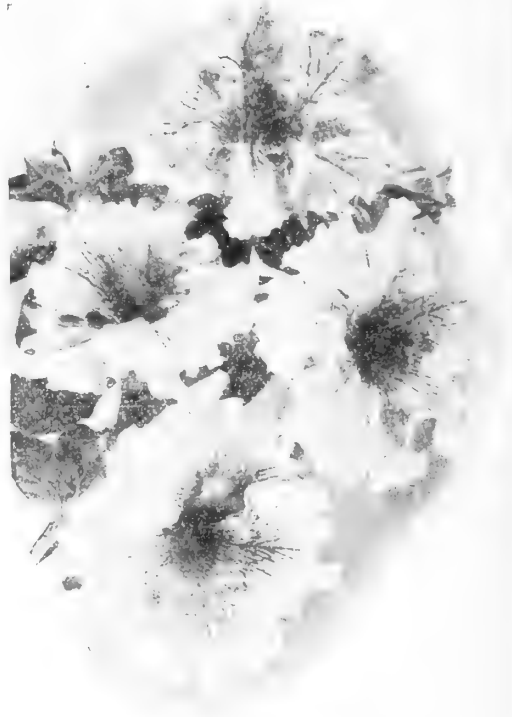
One and a half feet. A compact, free-flowering plant with finely cut foliage, curious looking seed pods; of easy culture, growing in any garden soil, blue and white mixed. Pkt. 5c; oz. 25c.

Miss Jekyll—Gives an abundance of long-stemmed flowers of the clearest cornflower blue, contrasting most charmingly with the fine fern-like foliage. Pkt. 10c; ½ oz. 25c.

PASSIFLORA (Coerulea Grandiflora, Passion Flower)§

Fifteen feet. Southern Beauty. A beautiful vine for greenhouse and window, called Passion Flower, since tradition sees represented in its flowers the symbols of the Christian faith. Pkt. 10c; ½ oz. 50c.

*Annuals. †Biennials. ‡Greenhouse Plants. ‡Perennials. ||Stove Plants. §Climbing Plants.



P.-W.'s Large-Flowering Hybrid Single Petunias

PETUNIA*

One of the best flowers for a splendid display throughout the entire season. Beautiful new colors, striped and marked in the most diversified manner. The ease of culture, profuse and continuous bloom, adaption for different styles of growth—indoors and in the garden—render the Petunia one of the most valuable of the annuals and entitled to a generous share of the garden.

P.-W.'s Giant Flowering Single Fringed Mixed—A superb strain of elegant, finely fringed flowers, measuring over four inches in diameter; remarkable brilliancy and variety of color. Pkt. 25c.

P.-W.'s Giant Flowering Double Fringed Mixed—Large, exceedingly double and fringed flowers of most brilliant color. Very desirable. Pkt. 25c.

Hybrid Nana Compacta—Best mixed. Dwarf, neat compact bushes 12 to 15 inches high, covered with a multitude of flowers all summer long, valuable for edging and formal bedding. Mixed and colors. Pkt. 10c; ¼ oz. 75c.

P.-W.'s Best Large Flowering Hybrids, Single Mixed—Including named sorts. This will certainly please for bedding purposes. Pkt. 10c; ¼ oz. 75c.

PEAS, EVERLASTING (Lathyrus Latifolius)‡
Eight feet. Perennial climber producing for many weeks a succession of blossoms in clusters of eight to ten each. An abundance of foliage and blooms is afforded. The plants die down late in the fall and start again in the spring. Sow seed in open ground.

All Colors Mixed—Pkt. 5c; ½ oz. 25c.

THOUGH YOUR HOUSE BE A MANSION IT IS NOT A "REAL HOME" WITHOUT FLOWERS

Let Prof. L. H. Bailey of Cornell suggest where to plant them, he says: "In front of bushes, in the corner by the steps, against the foundations of the residence or the out-house, along a fence or walk—these are the places for flowers. The flower garden should be at one side of the residence or rear. The size of the garden and the things to be grown in it must be determined by the desire of the person and the amount of time and land at disposal. Prepare the land thoroughly, fertilize it, resolve to take care of it, choose the kind of plants you like, then go ahead."

P.-W.'s LARGE FLOWERING NASTURTIUMS

There are few flowers so easily grown as Nasturtiums and, unlike most flowers, they grow and bloom best on poor, sandy soil. The Dwarf or Tom Thumb varieties grow about one foot high and they are very desirable for bedding, bordering or window boxes. The tall Nasturtium is a favorite climber for covering fences, rockeries, etc., while both are good for cutting and vase decoration. Our strains of both tall and dwarf Nasturtiums are noted for their large and beautiful flowers and great diversity of rich and brilliant colors. Sow the seed in open ground after danger of frost is over.

DWARF OR TOM THUMB NASTURTIUMS

Beauty—Yellow and scarlet.
Chameleon—Several colors on one plant.
Empress of India—Deep crimson; dark-leaved.
Golden King—Large golden-yellow flowers.
King Theodore—Dark maroon.

Pearl—Creamy white.
Queen—Scarlet flowers; variegated foliage.
Rose—Blush-rose.
Ruby King—Rosy scarlet.
Vesuvius—Beautiful salmon-red.

Price of each of above. Pkt. 5c; oz. 20c; ¼ lb. 60c.

P.-W.'s COLLECTIONS OF NAMED DWARF NASTURTIUMS

One Pkt. each of above 10 varieties sent Postpaid for 40c.

One ounce each of above 10 varieties sent Postpaid for \$1.25.

P.-W.'s SUPERB MIXTURE DWARF NASTURTIUMS—This mixture includes many of the varieties listed above, as well as a score of others. For a mixed border of bedding, where no definite color scheme is desired, none more desirable could be obtained. Pkt. 5c; oz. 15c; ¼ lb. 50c; lb. \$1.60.

TALL OR CLIMBING VARIETIES

Of quick growth, covering a wall, hedge or trellis in a short time. The brilliant blossoms almost cover the plant from top to bottom.

Heinemanni—Chocolate.
King Theodore—Maroon; dark foliage.
Orange—Large flowers.
Pearl—Creamy white.
Prince Henry—Yellow, spotted scarlet.
Regelanum—Purplish violet.

Scarlet—Very bright; green leaved.
Schulzi—Scarlet; dark leaved.
Striped.
Vesuvius—Salmon; dark leaved.

Price of each of above. Pkt. 5c; oz. 20c; ¼ lb. 60c.

P.-W.'s SUPERB MIXTURE TALL NASTURTIUMS—Comprising a selected combination of varieties and colors, including many of the choicest standard varieties as well as Trial Ground Mixture of Novelties. Pkt. 5c; oz. 20c; ¼ lb. 50c; lb. \$1.50.

PHLOX (Drummondii)*

Among the showiest and most easily managed of all the hardy annuals. From June until October they maintain an endless display of brilliant and varied colored flowers. The plants will be more bushy and cover the bed better if pinched back while small. For early plants, seed should be sown in boxes in the house, or sown in the open ground as soon as the weather will permit.

Grandiflora—One foot. Large flowering. Finest mixed. Pkt. 10c; ¼ oz. 50c.

Nana Compacta—Eight inches. Dwarf Phlox. Finest mixed. Pkt. 10c; ½ oz. 30c.

Phlox Decussata—Three feet. Perennial Phlox. These rank among the finest herbaceous plants for beds and borders. The seed of this germinates very slowly, often requiring five to six months. Mixture of all finest sorts. Pkt. 10c.

ALL FLOWER SEEDS ARE PREPAID AT CATALOG PRICES



P.-W.'s Large Flowering Nasturtiums

PORTULACA (Sun Plant)*

One of our finest hardy annual plants of easy culture, thriving best in rather rich, light loam or sandy soil and luxuriating in great profusion; fine for massing in beds, edgings or rockwork; six inches high.

Single Mixed Colors—Pkt. 5c; ¼ oz. 45c.

Double Mixed—Flowers perfectly double. Pkt. 10c; ½ oz. 30c.

PUERARIA THUNBERGIANA†‡ (Kudzu Vine or Jack and the Beanstalk)

Fifty feet. Flourishes where nothing else will grow. The large bold leaves of the brightest green afford a dense shade. Its greatest feature is its wonderfully strong growth. Pkt. 5c; ¼ oz. 30c.

You might buy seeds the equal of ours from other equally painstaking seedsmen, but we have gone to a big expense to make sure that you can get none better anywhere than P.-W.'s TESTED MOUNTAIN GROWN SEEDS AND TREES. Let us prove that they really "are more vigorous."



P.-W.'s Superb Pansies

PANSIES††

Little praise is needed for this most popular of all flowers, as it is seen everywhere and under all conditions. It is, however, well to mention that, no matter how careful and attentive the grower may be, it is but wasted time if you have not the proper seed to begin with. All our Pansy Seed is obtained from the most noted specialists, and we claim that seed obtained from us will produce flowers of unsurpassed size and form, beauty of markings, and brilliancy of colors and shades.

Pansy Seed germinates and the plants grow more freely in the cool, early days of spring, and for summer blooming should be sown by the latter part of April or early in May, and blooming plants will be produced by the last of June, which will give an abundance of flowers throughout the remainder of the season. About the middle of August is the best time for starting Pansy Seeds for early spring blooming, as this allows the plants to go into winter in vigorous condition.

SPECIAL PANSY MIXTURES

Bugnot Giant Mixture—Of enormous size and circular form, the petals are of great substance and velvety appearance, each bearing a large, deeply colored blotch that runs in delicate veins to the edge. Pkt. 10c; ¼ oz. \$1.00.

Cassiers 3 and 5 Blotched Mixture—Mostly light shades with dark blotches. Pkt. 10c; ¼ oz. \$1.00.

Giant Trimardeau—Flowers of extra large size; mostly marked with three large blotches or spots. Pkt. 10c; ¼ oz. 60c; oz. \$4.00.

P.-W.'s SUPERB MIXED—This strain comprises a beautiful collection of colors and markings and is our finest mixture, both as regards size texture and colorings. Pkt. 10c; ¼ oz. \$1.00.

English Finest Mixed—Pkt. 10c; ¼ oz. 75c.

Finest French Mixed—Pkt. 10c; ¼ oz. 75c.

*Annuals. †Biennials. ‡Greenhouse Plants. §Perennials. ||Stove Plants. §Climbing Plants.

POPPY*

A hardy annual, three to five feet high and bearing single and large double blossoms in bright colors. Sow seed in open ground where plants are to remain, and thin from six to twelve inches, depending on variety.

Double Varieties

"Mikado," (The Striped Japanese Poppy)—Very distinct in character and color. Brilliant and white with elegantly curved petals, like a Japanese chrysanthemum. Pkt. 5c; oz. 35c.

Carnation Flowered—Splendid double fringed flowers; mixed colors. Pkt. 5c; oz. 30c.

Paeony Flowered—Large, showy, double globular flowers, resembling a double peony, mixed colors. Pkt. 5c; oz. 30c.

NEW DOUBLE SHIRLEY (or Eldorado, see cut Page 53)—This handsome variety is a double form of beautiful single Shirley Poppy, of similar habits. A distinctive feature, aside from the doubleness, is the wonderful new color tints and shades. Pkt. 15c; ¼ oz. 45c.

Double Mixed—All colors. Pkt. 5c; oz. 30c.

Single Varieties

Tulip Flowered—Intense scarlet, single blossoms. Plant about two and one-half to three feet high. The brightest colored of all poppies. Pkt. 5c; ½ oz. 25c.

Shirley—A most beautiful type. Soft, hairy foliage, and an immense variety of single blossoms in white, pink, lavender, purple, shades of red, and scarlet. Mixed. Pkt. 5c; oz. 20c.

Single Mixed—Annual sorts. Pkt. 5c; oz. 20c.

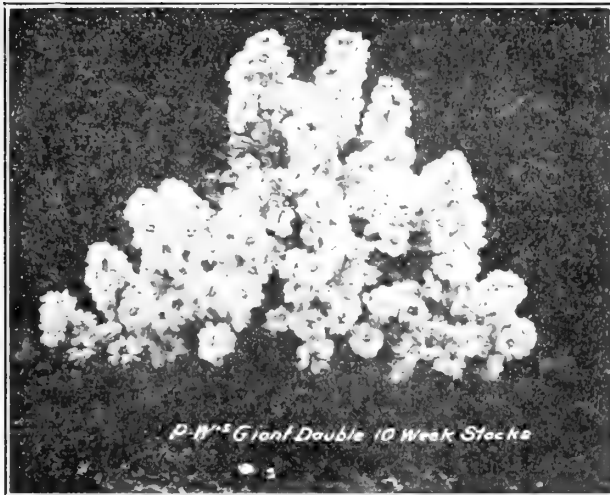
Perennial Varieties

Hardy perennial, of easy culture; in bright, glowing colors. Blooms first year from seed.

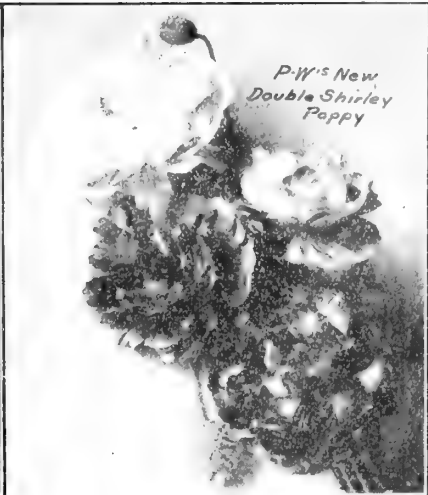
Nudicaule Single Mixed Iceland Poppy—One foot. Produce flowers the first year from seed. Colors range from the purest white to the deepest orange scarlet; delicious fragrance. Pkt. 5c; ¼ oz. 25c.

ORIENTALE (Oriental Poppy)—Three feet. One of the showiest perennials, with enormous scarlet flowers with purple centers. The leaf is long and deeply cut and clothed with white bristly hair. Beautiful among shrubs, roses and other perennials. Pkt. 5c; ¼ oz. 15c.

From about April 1st until June 1st we are able to furnish fine specimen Pansy Plants in full bloom. These can be shipped safely by express to all sections of the West. We are also large growers and shippers of Bedding Plants. See Page 65 for details.



P-W's Giant Double 10 Week Stocks



P-W's New Double Shirley Pappy

PRIMULA (Primrose)

Chinese Primrose*, **Choicest Mixed**—Eight inches. This is one of the most charming winter flowering house plants. May be raised very easily from seed. Leaves are rich green and prettily cut; flowers stand well above the foliage in umbels and have a delicate odor peculiarly their own. **Pkt. 25c.**

Cowslip (Primula Veris Polyanthus)‡ A beautiful hardy spring-flowering perennial; flowers of different colors, such as yellow, brown, edged yellow, etc. Very fragrant. Mixed colors. **Pkt. 10c; ¼ oz. 50c.**

Vulgaris (English Primrose)‡—Canary-yellow; fragrant. **Pkt. 10c; ¼ oz. \$1.00.**

PYRETHRUM‡

Golden Feather (Parthenifolium Aureum)—Six inches. One of the best plants for edging; grown for its beautiful yellow foliage. More successfully treated as an annual. **Pkt. 10c; ¼ oz. 50c.**

Roseum Hybridum Grandiflorum (Giant Flowered, Mixed)—Two and one-half feet. The flowers of this strain grow to an enormous size, and present all the beautiful variations of color between light rose, pink and deep carmine. They are splendid cut flowers; equally valuable in borders. **Pkt. 15c; ¼ oz. 75c.**

SALPIGLOSSIS (Painted Tongue)*

Two and one-half feet. The Salpiglossis is one of the greatest favorites among annuals, partly because of its easy culture, but principally for its beautiful, almost orchid-like flowers, which it produces from early summer until late fall. Seed should be sown early in spring in a hotbed or window and transplanted when weather is settled, or directly out of doors after danger of frost.

Emperor—Large-flowering, mixed. **Pkt. 5c; ¼ oz. 25c.**

SALVIA (Scarlet Sage)*

Three feet. 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 to give color. Its best use, however, is a hedge or border plant, where long, broad bands of intense color are desirable. **Splendens**—**Pkt. 10c; ¼ oz. 30c.**

SCABIOSA (Mourning Bride)*

Two and one-half feet. Commonly known as the "Pin-cushion Plant," owing to the queer effect of the center of the flower. The outer petals, making a ruffle around the cushion filled with pins, carries out the idea. The flower stems are long and the blossoms keep well in water. The soft shades predominate.

Large Flowering Double—Mixed. **Pkt. 5c; ¼ oz. 25c.**
Candasia‡—Two and one-half feet. Flowers beautiful, soft lavender. **Pkt. 10c; ¼ oz. \$1.00.**

SCHIZANTHUS (Hybridus Grandiflorus)*

One foot. "The Poorman's Orchid"; near pyramidal bushes covered with a multitude of small butterfly-like flowers of the most brilliant and striking color designs. **Pkt. 10c; ¼ oz. 25c.**

SMILAX (Myrsiphyllum Asparagoides)§§

Six feet. In many respects the Smilax is the most useful and it certainly one of the most graceful climbers which adorn the greenhouse or conservatory. For bouquets and floral decorations it is indispensable. **Pkt. 10c; ¼ oz. 25c.**

STOCKS (Gilliflower)*

The Stocks is one of the most popular annuals, either for bedding or pot culture. For brilliancy and diversity of color, fragrance, profusion and duration of bloom it is unsurpassed.

P.-W.'s GIANT DOUBLE TEN WEEK STOCKS—Splendid perpetual blooming class. Sown in March or April, they begin flowering in July, continuing until frost, and are especially valuable during September and October, when other flowers are scarce. They throw out numerous side branches, all bearing very double, fragrant flowers.

Blood Red	Canary Yellow	Violet
Light Blue	Pink	Lavender
White		

Each of the above. **Pkt. 10c; ¼ oz. 75c.**
 Finest mixed. **Pkt. 10c; ¼ oz. 50c.**

Mammoth-Flowering Beauty Stock's

A magnificent recently-developed strain of early flowering Winter Stocks, forming much-branched plants about 2 feet high and having numerous spikes of very large, double, delightfully fragrant flowers. They are of special value as pot plants.

Beauty of Nice—Large flowering; flesh color. Mixed. **Pkt. 10c; ¼ oz. 65c.**
Queen Alexandria—Giant flowered; rose color. **Pkt. 10c; ¼ oz. 65c.**

THESE TWO BOOKLETS FREE TO OUR CUSTOMERS

Where Orders Amount to \$5.00; or Choice of Either One on Orders Over \$3.00

"Your Flower Garden"

Just what you want to know about Flowers, Bulbs and Roses.

"Making the Garden Pay"

Helpful hints and cultural notes on the Home Vegetable Garden.

Ask for them when you send in your order.

P.-W.'s GIANT WAVED SPENCER SWEET PEAS

1 Pkt. 5 feet of Row

1 oz. 20 feet of Row

The introduction of this type has created new interest and added to the popularity of Sweet Peas. They are quite distinct from the standard sorts, having large, round, open flowers of extraordinary size, usually measuring two inches across, with wavy standards and wide-spreading wings, a very large percentage bearing four of these immense blossoms to the stem, which is long and strong, making them of exceptional value for cutting. All of the sorts offered below have been thoroughly tested, and are just as easy to grow as the standard varieties. Our stocks are from one of the most critical growers in America and are second to none.

Culture—Although the Sweet Pea does well in almost any soil, still one that is very rich and rather moist suits it best. A good rich loam with plenty of well-rotted manure in it is the ideal soil for raising good plants that will produce plenty of blooms of good substance. Considerable benefit has been noted from the use of Farmoxerm. See Page 35. Very early in the spring, preferably in March and April in the Mountain States and localities of similar climatic conditions is the best time to plant. One of the best methods is to make a trench or furrow about six inches deep, in the bottom of which sow the seed. Cover with about an inch of soil pressing it down firmly. As soon as they are above the ground thin out to four to six inches apart; when planted too close they do not attain their full development. They should be staked up either with branches of brush or stout stakes on which wire netting has been fastened. These should be at least four feet high and five feet would be better. It is just as well to do the staking at the time of sowing.

For the aphid or plant louse, spraying with solutions of Black Leaf 40 or whale oil soap (See Insecticides) is usually effective; and for the red spider, which also causes trouble at times, spraying with pure water is usually sufficient.

During dry weather they should be watered thoroughly and frequently. The flowers should be cut as often as possible, to prevent the plants from running to seed, which would stop them from continuing to bloom.



King White Spencer

Countess Spencer—A lovely soft rose-pink, shading deeper at the edges, the original of this type.

Ⓢ **DOBBIE'S CREAM**—The finest primrose-yellow

Ⓢ **FLORENCE NIGHTINGALE**—The largest and finest pure lavender.

Florence Morse Spencer—Delicate blush with pink margin; a charmingly beautiful flower of very large size.

Ⓢ **FLORA NORTON SPENCER**—Clear azure blue.

George Herbert—Bright rose-carmine; very showy.

Helen Lewis (Orange Countess)—Brilliant crimson-orange, wings orange-rose.

Ⓢ **ILLUMINATOR**—Rich salmony-orange overlaid with bright cerise-pink, the effect being a glowing orange-scarlet.

Ⓢ **KING EDWARD SPENCER**—Bright crimson-scarlet. Very large.

Ⓢ **MARGARET ATLEE**—The best rich pink.

Mrs. Hugh Dickinson—Beautiful salmon-pink on a cream ground; extra fine.

Nora Unwin—Superb pure white.

Othello Spencer—Deep rich maroon, very dark and adapted for many attractive combinations.

Ⓢ **ROYAL PURPLE**—Very distinctive rich rosy purple. Immense flowers on long stems.

Ⓢ **SENATOR SPENCER**—Striped purplish-chocolate on white.

Ⓢ **KING WHITE SPENCER**—A pure wavy white of enormous size and splendid substance; long, strong stems.

Price: Any of above, pkt. 10c; oz. 30c; lb. \$1.00, Postpaid.

BIG Ⓢ COLLECTIONS OF P.-W.'s GIANT SPENCERS

(A) Consists of regular 1 pkt. each of the above nine varieties marked Ⓢ which indicates each one is a leader in its color. These nine packets, regular value 90c, Postpaid for 50c.

(B) This is made up of one ounce each of the above nine Ⓢ varieties, regular value \$2.70. Sent Postpaid for \$2.25.

P.-W.'s SPECIAL MIXTURE OF SPENCER VARIETIES

In offering this mixture we are giving our customers the cream of this class in all possible color variations, and we are confident many happy surprises will result, as we have included in this lot not only many of the above sorts, but several others which are new and striking in this class. Pkt. 10c; oz. 25c; ¼ lb. 75c; lb. \$2.50.

Fall Planting—A better growth of vines and earlier blooming often result from planting seed in the fall instead of early spring. If a well drained, sandy soil is selected this method may usually be depended upon to give satisfactory results. A number of planters have been very successful here in the Salt Lake Valley.

Preparation of the soil is the same as that for spring planting. The seeds should be sown about an inch or two apart in rows about three inches deep and firmly covered with soil which should be somewhat ridged above the rows to improve drainage.

GRANDIFLORA SWEET PEAS

1 Pkt. Enough of 5 feet of row

The following are the very choicest of the Grandiflora varieties and stand at the head of their respective color. It would be impossible to select a similar list out of the vast number which have been in commerce so as to combine in the same degree all the qualities that go to make up the really worth-while varieties which justly repay for cultivation. While the length of the stems are shorter and the flowers smaller than the New Giant Spencers listed on the previous page, yet these old "stand-bys" have so many friends who refuse to discard them in favor of the "New" that we offer these selected varieties as the very cream of the Grandiflora types. See page 54 for cultural directions.

Dorothy Eckford—A grand, large, open-formed white.

Hon. Mrs. E. Kenyon—A beautiful primrose color.

Henry Eckford—Intense orange; wings rose-orange.

King Edward VII—Rich crimson-scarlet.

Lady Grisell Hamilton—Soft lavender.

Price of any of above: Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.50, postpaid.

P.-W.'s SUPERB MIXED GRANDIFLORA SWEET PEAS

This grand mixture is made up from several of the finest named sorts. Containing the cream of the novelties, such as Unwin and other new types of the large-flowering varieties. In just such quantities as to produce the best color effect. Pkt. 5c; oz. 15c; ¼ lb. 35c; lb. \$1.25, Post-paid.

DWARF CUPID SWEET PEAS OR TOM THUMB

These are very compact dwarf plants, growing not over six or seven inches high. Covering a circumference of about eighteen inches. From June until late summer they are literally a sheet of bloom. Pkt. 5c; oz. 15c; ¼ lb. 40c.

SWEET WILLIAM (Dianthus Barbatus) ‡

A hardy perennial, blooming the second year from seed. Grows one to two feet high and bears its flowers in clusters at the end of a stiff stem. The individual flowerlets are handsomely colored and marked. It makes a beautiful bedding plant, and is of easy culture.

Single Varieties—Mixed. More attractive than the double. Pkt. 5c; ¼ oz. 20c.

Double Varieties—Mixed. Pkt. 5c; ¼ oz. 20c.

P.-W.'s MAMMOTH VERBENAS

A carefully selected and improved fine strain of Verbenas. The trusses and individual flowers are of the largest size, free blooming and vigorous habit. For best results, seeds should be sown early in the house or hotbeds and transplanted in the beds in May.

Mammoth Scarlet

Mammoth White

Mammoth Blue

Mammoth Pink

Price, each of above: Pkt. 10c; ¼ oz. 25c.

Mammoth Verbena—Mixed. This embraces all colors. Pkt. 5c; ¼ oz. 20c.

VIOLA ORODATA (Semperflorens) ‡

Six inches. The true blue sweet violet. Blooming very early in the spring. A very hardy perennial. Will bloom earlier if protected during the cold weather. Easily grown from seed. Pkt. 10c; ¼ oz. 50c.

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 and old tree or unsightly building. Pkt. 5c; oz. 15c; ¼ lb. 75c.

WALLFLOWER*

A hardy and half-hardy perennial. Bearing long spikes or heads of exquisitely fragrant flowers. It is very ornamental for border or in groups. Sow thinly in shallow drills in early spring. They are very easily grown and last a long time as cut flowers.

Single Mixed—All colors. Pkt. 5c; ¼ oz. 15c.

Double Finest Mixed—Pkt. 10c; ½ oz. \$1.50.

WILD FLOWER GARDEN SEED

Under this heading we offer a mixture of the easiest and surest growing kinds that can be sown broadcast, and with little or no care will produce a bright effect in places that would otherwise be nothing but a collection of unsightly weeds, and furnishing an abundance of flowers for cutting.

Dwarf Sorts—Growing from 12 to 18 inches high. Oz. 25c.

Tall Sorts—Growing from 18 to 36 inches high. Oz. 25c.

1 oz. Enough for 25 feet of Row

Miss Wilmot—Deep orange-pink.

Navy Blue—A true navy blue, very distinct.

Othello—A very deep maroon, particularly rich.

Prima Donna—Pure pink.

Senator—Maroon and violet striped on white.

EARLY-FLOWERING SWEET PEAS (Best Mixture)

In this mixture we have combined a number of named varieties for best color effect. It is especially adapted to outdoor planting where the seasons are short.

The great merit of this class is earliness, commencing to flower within about sixty days from seed sowing, or about two weeks sooner than tall Sweet Peas. The plants are of dwarf, bushy growth, 18 to 24 inches high, producing profusely flowers of good size.

Price: 5c per pkt.; 15c per oz.; 50c per ¼ lb.; \$1.50 per lb., Postpaid.



ZINNIAS*

(Youth and Old Age)

The Zinnia is one of the most brilliant and showy of annuals, and has long been a general favorite. The seed can be sown early in the hotbed or light window and transplanted, or sown later in the open ground. They come into flower early in summer and keep on blooming until hard frost.

P.-W.'s NEW GIANT DOUBLE FLOWERED—This new strain produces immense double velvety flowers from three to five inches in diameter of almost every desirable tint and color. The plants are very thrifty, growing to a height of about three feet, blooming profusely the entire season. We can supply the following colors:

Crimson	Orange	White	Cream
Yellow	Flesh	Pink	

Any of above: Pkt. 10c; ¼ oz. 30c.

P.-W.'s NEW GIANT DOUBLE MIXED—Includes all the above colors and in addition several new tints and shades. Exceedingly attractive. Pkt. 10c; ¼ oz. 30c.

Elegans Double Choice Mixed—Splendid mixture of this old, popular strain. Pkt. 5c; ½ oz. 25c; oz. 40c.

SUMMER FLOWERING BULBS

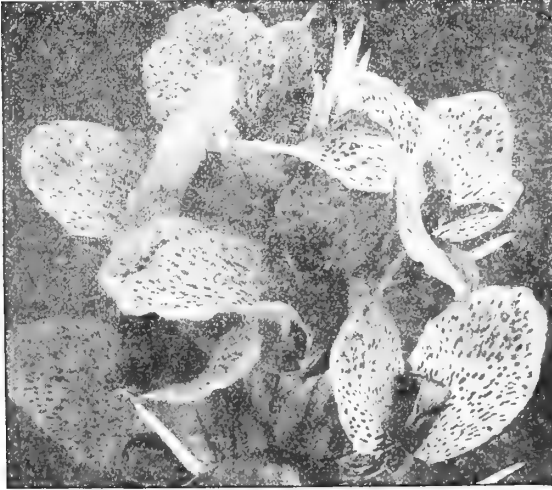
We grow and offer only the most popular sorts. They are inexpensive, easily grown, require little care, and make a rare and gorgeous display. They cannot fail to give satisfaction.

LARGE FLOWERING CANNAS

The Canna is one of the most beautiful of all bulbous plants. It has long been a great favorite, and since the introduction of many varieties their value has been greatly increased by adding to the already attractive foliage and large flowers of the most brilliant colors, so that they are now indispensable. No plant is better adapted to our climate. Plant out-of-doors in the middle of May, when weather is warm and danger of frost is over. Do not water too freely until well started, when they should have an abundance.

It is quite an advantage to start the roots inside the latter part of March. Simply plant them in boxes of sand or light soil and place them in a light window. Transplant them to the open ground when all danger of frost has passed.

PREPARING THE CANNA BED—Use a wheelbarrow-load of very well rotted manure over each square yard of soil and dig in deeply. The soil should at least be stirred to a depth of eighteen inches for best results. Care should be taken in selecting suitable varieties, so the colors will harmonize and the taller growing sorts placed in the background or in the center of an open bed. In our best choice named varieties we give height of plant and color of foliage and flower. Set the plants at least eighteen inches apart each way.



Florence Vaughan Canna

APIOS TUBEROSA

A hardy tuberous-rooted climber, resembling in miniature the common Wistaria in vine and foliage, and having clusters of rich, deep purple flowers, which have a strong, delicious violet fragrance. Tubers 10c each; \$1.00 per dozen, postpaid.

CALADIUM OR ELEPHANT EAR

One of the most easily grown plants for the lawn or flower borders. It will thrive in any ordinary garden soil, but to get the best results, 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, 25c; 3 for 60c, postpaid.

CALLA (Golden Yellow)

This splendid new variety has found a hearty response with all. The flowers are as large and the same shape as the old white variety but of a rich golden yellow; foliage is dark green spotted cream, with a truly striking plant and much admired everywhere. Large bulbs 35c each; \$3.50 per doz. postpaid.

CINNAMON VINE (Dioscorea Batatas)

A rapid-growing climber, taking its name from the peculiar fragrance of the delicate white flowers. The leaves are heart-shaped, bright glossy green. Growth is very rapid, often running twenty-five to forty feet. Quite hardy. Each 15c; \$1.50 per dozen postpaid.

MADERIA VINES

One of the best and most popular climbers, not for flowers, which is insignificant, but for its leaves, which are small, dark green and very dense. Vine is of slender growth and will succeed in any location, doing best, however, in a sunny, sheltered place. Not hardy, and roots should be taken up in fall. Strong tubers. Each 15c; \$1.50 per dozen postpaid.

CHAS. HENDERSON—Crimson flowers, green foliage, height 4 feet.

CRIMSON BEDDER—Crimson flowers, green foliage, height 4 feet.

DAVID HARUM—Crimson flowers, bronze foliage, height 3½ feet.

EGANDALE—Red flowers, bronze foliage, height 4 feet.

Express—Scarlet flowers, green foliage, height 2½ feet.

Florence Vaughan—Flowers yellow spotted brown, bronze foliage, height 5 feet.

Mad Crozy—Flowers vermilion with gold eye, green foliage, height 3½ feet.

Mount Blanc—Pure white flowers, green foliage, height 4 feet.

Venus—Rose-pink flowers mottled cream, green foliage, height 3½ feet.

Wyoming (King Humbert)—Orange-scarlet flowers, bronze foliage, height 5 feet.

Price: Dormant Roots; any of above 20c each; 2 for 35c; \$1.75 per dozen, postpaid.

MIXED CANNAS—Comprising good kinds, our selection, superb for bedding or massing. Strong plants 15c each; 6 for 80c; \$1.50 per dozen, postpaid.

MONTBRETIAS (Blazing Star)

A desirable summer-flowering plant; hardy; easily grown. Star-shaped flowers on spikes, 20 to 30 inches high. Bloom the first season. Should be planted by hundreds. Mixed varieties, bulbs. Each 5c; dozen 50c, postpaid.

SUMMER-FLOWERING OXALIS

These useful little plants are very effective in masses or beds and are particularly valuable for edgings. They produce an unbroken row of foliage about one foot high and continuous show of bloom. Pure white, pink or red. Either color. Per dozen 30c; 25 for 50c, postpaid.

TIGRINUM (Single Tiger Lily)

Very hardy native Lily. Orange-red, spotted with purple-black. Is very pretty and bears from eight to twenty flowers. Each 15c; \$1.50 per dozen postpaid.

TUBEROSE

The Tuberose is pre-eminently a flower for everybody. The lovely waxy flowers are so fragrant that a few tips will perfume a room or greenhouse. It is especially desirable for furnishing a continuous supply of blooms for bouquets, cut flowers or ladies' hair. 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.

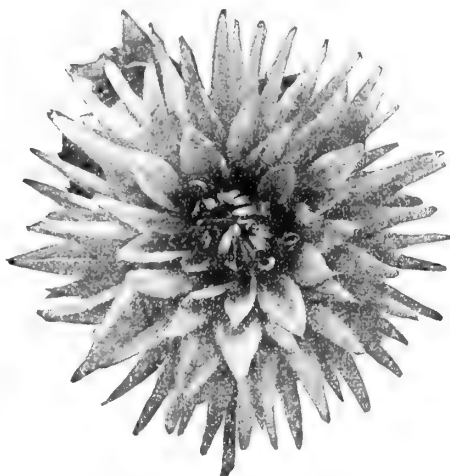
Double Dwarf Pearl—This is an improved strain of the Dwarf Pearl, bearing very heavy spikes of double flowers. Each 10c; 75c per doz. postpaid.

FLOWERING BULB FOR FALL PLANTING

We carry a full line of bulbs for fall planting ready in September, such as Hyacinths, Tulips, Crocus, Narcissus, Daffodils and Lilliums. Ask for Fall Bulb List, which we will mail free on request.



Type of Decorative Dahlia



Type of Cactus Dahlia

DAHLIA

Choicest Double Varieties

The double-flowered Dahlia is one of the most popular fall flowers. From strong field-grown roots, fine flowers may be had the first season, much earlier than plants grown from seed. On mailing the roots we usually remove a portion of the tuber to reduce the cost of postage, but the portion attached to the stem from which the eye starts is left intact.

CULTURE—Here are a few hints from our grower: "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 flat 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. Three by three feet is about the proper distance to plant apart.

Keep all dead flowers trimmed off.

Dahlia blooms keep much better if cut in the evening—about sunset—and the less foliage taken off with the flowers the better for both plant and flower. If green is desired, use some other green of better keeping qualities."

P.-W.'s CACTUS DAHLIAS

Including Both Old and New Sorts

	Postpaid Prices Each	Doz.
COUNTESS OF LONSDALE —The freest-flowering Cactus Dahlia. Color, an exquisite shade of rich salmon-pink	25c	\$2.50
Kriemhilde —Birilliant pink, splendid for cutting	25c	2.00
GOLDEN GATE —Very large; rich deep golden-yellow suffused and shaded fawn	25c	2.50
Floradora —Deep blood-red; very early	20c	2.00
General Buller —Rich velvety crimson, tipped white	20c	2.00
PERLE DE LYON —Large; petals cleft at the tip. Pure white flower and borne on good stems	25c	2.00
Hungarian —A finely formed flower borne on long stems. Pure old gold shade	20c	2.00
Uncle Tom —Dark maroon, almost approaching black. Fine shaped flower with good stem	20c	2.00
Zephyr —Light feathery form of unique coloring, rosy-pink, shading to heliotrope	20c	2.00

P.-W.'s Big Nine Collection of Cactus Dahlias

One each of the above nine superb varieties. \$1.50 postpaid.

P.-W.'s DECORATIVE DAHLIAS

	Postpaid Prices Each	Doz.
Autumn Glow —A very large, full flower, bronze-yellow	20c	\$2.00
Black Prince —Very dark, almost black	20c	2.00
Lavender Beauty —A clear, soft lavender shade. Petals deeply serrated	20c	2.00
DELICE —Wonderful, glowing rose-pink flower, perfect shape. When cut retains its freshness longer than any other. Height 4 feet	30c	3.00

P.-W.'s Collection of Decorative Dahlias—One each above nine varieties \$1.50, Postpaid

P.-W.'c SHOW AND FANCY DAHLIAS

The name Show applies to those varieties producing large, well-formed flowers, showing only solid colors, but may frequently have shaded tips.

	Postpaid Prices Each	Doz.
A. D. Livoni —Rick pink, finely formed. A very handsome flower	20c	\$2.00
Arabella —Pale lemon, shading to primrose at the tips	20c	2.00
Bon Ton —A fine ball-shaped flower of deep garnet-red. An extra fine Dahlia	20c	2.00
Glori De Lyon —Pure white. The largest white show Dahlia in cultivation; round as a ball	20c	2.00
Golden Treasure —A beautiful burnt orange color. Flower large well formed and full to the center	20c	2.00
GRAND DUKE ALEXIS —A magnificent Dahlia of the largest size. Its petals are beautifully quilled, giving it a very unique appearance. Its color is pure white, over spread with delicate lavender when grown in bright sunlight	25c	2.50
Morocco —Large, well-formed blooms. Dark maroon, often tipped with white	20c	2.00
Purple Gem —Rich royal purple, clear and constant. Decided improvement over the old varieties	20c	2.00
Queen of Yellows —Fine clear yellow. An early and very prolific bloomer	20c	2.00

P.-W.'s Collection of Show and Fancy Dahlias
One each of above nine varieties. \$1.50, postpaid.

P.-W.'s PAEONY FLOWERED DAHLIAS

This new type is fast becoming very popular. It could well be described as semi-double of the Decorative form and resembles very much a large semi-double paeony. We have selected a half dozen of what we consider the choicest varieties of this class.

	Each	Doz.		Each	Doz.
Duke Henry—Brilliant red. Large broad petals. Very free bloomer	25c	\$2.50	Queen Wilhelmina—Immense fluffy flower of pure white, with yellow center	25c	\$2.50
GEISHA—The showiest and most attractive of this type yet introduced. Petals very long, curved and twisted. A rich combination of scarlet and gold, shaded to amber yellow	50c	5.00	Souvenir Franz Liszt—Dark purple, maroon. Veined and shaded with white.	25c	2.50
Kai Ora—Flowers large, rosy-pink, borne on long graceful stems. Height 4 feet	25c	2.50	Van Dyck—Mammoth salmon-rose tinted heliotrope. Petals twisted. The most popular of this type	25c	2.50

P.-W.'s COLLECTION OF PAEONY FLOWERED DAHLIAS—One each of above six varietiesPostpaid \$1.25

P.-W.'s SELECT MIXTURE OF ALL TYPES DOUBLE DAHLIAS

Where the purchaser is not particular about knowing the names of the different varieties, this mixture gives a superb assortment. They are field-grown roots and mixtures without names, of all choice double flowers, of many distinct colors and shadings. We offer these select double Dahlia roots at 20c each; \$2.00 per doz. Postpaid.

GLADIOLUS

These are the most attractive and useful of all summer-flowering bulbs, and as a cut flower all through the summer months and well into the autumn they hold a place that cannot be taken by any other flower. Wonderful improvements are being made each year in the size, color and beauty of these flowers, and our list comprises only the best both in mixture and in named sorts.

Culture—For best results a good rich sandy loam is desirable, though they are easily suited both as well to soil and location. The best time to plant is about the first of May, putting in the smallest bulbs first, and reserving the larger bulbs for later planting. A succession of bloom may be had from July to October by making plantings two weeks apart up to the end of June. To make a good show they should be planted from three to four inches apart each way. The depth to plant is regulated by the size of the bulb, the large bulb being covered about six inches deep, smaller ones from three to four inches.

If wanted by mail the prices on single and dozens include postage For large quantities the average weight is about 10 lbs. per 100 bulbs. See Page 2 for parcel postage.

AMERICA—A beautiful soft, flesh-pink, slightly tinged with lavender; strong grower, erect spikes of large flowers; grand for bedding. For florist's use it has no equal. Each 7c; per doz. 60c.

Augusta—Pure white, blue antlers. Each 7c; per doz. 60c.

Attraction—Deep rich crimson, with large white center and throat. Each 7c; per doz. 60c.

Blue Jay (Baron Hulot)—The finest blue Gladiolus yet seen. It is a rich, deep color of an indigo shade. The only real blue Gladiolus on the market. Each 10c; per dozen 75c.

Canary Bird—Clear canary yellow, finest yellow Gladiolus in existence Each 15c; doz. \$1.50.

Europe—The finest pure white. Each 15c; per doz. \$1.50.

MRS. FRANCES KING—A striking shade of light scarlet or flame color; one of the most effective, both in the border and when cut. Each 7c; 75c per doz.

Mrs. Frank Pendleton—The flowers are of largest size, borne on strong, straight spikes. In color a lovely salmon-pink with brilliant deep red blotches in the throat. A color combination rivaling many of the finest orchids. Each 10c; \$1.00 per dozen.

Glory of Holland—Splendid pure white. Each 15c; per doz. \$1.50.

Panama—Very long spike with large well arranged flowers. Splendid deep pink. Each 10c; per doz. \$1.00.

Niagra—Beautiful cream, blending to yellow, throat splashed with carmine. Each 10c; per doz. \$1.00.

SCHWABEN—Strong erect spikes and large well expanded flowers of a clear canary-yellow with a small blotch of deep garnet in the throat. Each 10c; per doz. \$1.00.

P.-W.'s SUPERB MIXED—Our special mixture from best named and hybrid Gandavensis, Childsii and European types. A well blended combination of all colors, shades and combinations. Per doz. 50c; \$3.50 per 100, Postpaid.



P.-W.'s Superb Mixed Gladiolus

P.-W.'s Mixed Gladiolus in Separate Colors

	Postpaid per doz.		Postpaid per doz.
Scarlet and Crimson Shades—Mixed	\$0.45	Yellow and Orange Shades—Mixed	\$0.85
White and Light Shades—Mixed	.50	Striped and Variegated Shades—Mixed	.55
Pink and Rose Shades—Mixed			.50

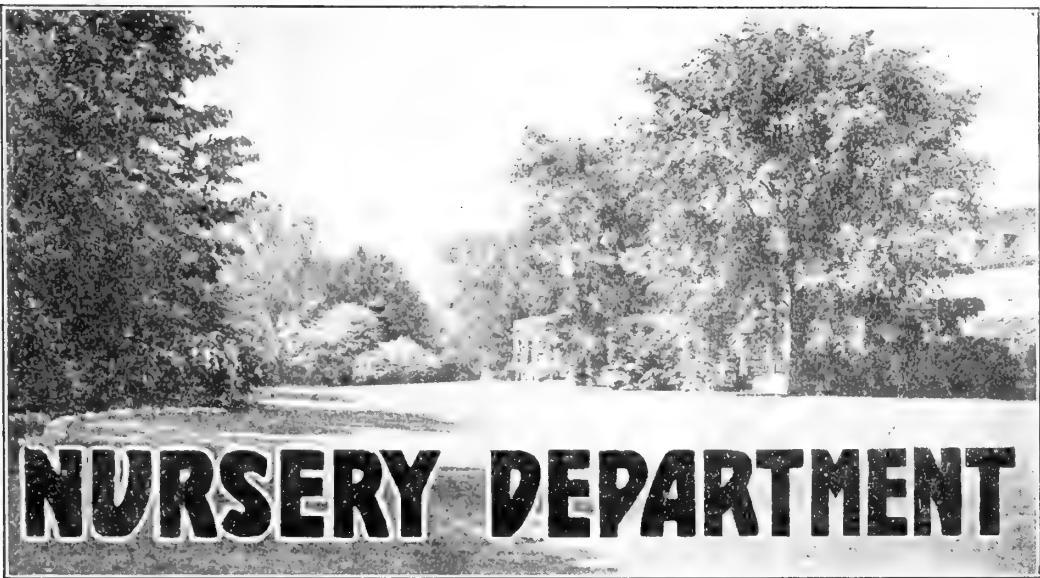
USEFUL PLANTING TABLE FOR BULBS AND PLANTS

The table below shows the number of plants required to fill a circular bed of the dimensions given. In planting begin outside row—where 6 inches apart, 3 inches from edge of bed; where 12 inches apart, 6 inches from edge of bed. It is customary in planting a bed to set the plants somewhat closer together in the two outer rows, giving more space between each plant toward the center of the bed.

A square bed will take about the same number of plants. For an oval bed, add length and breadth and divide by 2. For example, an oval 8 feet long by 6 feet wide will require the same number of plants as a circular bed 7 feet in diameter.

NUMBER OF PLANTS FOR CIRCULAR BEDS

3 ft. dia., 6 in. apart	28 plants	6 ft. dia., 12 in. apart	28 plants	10 ft. dia., 18 in. apart	86 plants
3 ft. dia., 12 in. apart	7 plants	8 ft. dia., 6 in. apart	200 plants	10 ft. dia., 24 in. apart	20 plants
5 ft. dia., 6 in. apart	80 plants	8 ft. dia., 12 in. apart	50 plants	14 ft. dia., 6 in. apart	612 plants
5 ft. dia., 12 in. apart	20 plants	10 ft. dia., 6 in. apart	320 plants	14 ft. dia., 12 in. apart	153 plants
6 ft. dia., 6 in. apart	112 plants	10 ft. dia., 12 in. apart	80 plants	14 ft. dia., 18 in. apart	68 plants



NURSERY DEPARTMENT

All Nursery Stock shipped by us is accompanied by a certificate of health, issued and signed by an Inspector of the Horticultural Commission. This insures shipments to consist of nothing but healthy stock, free and clear of all scale, insect pests, etc. Orders for Winter and Spring shipments should be placed as early as possible. Three-fourths of the nursery business is done in the Spring months, and when our busy season starts, we are rushed with orders. All orders are filled in rotation as received.

PLEASE NOTE CAREFULLY WHEN ORDERING

First—Please use the order sheet and give explicit instruction how you wish the plants sent.

Second—Please don't mix orders for seeds and plants together; all can be sent in one shipment, but is aids us materially if they are written on separate order sheets supplied for that purpose.

Third—Please don't mix orders with letters. They should be written on separate sheets to avoid confusion.

Dormant Trees and Shrubs by Freight—Trees, both ornamental and orchard, shrubs and other dormant stock can be forwarded safely by fast freight lines, even to very distant points, at low rates.

Packing Free—We make absolutely no charge for boxes or packing, or delivery to any express or freight line in Salt Lake City.

Safe Arrival Guaranteed—We guarantee the safe arrival of all plants to any part in the U. S. when sent by express. Should the express shipment reach you in bad order have notation made by the agent on your receipt for charges, so that recovery can be made for damages.

Claims—Should any errors occur we desire to be informed upon receipt of goods, that we may rectify them without delay. All claims must be filed within ten days after the arrival of shipments.

IMPORTANT RULES ABOUT NURSERY ORDERS

No order can be accepted for less than \$1.00, as packing expense is too great.

CASH IN FULL must accompany the order if immediate shipment is desired.

Orders to be delivered at later date will be booked only providing at least **one-fourth** of the purchase price accompanies them, and shipment cannot be made until payment is made in full. This rule applies to all except Public Institutions.

We cannot ship Plants or Nursery stock C. O. D. to anyone.

After stock has been received in good condition and accepted by the purchaser, we decline to assume any responsibility whatsoever for failures or any other matter, except where it should prove untrue to label, in which case we will replace free of charge or refund the purchase price, but further than this we assume no responsibility.

HINTS UPON RECEIVING ORDER

Caution—Be careful in unpacking to note everything, and either plant, or cover up with moist soil at once. Moisten the roots, and do not allow them to become dry.

Treatment Before Planting—Before planting prune of all broken and extra long roots. Peach, Plum, Apricot, etc., should have side limbs and top cut back to at least half the length.

Planting—Dig holes large enough to allow the roots of the tree to spread out in their natural position, carefully placing the finest and best soil from the surface among the roots; when the soil is nearly filled in, thoroughly settle the earth by filling the hole with water; after it settles, fill in the remainder of earth. In moist soils, the use of water to settle the earth is much better than treading the soil with the foot.

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.

AN INVITATION

Our Centerville Nurseries are but a twenty-minute ride from Salt Lake City, either by automobile or electric railway. Visitors are always welcome. Much of interest and value would be gained from a trip there during the summer months. Hundreds of varieties of roses and other shrubs, etc., both old and new, could there be seen growing side by side and the relative merits of anything of particular interest could then be best judged. Without any obligation whatever to you it will be a pleasure to show you over the grounds.



A Spray of P.-W.'s Climbing American Beauty in the Foreground

P.-W.'s HOME GROWN ROSES

OUR GREAT SPECIALTY

The Rose is the joy of the rich man's garden and the solace of the poor man's front yard—it gives forth its beauty and perfume to the woman of fashion as well as to the toilers in the factory and on the farm. Certainly there is no plant in the Floral Kingdom that will bring greater reward for cultivation than the Rose.

In planting Roses be sure to remember that the hybrid perpetuals do best on heavy soils; the hybrid teas on the medium heavysoils, and the teas on the lighter soils.

SOME THINGS TO OBSERVE

Unpacking Roses—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. When the bush is planted press the soil firmly over the roots. Make a basin around the plant, and water freely to exclude air and to settle the earth.

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 require to be pruned as soon as their first blossoming 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 of Roses—See Page 94 on Insecticides.

Time for Planting—In this intermountain region, the best time for planting is in the spring, immediately after the frost is 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 10 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.

Delivery Charges are Prepaid on all Roses at prices quoted in this Catalog. Your are, therefore, as close to our Rose Grounds as your Express or Post Office.

QUANTITY PRICES ON ROSES

Where the price on the variety is:		75c each, we supply ten for	\$7.00
50c each, we supply ten for	\$4.50	80c each, we supply ten for	7.50
55c each, we supply ten for	5.00	85c each, we supply ten for	8.00
60c each, we supply ten for	5.50	90c each, we supply ten for	8.50
65c each, we supply ten for	6.00	95c each, we supply ten for	9.00
70c each, we supply ten for	6.50	\$1.00 each, we supply ten for	9.50

See P.-W.'s Special Rose Offer on Page 64

P.-W.'s SUPERB, HARDY, EVER-BLOOMING HYBRID TEA ROSES

This class combines the good points of both the Teas and Hybrid Perpetuals. Blooming freely and without interruption from the first year, like ordinary Tea Roses, with large, finely formed flowers of delightful fragrance. These roses have constitutions which enable them to stand severe winters with only ordinary protection. Certainly everyone will be well repaid for the extra attention in caring for them. In all cases they are much more profuse bloomers than the Hybrid Perpetuals, in fact, more beautiful in every way. To supply the ever-increasing demand for this class of rose, we are increasing our acreage every year. Our list includes the cream of both old and new.

Unless otherwise noted, price of any on this page: 85c each; \$8.00 per ten, charges prepaid. Strong, healthy 2 year old Dormant Roots.

BETTY

Very large flowers of splendid form. Color copper-rose shaded golden-yellow; deliciously perfumed; without doubt a sterling rose.

DEAN HOLE

Grows into a stout, vigorous hardy bush, bearing all summer great numbers of gorgeous, silvery carmine Roses with salmon shadings. The coloring is distinct and unique.

DUCHESS OF ALBANY

Deep rose, nearly red.

DUCHESS OF WELLINGTON

Intense saffron yellow stained with crimson, changing to deep coppery saffron yellow.

EDWARD MAWLEY

A beautiful rich crimson touched with maroon, with a delightful velvety gloss on the petals, which are large, forming a good-sized flower with high globular center. The growth is strong and the very fragrant flowers are borne in profusion.

ETOILE DE FRANCE

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.

GENERAL McARTHUR

A dazzling crimson-scarlet. Buds of ideal shape.

GRUSS AN TEPLITZ (Virginia R. Cox)

The best bedding and hedge rose for the Rocky Mountain States. In bloom continuously from early spring until snow.

For intense and dazzling color there is no other Rose to compare with this splendid kind. The flowers are large and handsome, moderately double, of splendid substance, and are produced in amazing profusion during the whole of the blooming season; in fact, it is always in bloom. The color is fiery-crimson, shaded with a dark velvety sheen, a combination found in no other rose.

The fragrance of this rose is unexcelled by that of any other variety under cultivation. It is a strong and sturdy grower, often attaining a height of four or five feet, is perfectly hardy in all sections.

HERMOSA (Bengal)

It is hardy as an oak, and is always covered with clear, pink blooms.

HOOSIER BEAUTY

Beautiful, well-shaped, long buds and large, full perfect flowers of an intense, rich, dazzling crimson-scarlet and deliciously fragrant. Price: 85c each.

IRISH ELEGANCE

Large, single, golden-bronze flowers of great beauty, free and constant bloomer, with deep bronze foliage.

JONKHEER J. L. MOCK

One of the best bedding varieties. The flowers which are produced with the greatest freedom on long, stiff stems, are of large size and of perfect form, of a deep imperial-pink, the outside of the petals silvery-rose white.



Gruss An Teplitz Blooms from June to Snow

KAISERIN AUGUSTA VICTORIA

This splendid rose should be in every collection. In color it is a soft pearly-white, tinted with just enough lemon in the center to relieve the white; remarkably fragrant; beautifully formed flowers on long, graceful stems; a strong free, healthy grower, with bold, handsome foliage. Can't be beat. See cut Page 62.

KILLARNEY (The Irish Beauty)

Brilliant sparkling pink with large, pointed buds, broad, waxlike petals and enormous semi-full flowers of exceeding beauty. One of the very finest forcers.

IRISH FIRE FLAME

The name describes this rose; unique and unlike any other rose; color of close 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; a continuous bloomer; strong grower; foliage dark green; reverse, bronze.

Old customers will notice we have eliminated a number of Roses listed in our previous catalogs. This has been done only after careful comparison with those added or still retained to make sure that we cut out nothing but inferior types. So if some familiar name is missed from this list you may be sure a better and more desirable one will be found to take its place. Our aim is to cut out everything but those that will handsomely reward for time and cost of cultivation.

P.-W.'s SUPERB COLLECTION OF HYBRID TEAS—Continued

See bottom of page for prices

MABEL DREW—The booms are large and full; the color is deep cream on first opening, passing to intense canary-yellow in the center; delicious, refreshing perfume.

MADAM CAROLINE TESTOUT—Grand bright pink. Flowering freely all summer. One of the best. Known in the northwest as the "Portland Rose."

MARY, COUNTESS OF LEICESTER—Distinct, warm crimson-carmine; great size with large, smooth circular petals.

Laurent Carle—Long buds are borne on long stems, opening into large flowers of perfect form, just full enough to open freely; color brilliant velvety-carmine.

La Detroit—Foliage is rich and glossy and the large cupshaped blossoms are shell-pink, shading to soft rose. A rampant grower and very fragrant.

LA FRANCE* (The queen of all the roses.)—Beautiful bright silvery-pink with pale lilac shadings, over the entire flower a satiny sheen. Large, full and fine form; one of the sweetest scented roses.

LOS ANGELES—The following is the originator's description which, after carefully testing out this variety in our trial grounds, we find to be true in every respect: "A rose which, through its own intrinsic worth and beauty will eventually find its way into the gardens of rose lovers throughout the world. The color is absolutely new in roses. Luminous flame-pink toned with coral and shaded with translucent gold at the base of the petals. Buds long and pointed, expanding to a flower of mammoth proportions. Beautiful from the opening bud until the last petal drops. A rose which will furnish you from plants grown in your own garden, better flowers than can be produced from the finest of under-glass grown stock." Price: \$1.50 each.

LYON ROSE (Perentiana)—The result of a cross between Mad, Melaine, Souperet and Soleil d'Or. Pronounced by experts as the most important production of modern times. Flowers large, full and double, of remarkable substance, shrimp-pink, edges of coral-red or salmon-pink, shaded chrome-yellow. Very fragrant. Constant bloomer. Perfectly hardy. \$1.00 each; \$9.50 per ten.

Mrs. Aaron Ward—Coppery-orange in the open bud, but golden-orange when partly developed, pinkish-fawn of lovely shade when fully open, when it looks like a full silk rosette. Price: 60c each.

Mrs. David Jardine—The color is bright rosy-pink shading to rich salmon-pink on the outer petals. A strong grower, large flowers, fine buds and very free-flowering richly fragrant.

My Maryland—The color is soft salmon-pink which lightens up beautifully as the flowers expand. Under artificial light it is even more beautiful than in the daylight. The growth sturdy and healthy, the foliage large and abundant. It is strongly and delightfully perfumed.

Mrs. A. R. Waddell—This is most beautiful in bud and flower. The flowers are of the largest size, of perfect form, and possess wonderful keeping qualities. The coloring is most beautiful in effect, being a rosy-scarlet, opening rosy-salmon, with reverse of petals rosy-scarlet. A sturdy, erect and vigorous grower.

Mme. Jules Groles (Red Kaiserin Augusta Victoria)—This magnificent rose is exceedingly free-blooming, with very large, finely formed flowers. The color is a distinct and charming shade of cherry-red. It is a remarkable strong-growing variety, as hardy as the Hybrid Perpetuals.

Mad, Leon Pain—Silvery-pink shading to salmon, base of petals orange. Unquestionably one of the freest blooming and best all around Roses in cultivation today. Superb in either bud or open flower. A sheet of color throughout the season.

Strong, healthy field-grown 2 year old Dormant Roots of above at 85c; 10 for \$8.00, except where otherwise noted. All delivery charges prepaid.

HYBRID PERPETUAL ROSES

The varieties we list in this class are all of very vigorous growth and hardy in our climate. Many of them flower the entire summer. Others flower during the month of June and again in August and September. The flowers are large, often measuring from five to six inches in diameter. Very fragrant, and in all the colors known to the rose. All Hybrid Perpetuals should not be ordered for house culture, as some of them are not suitable for that purpose. We have eliminated all varieties except the very choicest and best bloomers and included in this class some varieties that are classed in Europe and by some American houses as Hybrid Teas.

AMERICAN BEAUTY RED—A popular perpetual bloomer. Very double and deliciously fragrant. Color deep, rich crimson, exquisitely shaded. This should have a little protection during winter.



Kaiserin Augusta Victoria

MRS. CHARLES RUSSELL—A strong-growing, free-flowering Rose. The foliage is heavy and almost mildew-proof. The bud is fully as large as American Beauty but longer and pointed and opens into a flower of unusual beauty; color of a bright rose-pink, deeper towards the center. Each \$1.00; \$9.50 per ten.

Mrs. George Sawyer—This variety possesses the irresistible combination of size, fragrance, perfect form and color. The flowers are large, brilliant, rose-pink in color and keep well when cut. A strong grower, it is a fine variety for forcing, while as an outdoor rose it is one of the best.

Ophelia—Color salmon-flesh, shaded with rose; large and perfect shade; of excellent habit, the flowers standing up well on long stiff stems. Excellent for forcing or outdoor culture.

PRINCE DE BULGARIE—Silvery-flesh, shaded to rosy salmon.

RHEA REID—This rose is of the American Beauty type, and of much easier culture. It never mildews or black-spots; flowers perfectly under all weather conditions. In color it is a rich, dark, velvety red.

Richmond—Superb form and fragrant flowers; wonderfully free-blooming. Its immense scarlet-crimson flowers are borne on long, stiff stems, making it a rival of the American Beauty, and even more dazzling.

White La France—Same habits as Pink La France; differs only in color, which is pure white.

Sunburst—It has long, pointed buds, which can be cut tight for market. The color is orange-copper or golden-orange and golden-yellow; edge of petals lighter; intense

Strong two year old dormant roots of above at 85c each; 10 for \$8.00, charges prepaid.

HYBRID PERPETUAL ROSES—Continued

Coquette Des Alps—One of the best and freest blooming of the hardy roses. It is finely formed, occasionally shows light blush when first opening.

General Jacqueminot—An old stand-by. Shapely buds, shining crimson; brilliant, velvety and fragrant.

Gloire Lyonnaise—White, tinted with yellow; large, full and of good shape; very free, distinct and pleasing.

MARSHAL P WILDER—Hard to beat. Deep, rich, glowing red.

Magna Charter—Extra large full flowers of unusual depth; sweet and of fine form. Bright rosy-red in color.

MRS. JOHN LAING—Very delicate pink; large, fine form; very fragrant; flowers continuously. The best bloomer in the Hybrid Perpetual class.

Paul Neyron—The flowers are immense; color bright shiny pink; clear and beautiful. Very double and finely scented. Blooms all summer.

PRINCE CAMILLE DE ROHAN—Known as the black rose, owing to its very deep velvety crimson color, passing to intense maroon and shaded black. Large, handsome, fragrant flowers.

P.-W.'s RED AMERICAN BEAUTY—Same habits of growth and bloom as the popular forcing American Beauty, the only difference being in its adaptability to outside culture; it is much hardier and does not fade as quickly as the old variety when exposed to the wind and direct rays of the sun.

ULRICH BRUNNER—Brilliant, cherry-red; flowers of immense size and bold, globular form. Seedling of Paul Neyron. Strong and disease resisting.

Price of any of the above strong two year old field grown roots 85c each; \$8.00 per ten, charges prepaid.

P.-W.'s EVER-BLOOMING TEA ROSES

The Roses of this class are easily distinguished by their delicate fragrance and shades of color. Not being as hardy as the Perpetuals or Hybrid Teas, they should be planted where they are protected from cutting winds. They prefer a rich, warm, dry soil and moderate pruning, removing all the unripe and weak wood. Protection in the way of straw, litter and leaves is necessary in the fall. They bloom in great perfection during the entire summer and autumn, being especially fine during the autumn months.

Burbank—A hardy, free-flowering, free-blooming rose; fine double form, nearly three inches across. Color deep rose-pink, shading to beautiful soft rose at the center. Delightfully fragrant.

Harry Kirk—Deepest yellow, passing to lighter shades at edge of petals; large, full and beautiful form; buds long and elegant; free bloomer. Gold Medal Rose.

PAPA GONTIER—This is probably the most popular red rose in the whole list; the bush, which is of strong growth and always furnished with an abundance of healthy foliage, is an incessant bloomer; it is much sought after for cut flowers on account of its magnificent buds; color, rich cherry red; no collection is complete without it.

LADY HILLINGDON—One of the recent introductions of the Tea class, and has taken the medal over all yellow roses, the color being one almost beyond description, apricot yellow shaded to orange on the outer edge of the petal, becoming deeper and more intense toward the center of the bloom. The color does not fade after the bloom is cut, but invariably becomes darker. Buds are produced on long, strong, wiry stems, well above the foliage, producing a slender, graceful effect. A strong, hearty grower.

WHITE MAMAN COCHET—Free bloomer, bearing magnificent buds and flowers, standing at the very head of all roses as the best white for open ground culture.

PINK MAMAN COCHET* (The Queen of all Garden Roses)—The buds are large, full and firm, elegantly pointed, showing depth and richness as they expand. The superb flowers open perfectly double, are extra large and of splendid substance. Hardy in every section of the country; clear, rich pink, changing to silvery-rose.

YELLOW MAMAN COCHET*—One of the very best hardy, ever-blooming yellow roses. It is ideal for open ground culture—a typical Cochet Rose, with gracefully molded buds, flowers magnificent when open, on stiff, strong stems.



Price of above, except where otherwise noted: 85c each; \$8.00 per ten. Strong 2 year old Dormant Roots. All charges Prepaid.

P.-W.'s POLYANTHA OR BABY ROSES

VERY DESIRABLE BEDDING AND EDGING ROSES

A Continuous Sheet of Bloom During the Entire Season

A class of Roses derived from the Climbing Polyantha. They are of dwarf habit and bloom so freely as to cover the entire plant with bloom all through summer and fall. The plants are splendid for bedding or as edgings for borders they are very beautiful. They are useful, either for pot culture, for bedding purposes or for hedge effects. The plants are completely hidden with bloom from spring until late in the fall.

Baby Dorothy—A prolific producer of pure pink flowers, with all the qualities of the Crimson Baby Rambler.

Crimson Baby Rambler—Hardy and healthy. Blooms in profuse clusters until frost and throughout the winter if taken indoors. Clear, brilliant ruby-red color.

Erna Teschendorf—The flowers are of a deep crimson color flushed with carmine, resembling the dazzling color of Gruss an Teplitz.

White Baby Rambler—Same habits of growth as Crimson Baby Rambler. Color pure white.

Madame Cecil Brunner—Plant of dwarf growth, excellent for bordering. Color salmon-rose. We think the most beautiful and lovely of the miniature roses; very fragrant. Needs protection in winter.

Baby Orleans—One of the best; flowers of large size of brilliant geranium-red, becoming suffused with rose as the flowers mature, and large white center; a very pretty color combination.

Price on any of above: 85c each; \$8.00 per ten. All charges Prepaid.

P.-W.'s HARDY CLIMBING ROSES

Including the Ramblers, Climbing Polyanthas and Wichuriana

These roses are suitable for planting where they can climb on walls, fences, galleries, pillars, pergolas, arches, etc.; in fact, wherever a hardy climber is required.

Price of any on this page, except where noted, 75c each; 10 for \$7.00; two year old field grown shrubs, all charges prepaid.

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. The plant frequently retains its lovely green foliage until the end of November; it forms a beautiful decorative subject throughout the autumn months.

CLIMBING AMERICAN BEAUTY—Same color, size and fragrance as American Beauty, with the addition of the climbing habit. Good foliage and better blooming qualities. Each 85c.

CLIMBING CECIL BRUNNER—Easily the most charming and popular of the Polyantha Roses. Very robust and one of the strongest climbers in the rose family. Hardy and suitable for all sections. Each 85c.

Climbing Frau Karl Druschki—Bloom identical with the parent plant, the bust sort of the same name.

CLIMBING MME. CAROLINE TESTOUT—A sport from the bush sort of the same name; bloom identical with its parent. One of the strongest growers in climbing family of roses. A plant of this in full bloom is one of the most pleasing sights we know of in the way of a climbing rose; bloom is very large; color, a solid cerise-pink and does not fade. Highly fragrant. Each 85c.

CLIMBING KAISERIN AUGUSTA VICTORIA—This is easily the grandest climbing white rose extant. Bloom is identical with the parent plant (Kaiserin); of extremely strong climbing habit; we have seen it make shoots of fifteen feet in one season; this is one of the very few roses strictly GOOD AT ALL TIMES—regardless of the season of the year. Each 85c.

CLIMBING BABY RAMBLER, or MISS G. MESSMAN—Climbing Polyantha. This is a true ever-blooming Crimson Rambler. Simply a climbing form of the Baby Rambler, embracing all its good qualities.

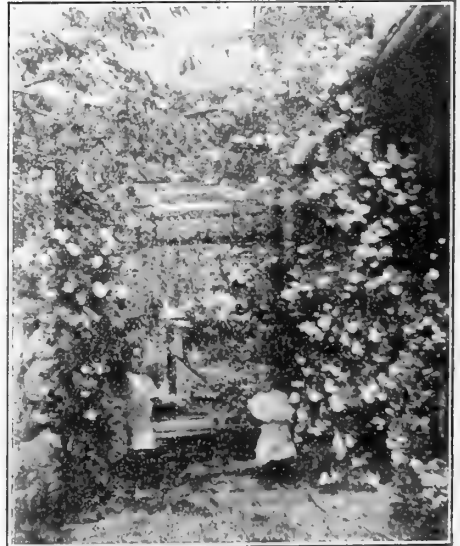
Crimson Rambler—Rapid producer of long, heavy canes, reaching a height of ten to twenty feet in one season; rich clusters of bloom form a mass of livid beauty until late in the season.

DOROTHY PERKINS—Beautiful shell-pink color, which holds for a long time, fading finally to a lovely deep rose; very sweet scented; fully equal to Crimson Rambler in foliage and hardiness, habit of growth much the same.

EXCELSIA or RED DOROTHY PERKINS—A brilliant Crimson Rambler flower on glossy, varnished Wichuriana foliage; the infusion of Wichuriana blood assures an ornamental climber which is nearly evergreen, and this will assure this lively crimson-scarlet rose a place in every American garden.

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

Price of any of above except where noted, 2 year old field-grown shrubs: 75c each; \$7.00 per 10. Delivery charges prepaid.



White Dorothy Perkins (Second Year from Planting)

Philadelphia Rambler—Roses borne in grand clusters, completely covering the whole bush. Color pure deep crimson.

TAUSENDSCHOEN, or THOUSAND BEAUTIES—The flowers upon first opening are the most delicate shade of pink ever seen in a rose; might be described as a white delicately flushed pink, changing to rosy-carmine. It gets its name from the many flowers and the variation in coloring; beautiful. Simply a wonder.

WHITE DOROTHY PERKINS—We have the pleasure of offering this White Dorothy Perkins that in every way is the equal, if not superior, to Crimson Rambler as a red, and Dorothy Perkins as a pink.

P.-W.'s INTRODUCTORY ROSE OFFER

Of Ten Everbloomers for Your Rose Garden for \$7.00

That you may know the excellence of our Home Grown Stock and our facilities for packing and delivery so that roses reach you in a healthy, thrifty condition, we make this exceptionally low offer of \$7.00 for one each of the following ten roses, all charges prepaid. Every one is a top-notch, hardy in most any situation, all 2 year old field grown shrubs and guaranteed to bloom continuously during the entire season, if given just an ordinary chance.

Jonkheer J. L. Mock—Silvery rose-pink.
Duchess of Wellington—Coppery-yellow.
Edward Mawley—Deep, rich crimson.
Gruss An Teplitz—Dark crimson-red.
Kaiserin Augusta—Blush-white.

Mrs. Chas. Russell—Wonderful deep rose-pink.
Sunburst—Orange-yellow.
White American Beauty—Pure white.
Climbing American Beauty—Red.
Climbing Cecil Brunner—Pink.

One each of above ten choice 2 year old dormant shrubs for \$7.00, Prepaid.

CONSERVATORY AND HOUSE PLANTS

Our facilities are excellent in this line, being in a position to furnish most all desirable and reasonable decorative plants on short notice. We not only have an extensive assortment of Potted Plants at our own Greenhouses, but are in touch with other large growers, which enables us to deliver anything desired.

The conditions in the Potted Plant Trade are so changeable that we are compelled to quote approximate prices only. We shall be pleased to give special quotations at any time. We do not ship any plants under this division by Parcel Post. Most of them are too large to carry safely, and the risk of damage is too great; by express is the only safe way.



ORNAMENTAL ASPARAGUS

Sprengerii—A beautiful decorative plant for porch, hanging baskets, long vase and for planting in window boxes. It is very effective used as a house plant, and it can be taken in the house for a winter plant after its summer use is over. It is a vigorous grower, producing sprays three or four feet long, of fresh, green, feathery foliage. **Vigorous Plants, \$1.25 to \$3.00 each according to size.**

Hanging Baskets—Eight to fourteen inches in diameter with sprays, 14 to 36 inches long, \$3.50 to \$7.50 each.

Asparagus, Plumosus or Lace Fern—A beautiful plant with dark green, gracefully arched foliage. Surpassing Maiden Hair Fern in grace and delicacy of coloring. One of the most beautiful decorative plants. **Plants, \$1.00 to \$3.00 each, according to size.**

FERNS

Boston—This fern is of such easy culture and rapid growth, and so graceful and ornamental, that it has superseded the other varieties, both with the florist and amateur. Its long, graceful drooping fronds often attain a length of five or six feet in a year. **\$1.25 to \$5.00 each according to size.**

New Ostrich Plume, Whitmani—This beautiful fern is a sport from the Boston, but it indescribably more beautiful. **\$1.50 to \$5.00 each, according to size.**

PALMS

Areca Lutescens—One of the most decorative plants always graceful and artistic. **\$3.00 to \$10.00 each, depending on size.**

Kentia—The most popular parlor palm we grow. Hardy and rugged under all kinds of treatment. **\$2.00 to \$10.00 each, depending on size.**

Flowering Potted Plants, such as Cyclamen, Azaleas, Begonias, Easter Lilies, Spireas, Hydrangeas, Hyacinths, Daffodils, etc., can always be furnished in season at reasonable prices.

Miscellaneous Conservatory Plants at Our Centerville Greenhouses

SUMMER BEDDING PLANTS

The following plants are raised from the choicest grades 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 either extra strong, transplanted, flat-grown stock, or else from two in. h pots. If wanted by mail, add 10c per dozen for postage. **Price: 65c per doz.; \$4.00 per 100.**

- *Asters—Mixed
- Balsam
- Carnations—Marguerite.
- *Cosmos—Mixed.
- Fever Few—Mixed.
- Double Daisy—Mixed.
- Lobelia—Blue.
- Marigold.
- *Marguerite—Mixed.
- Petunia—Mixed.
- Phlox—Drummondii—Mixed
- Salvia.
- *Snapdragon—Mixed.
- Stocks—Mixed.
- Verbena—Mixed.

*Marked varieties can be furnished in separate colors at same price.

THE FOLLOWING PLANTS ARE POT GROWN Propagated From Cuttings

	From 2 1/2 inch pots.		From 4 in. Pots	
	Each	Doz.	Each	Doz.
Begonia Vernon—Bright red	25c	\$2.00		
Coleus—Assorted varieties	25c	2.00		
Geranium, Double—Assorted colors	30c	3.00	50c	4.50
Geraniums, Variegated—Border	25c	2.00	40c	3.50
Geranium, Ivy Leaved—Assorted	30c	3.00	50c	4.50
Geranium, Martha Washington	35c	3.50	60c	5.50
Petunia, Giant Double Fringed	25c	2.50		
Variegated Vinca—Foliage mottled	25c	2.00	50c	4.50
Senecio Scandens (Parlor Ivy)	25c	2.00		
Snapdragon	25c	1.50		

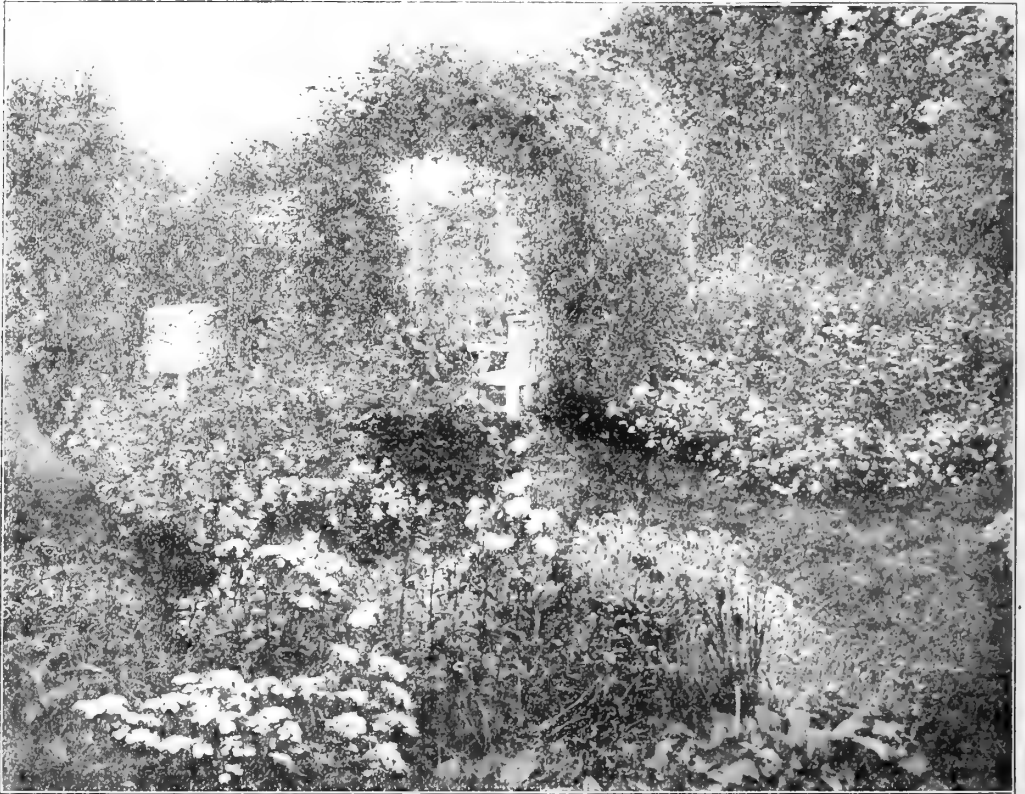


A House of 4-inch Geraniums at Centerville.

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, 1 dozen, 75c; 3 dozen, \$2.00; 100 plants, \$4.75, by mail, add 20c per dozen for postage.

Important—Plants n roots, and should receive careful attention upon arrival. If they appear withered, place in lukewarm water for an interval of ten or fifteen minutes. This will revive them.



Effective Planting of Hardy Perennials

HERBACEOUS PERENNIAL PLANTS

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. Our prices are for field grown plants. If by mail, add 5c each, 30c per dozen, postage.

Alyssum Saxatile Compactum (Basket of Gold, Gold Tuft, Rockmadwort).—An indispensable plant for the rockery or border, growing 1 foot high and producing early in the summer masses of broad, flat heads of bright yellow flowers. Each 25c.

Bleeding Heart (Dielytra).—The old favorite, heart-shaped flowers. Each 30c.

Campanula.—In several varieties, including the Canterbury Bell. Each 25c.

Columbine (Aquilegia).—Assorted colors. Each 25c.

Coreopsis Lanceolata.—Flowers are bright golden yellow. Each 25c.

Dianthus Barbatus (Sweet William).—Continues to bloom most all summer. Large, double flowers. Each 25c.

Delphiniums (Hardy Larkspurs).—A very graceful, tall-growing plant, with long spikes of bright flowers; assorted colors. Each 25c.

Digitalis (Fox Glove).—A very ornamental plant, growing to about three feet high; assorted colors. Each 25c.

Poppy, Hardy Oriental.—Large flowers resembling chrysanthemums, in a great variety of colors. Each 25c.

Pyrethrum (Aliginosum Giant Daisy).—Very attractive. Each 25c.

Gaillardia Grandiflora.—Has a mass of blooms the entire season. Flowers are dark red-brown with petals of orange or crimson. Each 25c.

Feverfew Little Gem (Matricaria).—A most useful summer cut flower, with large double-white flowers; June until October; 12 to 15 inches high. Each 25c.

Forget-Me-Not (Myosotis Alpestris).—Low growing plants, producing an abundance of fragrant small blue flowers. Each 25c.

Gypsophila Paniculata (Baby's Breath).—Single. Each 25c.

Hardy Garden Pinks—Assorted colors. Each 25c.

Hollyhocks.—The handsome double flower of the improved varieties of this flower makes it a great favorite. One-year-old roots. Assorted. Each 25c.

Lobelia Cardinals (Cardinal Flower).—Flowers from July to September; color, fiery scarlet; height, two feet. Each 25c.

Rudbeckia (Golden Glow).—Height four to six feet, and producing hundreds of large blossoms of brilliant golden-yellow color during August and September. Each 25c.

Rudbeckia Newmanii (Blackeyed Susan).—Golden yellow ray petals around a dark center. Fine cut flowers. Each 25c.

Shasta Daisies—Burbank's new varieties. Each 25c.

Santolina Chamaecyparissus Incana (Lavender Cotton).—A dwarf evergreen perennial with attractive silvery white foliage; useful as a rock or border plant and largely used for carpet bedding; prefers a light soil and rather dry position. Each 25c.

Vinca Minor (Periwinkle, or Trailing Myrtle).—An excellent dwarf evergreen trailing plant that is used extensively for carpeting the ground under shrubs and trees, or on graves where it is too shady for other plants to thrive. Each 25c.

Violets—Hardy sweet-scented blue. Per clump, 25c each.

CHRYSANTHEMUMS

Old Fashioned Large-Flowering, etc.—We offer below five fine large-flowering varieties, which are absolutely hardy and will be found useful for garden decoration:

Autumn Glow.—Rose

Golden Queen.—Yellow.

Indian.—Red

Old Homestead.—Pink.

Victory.—White.

Any of above; 25c each; \$2.50 per dozen.

Plants marked 20c, are \$2.00 per dozen; 25c, are \$2.50 per dozen; 30c, are \$3.00 per dozen; 35c, are \$3.50 per dozen. Add 5c each for postage, if wanted by Parcel Post.

DOUBLE PAEONIES

HARDY EVERYWHERE

The Peony, of all the list of bulbous or tuberous rooted plants, is perhaps the oldest and best known inhabitant of the flower garden. 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. The abundant dark green foliage is exceptionally clean and attractive. The gorgeous display of blooms in the months of May and June is simply unequalled, the flowers being perfectly double, many being very fragrant and all of immense size.

An important point to observe in the planting of Herbaceous 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.

THE PEER OF ALL FLOWERS

THE CREAM OF NAMED VARIETIES

Prices Include Postage.

ASA GRAY.—Bright lilacs, sprinkled with minute dots of deeper lilac as if dusted on; very large. 80c each; \$7.50 per dozen.

BERLIOZ.—Large full flower of a bright currant red shaped amaranth. 55c each; \$5.00 per dozen.

COURONNE d'OR.—One of the finest late flowering white varieties. 65c each; \$6.00 per dozen.

EDULIS SUPERBA.—This is the famous Decoration Day Peony. Color, a beautiful bright clear pink with silvery reflex. To those who want flowers on Decoration Day, buy *Edulis Superba*. 50c each; \$4.50 per dozen.

FELIX CROUSE.—Large, ball-shaped bloom; very brilliant red. One of the finest self-colored varieties. 65c each; \$6.00 per dozen.

FESTIVA MAXIMA.—This truly superb variety, the finest white in cultivation, combine wonderful purity of color, freedom and earliness of flower. 55c each; \$5.00 per dozen.

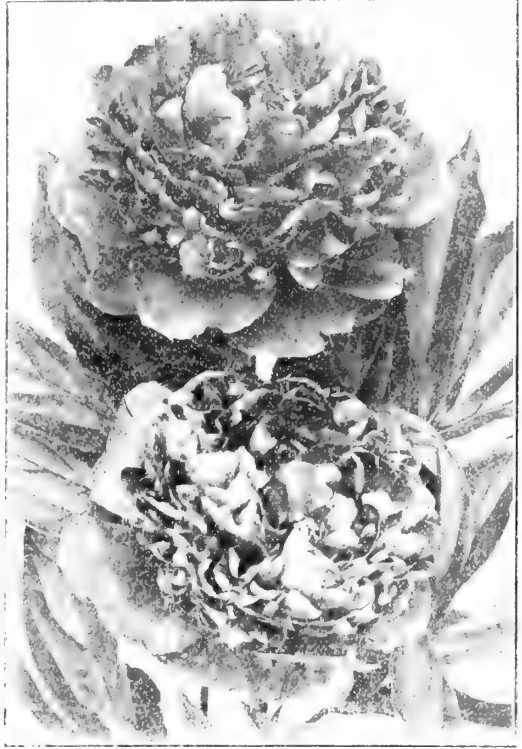
LA TULIPE.—Very large globular flesh-pink shading to ivory-white, center petals tipped with carmine. One of the best. A vigorous grower and free bloomer. 65c each; \$6.00 per dozen.

MADAME FOREL.—An extra fine silvery-pink, shading darker at the center. A beautiful shaped flower. 80c each \$7.50 per dozen.

MADAME CALOT.—Large pale hydrangen pink, with darker shadings in the center; early. 55c each; \$4.00 per dozen.

MIXED NAMED PEONIES (Separate Colors).—Double white, double red, double pink and double mixed colors. Price: 45c each; \$4.00 per dozen, Postpaid.

If above, are ordered by express at purchaser's expense, deduct 5c each and 50c per dozen.



Felix Crouse

HARDY PHLOX

Phlox are a garden in themselves. There is nothing quite equal to them in all-around good qualities. Formerly, they consisted of white and a few dull shades of pink and purple, but not so now. There are varieties of the most vivid crimson, the clearest and softest shades of pink, clear mauves and purples and snowy white. Phlox succeeded in almost any soil and position, and flower through a long season; and while they will continue in good condition 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 very early spring.

B. COMPTE.—A glowing French purple, one of the finest dark colored varieties.

ECLAIREUR.—Brilliant rosy-magenta, with large lighter halo.

HENRY MARCEL.—Pure red, with bright salmon shadings.

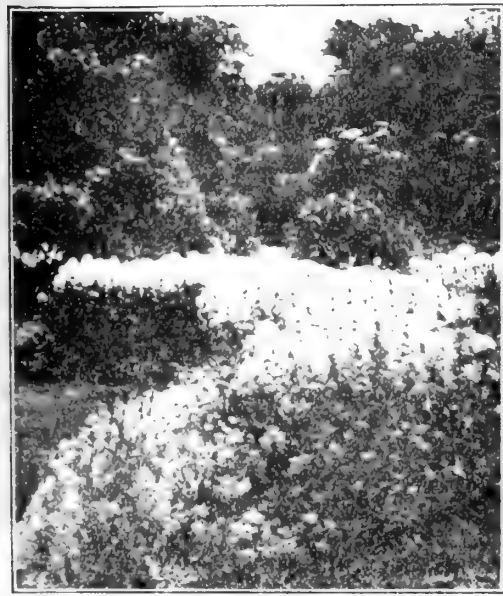
MRS. JENKINS.—The best white variety; immense panicles; early and free bloomer.

R. P. STRUTHERS.—Rose carmine, with scarlet red eye; very bright.

SELMA.—A pretty delicate, soft pale rose with distinct red eye.

Price: Any of the above, 30c each; \$2.50 per dozen, Postpaid.

WE SUPPLY SIX AT DOZEN RATES.
TWENTY-FIVE AT HUNDRED RATES.



Attractive Border of Hardy Phlox

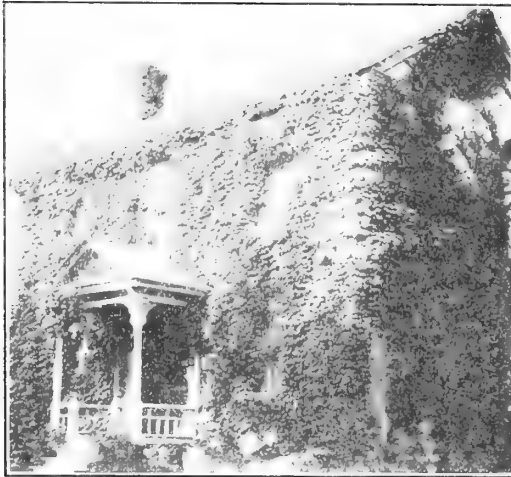
LIBERTY IRIS

Flag Iris are all sun-lovers and delight in a well-drained situation. They almost out-rival the Orchid, in delicacy and richness or coloring. They are splendid for beds, border or front of shrubery. Plant in bold groups for best effects. Avoid planting too deep, barely covering the rhizomes (creeping root stems) being sufficient.

ALL COLORS MIXED—This is the Trial Grounds mixture of choice varieties grown for test purposes. All very excellent types. You will be pleased with this mixture. 20c each; \$2.00 per dozen, Postpaid.

HARDY ORNAMENTAL CLIMBING PLANTS

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 grown plants at prices given below. If by mail, add 5c each for postage.



Boston Ivy—Mayor Williams residence, Centerville, Utah.

AMPELOPSIS 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. This variety has proved itself perfectly hardy. Will grow in almost any soil and withstand drought and heat well. Each 55c.

AMERICAN IVY

Virginia Creeper or Woodbine (Ampelopsis quinquefolia)—A strong, rapid grower; foliage large, dark green; in autumn, bronze and crimson. This is an old favorite and valuable for covering back porches, outbuildings, arbors, etc. Perfectly hardy everywhere, and will grow in any soil and situations. Each 50c.

BOSTON or JAPAN IVY

AMPELOPSIS VEITCHII—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. The handsomest vine possible for growing on house walls, especially the foundation and the first story, around the doors and windows. When once established it is hardy. Each 75c.

BIGNONIA RADICANS

TRUMPET VINE—Dark red-orange throat; free blooming, very hardy and rapid grower. Useful for covering unsightly places, stumps, or wherever a showy flowering vine is desired, it will be found useful. Each 60c.

CELASTRUS SCANDENS

Climbing Bitter Sweet—A native climbing or twining plant, with handsome large leaves; yellow flowers in May and June and clusters of ornamental orange-capsuled fruit in autumn. One of the most desirable climbers for shade. Each 60c.

MATRIMONY VINE (Lycium)

Well known, hardy, fast-growing vine; handsome when covered with scarlet fruit in autumn. Commonly used as a trailer, and for a ground cover under trees, and on terraces or any kind of steep slopes to hold the soil in place. Each 60c.

We recommend express shipments on above, wherever possible. If it is necessary to send parcel post, add 5c each for postage.

	Where The "Each" Price Is	
35c	We supply ten for	\$3.00
40c	We supply ten for	3.50
45c	We supply ten for	4.00
50c	We supply ten for	4.50

CLEMATIS

PANICULATA (Virgin's Bower)—This is hardy in all parts of the United States. The blossoms are pure white, very fragrant, and borne in great clusters or bunches, covering the plant almost completely, enough to hide the glossy, rich green foliage. Each 50c.

JACKMANII—This is the best of all large flowering varieties. Color, a deep violet purple. A strong rampant grower, succeeding well in all localities. Each 75c.

HONEYSUCKLES

We cannot speak too highly of this class for covering arbors, fences, pergolas, verandas, etc. All are perfectly hardy and improve in beauty each year.

JAPONICA HALEANA (Hall's Japanese)—Almost evergreen sort; flowers pure white, changing to yellow July to November. Each 55c.

JAPONICA FLEXUOSA (Chinese Twining)—Remarkable on account of retaining its beautiful, glossy foliage most all winter, and covered with sweet, yellowish-white flowers most all summer. Each 55c.

HOP VINE

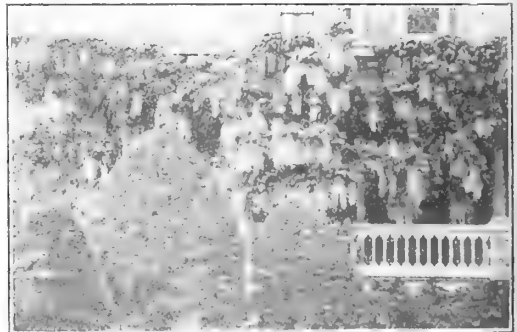
Humulus Lupulus—A useful climber for covering unsightly places. Each 40c.

IVY (English)

Valuable for covering graves. Grows well in shade. Each 40c

KUDZU VINE

Pueraria Thumbergiana or Jack-and-the-Bean-Stalk—The most remarkable climber extant. In rich soil will grow seventy feet in one season. Starts into growth slowly, but after three or four weeks grows almost beyond belief. Leaves in shape like Lima Bean; dark green; texture, soft and woolly. Fine for porches, arbors, old trees, etc. Each 45c.



Chinese Wistaria (on Porch).

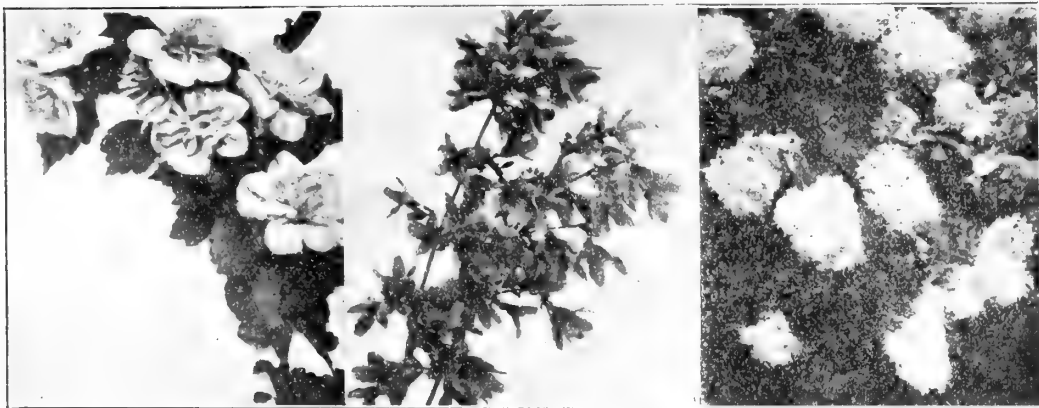
WISTARIA

Chinese Wistaria (Wistaria Chinese)—A rapid-growing tall vine with handsome foliage and flowers. Flowers pea-shaped, purplish, profusely borne in dense, drooping clusters 7 to 12 inches long, opening in midspring. Each 50c.

Chinese White Wistaria (W. Var. Alba)—A form of above with pure white flowers. Each 65c.

In selecting your Climbers, don't overlook our splendid collection of Hardy Climbing Roses. See Page 64.

	Where The "Each" Price Is	
55c	We supply ten for	\$5.00
60c	We supply ten for	5.50
65c	We supply ten for	6.00
70c	We supply ten for	6.50
75c	We supply ten for	7.00



Althea (Hib Syriacus)

Golden Bells (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.

If to be shipped by Parcel Post, add 15c each for postage. Each specimen will be properly labeled and packed for shipping. Plants reach customers in better condition when shipped by express. We strongly advise express shipments wherever possible.

(A) denotes shrubs which attain 9 to 12 feet in height at maturity. (B) denotes shrubs which attain 5 to 8 feet in height at maturity. (C) denotes shrubs which attain 1 to 4 feet in height at maturity.

ALTHEA (ROSE OF SHARON). (A)—A free-flowering shrub of easy culture and very desirable on account of blooming in August and September. Flowers resemble a double hollyhock. **Double Pink, Red or White, 50c each.**

BERBERIS THUNBERGII (Japanese Barberry) (B)—A most beautiful shrub adapted for hedges border, screens or general purposes. The growth is very compact and needs no attention with the shears, though, if desired it is as susceptible to formal pruning as Privet or Boxwood. Its dainty fern-like foliage in the spring and summer is a rich green changing in the autumn to brilliant scarlet and gold. Following the close set, white flowers are the scarlet oval berries which are borne into the winter. **Two-year, 12 to 18 inch shrubs, 25c each; \$2.00 per 10; \$15.00 per 100.**

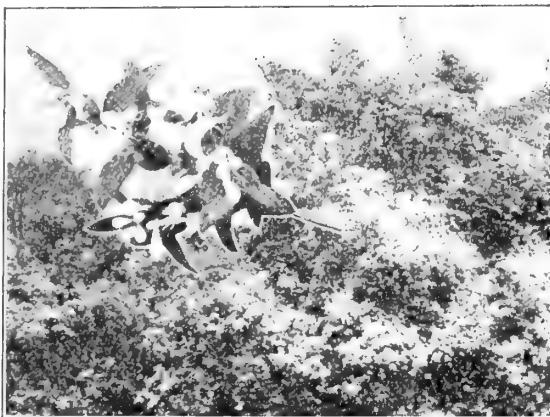
CARAGANA SIBERICA (Siberian Pea Tree). (A)—Most beautiful of all the flowering crabs; hardy. Trees of medium size, are covered in early spring with large, beautiful, double, fragrant flowers of a delicate pink. This is the lawn tree for a small yard. **65 each.**

CRANBERRY (Highbush). (B)—Hardy as a rock and most desirable, combining the ornamental with the useful. The blossoms are white, single and very showy and its beautiful fruit clings to the branches in winter, making it very desirable for single specimen or for the shrubery. **60c each.**

CYDONIA (Japan Quince). (B) **Japonica**—A single shrub on the lawn is very attractive; brilliant crimson flowers, among the first in spring. Valuable ornamental hedges. **50c each.**

DEUTZIA. (B)—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. **Double Pink, 50c each; Double White, 50c each.**

FLOWERING ALMOND (Amygdalus). (B)—One of the early blooming shrubs, producing handsome little flowers in great profusion. It is one of the most beautiful little shrubs we have. **Double Red, 50c each; Double White, 50c each.**



Upright Tartarian Honeysuckle

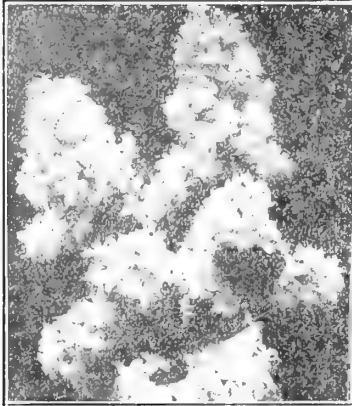
FORSYTHIA (Fortuneii) (Golden Bell)

This is a pretty shrub of medium size. Native of China and Japan. The flowers are drooping, golden yellow, and appear very early in spring before the leaves. The best very early flowering shrub. **Each 60c.**

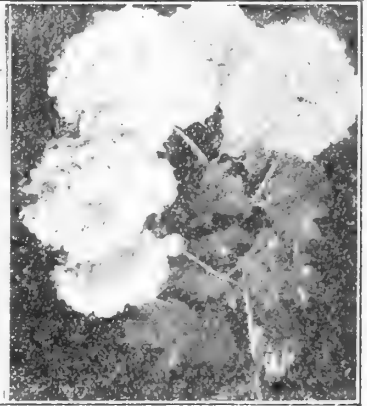
GOLDEN LEAVED ELDER The best of all the colored shrubshrubs. A plant of this bush in a bed, or a border on the lawn is a conspicuous feature, the foliage being as yellow as gold. **55c each.**

HONEYSUCKLE UPRIGHT TARTARIAN (Lonicera Tartarica) (B)—The best known of all the Bush Honeysuckles and in our estimation the finest variety of all. Grows with upright, somewhat spreading, branches and bright green foliage. The flowers are borne freely in May and June, followed by showy red berries, which cling to the bush for several weeks. **White, 50c each; Pink, 50c each.; Red 50c each.**

HARDY SHRUBS (CONTINUED)

Lilac (*Syringa*)

Weigelia Rosea



Snowball

HYDRANGEA (*Paniculata Grandiflora*)

Unsurpassed for the lawn, a hedge, or for the 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; the flowers are massive, cone-shaped, sometimes ten inches in length, and changing from the original pure white to pink, and finally to a beautiful rich coppery red. Each 70c.

LILACS (True *Syringa*)

Alba Grandiflora—Flowers pure white and very fragrant. 60c. each.

Charles X—A strong, rapid-growing variety, with large, shining leaves; trusses large, of a reddish purple color. Each 75c.

Persian Purple—Flowers are deep purple and their familiar fragrance is loved by all. Easy culture and grow in any soil. Each 60c.

PRIVET FOR HEDGES

Of all shrubs planted for hedges, none can equal this. Extremely hardy, very easy to grow, and makes a splendid green foliage. Always free from insects. Thousands of these beautiful hedges are planted annually. As well as being the cheapest. Privet is the prettiest hedge that can be had. Strong two year old shrubs at 75c per 10; \$5.00 per 100. Strong two year old shrubs at \$1.00 per 10; \$6.50 per 100.

SNOWBALL (*Viburnum*

Japanese Plicatum)—A valuable improvement on the common Snowball; the flowers are smaller, more numerous, frequently as many as twenty balls on a stem; 18 inches long. Each 75c.

Common (Sterilis)—Too well known to need description. Each 55c.

SPIREA

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. Each 50c.

Van Houti (Bridal Wreath)—Pure white flowers in clusters or panicles an inch in diameter. Each 50c.

SYMPHORICARPUS

The Coral Berry, Indian Currant and Snowberry

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

Racemosus (Snowberry) (B)—A graceful shrub, 3 to 5 feet tall with slender branches. Flowers white or pinkish, in loose racemes, in summer. Two to three feet bushy 50c.

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. Two to three feet, bushy 50c.

TAMARIX

Amurensis—Shrub of strong but slender, upright growth, clothed in foliage as light and feathery as that of the asparagus.

Their delicate fringed flowers of pink, are very ornamental at the back of shrubby borders. Flowers all summer. Price: 50c each.

SYRINGA OR MOCK ORANGE (*Philadelphus Coronarius*)

This is a grand old favorite shrub. It is prized very highly for its beautiful foliage and white flowers. Very fragrant, resembling somewhat apple blossoms. Each 50c.

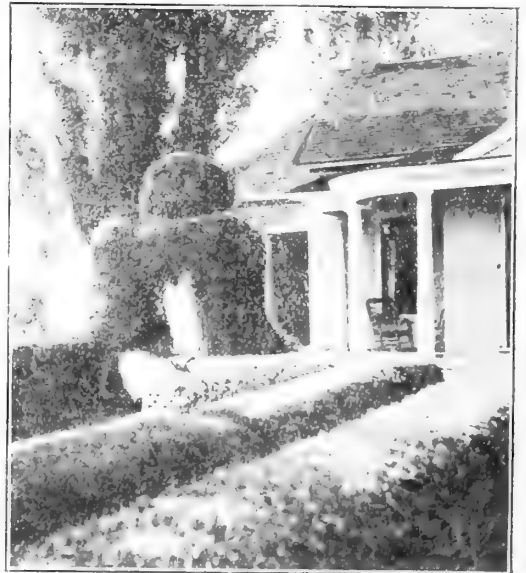
WEIGELIAS (*Diervilla*)

These shrubs bloom after the lilacs, in June and July. They make a strong growth, erect when young, gradually spreading and drooping into large graceful shape with age. Their large flowers are of wide trumpet-shape, colors from white to red, and borne in clusters thickly along the branches.

Candida—White flowering Weigelia, flowering throughout the summer; 2 to 3 feet. Each 50c.

Eva Rathke—A charming new Weigelia. Flowers brilliant crimson; flowering throughout the summer. The best of all Weigelias; 2 to 3 feet. Each 75c.

Rosea—A beautiful shrub with rose colored flowers in May and June; 2 to 3 feet. Each 50c.



Privet Hedges and Archway

Transportation charges on all shrubs to be paid by the purchaser. If necessary to ship Parcel Post, add 15c each, for postage. We strongly recommend shipment by Express where possible.

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.	Weeping
Japan Quince	Red	Single	4 to 5 ft.	Dense
Japanese or Thunberg's Barberry	Yellow	Single	2 to 3 ft.	Dense
Spirea, Thunbergii	White	Double	3 to 6 ft.	Bushy
MAY—				
Mock Orange (Syringa)	White	Single	5 to 10 ft.	Upright
Snowball	Yellow	Spherical	3 to 8 ft.	Spreading
Lilac, White and Purple	White and Purple	Single	4 to 8 ft.	Branching
Spirea Van Houtii	White	Double	4 to 6 ft.	Upright
Flowering Currant	Red or Yellow	Small	3 to 6 ft.	Bushy
Siberian Pea Tree	Yellow	Single	8 to 12 ft.	Upright
Flowering Plum	Pink	Double	4 to 7 ft.	Branching
JUNE—				
Weigelia	Red, White, Pink	Single	3 to 6 ft.	Arching
Lilac	White, Purple	Large	4 to 8 ft.	Branching
Golden Elder	Yellow, Orange	Flat	4 to 8 ft.	Shrubby
Bush Honeysuckle	Pink, White	Clusters	3 to 5 ft.	Branching
Deutzia	White	Clusters	2 to 3 ft.	Branching
JULY—				
Wegelia	Red, White, Pink	Single	3 to 6 ft.	Arching
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
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 panical	4 to 8 ft.	Spreading
SEPTEMBER—				
High Bush Cranberry		Red berries	8 to 10 ft.	Spreading
Privet		Foliage and berries	5 to 10 ft.	Dense

*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

Japanese Barberry	Indian Currant
Coral Berry	Japan Quince
Elders	Snowberries
Bush Honeysuckles	Cranberry High Bush

SHRUBS FOR WET PLACES

Dogwoods	Elders	Tamarix
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SHRUBS FOR SHADY PLACES

Japanese Barberry	Indian Currant
Deutzias	Privet
Dogwoods	Snowberries

SHRUBS FOR HEDGES

Bush Honeysuckle	Lilacs
Hydrangea Grandiflora	Privet
Japan Barberry	Spirea Van Houttei
Japan Quince	

CLASSIFICATION OF ORNAMENTAL TREES

TREES SUITABLE FOR STREET AND AVENUE PLANTING

Ash—Both American and European	Maple—Ash Leaved Box Elder, Norway, Silver, Sugar, Sycamore, Schwedlerii
Catalpa—Speciosa	
Elm—American	
Linden—American	Oriental Plane
Horse Chestnut	Poplar—Carolina, Boileana

FLOWERING TREES

Horse Chestnut	Linden
Flowering Crabs	Catalpa Speciosa
Flowering Plums	

TREES FOR LAWN OR YARD

Catalpa Bungeii	Mountain Ash
Cut-Leaved Birch	Mulberry-Teas Weeping
Camperdown Weeping Elm	Willow Weeping

TREES WITH COLORED FOLIAGE

- Maple Schwedlerii—(Purplish foliage).
- Prunus Pizzardi—(Flowering bloom) purple.
- Poplar Boileana—Silvery underneath leaves.

P.-W.'s Mountain Grown Seeds and Trees
Are Hardier

HARDY CLIMBERS FOR SPECIAL SITUATIONS

<p>Climbers for Shady Places — Celastrus Bittersweet, A- ios Tuberosa, Hop Vine, Honeysuckle, English Ivy</p>	<p>Climbers for Hot Sunny Situa- tions and Southern Aspect — Bignonia Radicans, Clem- atis Paniculata, Honey- suckles, Roses.</p>	<p>Climbers for North Aspects— Clematis Jackmanii, Am- pelopsis Veitchii (Boston Ivy), English Ivy.</p>	<p>Climbers for Eastern or West- ern Aspects — Ampelopsis Engelmanni, Cinnamon Vine, Matrimony Vine, Climbing Roses.</p>
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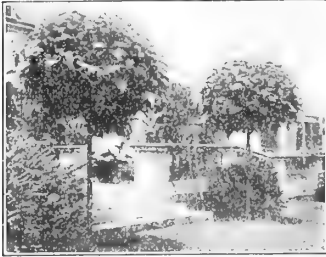
ORNAMENTAL TREES

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, and the effect is much better when only one kind of a tree is planted on the same street, or, at least, on the same block.

Get your neighbors to co-operate, agree upon suitable tree, then plant trees uniform size at equal distances apart on the whole block, and you will enhance the value of your property and have a street that lends contentment and refinement to every home.

The following list of deciduous trees (those that lose their leaves in autumn) embraces a selection for all purposes. For street planting, among the leaders for the Rocky Mountain States are Bolleana Poplar, Oriental Plane, Linden, Catalpa, Maples and others; while for lawn and park planting this varied list covers trees of every characteristic in outline and habit, color of foliage and floral diversity.

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 5 trees or more of one variety and size. Special prices made on lots of 100 up.



Catalpa Bungei

ASH (Fraxinus)

American White (Fraxinus Americana)—A rapid growing native tree of fine symmetrical outline. A valuable street or park tree. Timber is largely used in the manufacture of agricultural implements, railway cars, etc. Price, 6-8 ft., \$1.00 each; 10-12 ft., \$1.50.

Excelsior—European Ash. A lofty tree of rapid growth, with spreading head and gray bark, pinnate leaves and black buds; 8-10 feet. Each, \$1.50.

BIRCH (Betula)

Cut Leaved Weeping (Pendula Lacinata)—This tree is indeed a picture of delicacy and grace. Makes a large tree, very effective in landscapes. Price: 6-8 ft., \$1.75.

CATALPA

Bungei (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. Fine 2-year old heads, \$2.00 each.

Speciosa (Western Catalpa)—One of the most rapid growers, producing large panicles of fragrant flowers, delicately marked with violet and yellow. Reliable, hardy and extensively planted. Six to eight ft., \$1.00 each; 10-12 ft., \$1.50 each.

ELM (Ulmus)

American Elm—Tall and stately with a graceful, widespreading form (vase-like), densely covered with a rich, bright green foliage. It stands alone as an ornamental shade tree. The hardiest and most vigorous of all trees. Six to eight ft. \$1.00; 10-12 ft., \$2.00.

CAMPERDOWN WEEPING ELM

Its vigorous, irregular branches, which have a uniform weeping habit, overlap so regularly that a compact, roof-like head is formed. Leaves are large, glossy dark green. A strong, vigorous grower. One of the best weeping trees. One-year heads, \$2.25.

HORSE CHESTNUT European (Aesculus Hippocastanum)

Showy flowers; white panicles in upright panicles. Six to eight ft., \$2.00.

LINDEN, American (Tilia Americana)

Basswood. Shapely trees, with large, handsome foliage. Flowers creamy-white and very fragrant. Six to eight feet, \$1.75.

MOUNTAIN ASH (Sorbus)

These very ornamental trees all have handsome foliage turning orange-red in the fall. The scarlet fruits often remain on the ranches all winter.

European (S. Aucuparia)—White flowers followed by brilliant red berries. Six to eight feet, \$1.50.

CRAB (Bechtels Double Flowering)

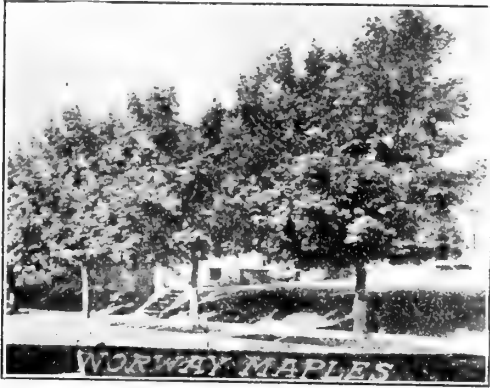
Most beautiful of all the flowering Crabs; hardy. Trees of medium size are covered in early spring with large, beautiful double, fragrant flowers, resembling small roses of a delicate pink. This is the ideal tree for a small yard. Two to three ft., \$1.00 each.

MULBERRY (Teas Weeping)

The most beautiful weeping tree of recent introduction. The slender branches grow downward parallel with the stem, forming an umbrella-like shape. All who have seen it agree that in light, airy gracefulness and delicacy of form, it is without a rival. It undoubtedly takes the foremost place of weeping willow trees. It has beautiful foliage, is hardy, enduring the cold of the north and the heat of the south. One-year heads, \$2.50.

We quote on the sizes most generally used. If trees are desired of larger sizes than quoted, please write us for Special Quotations, also Quantity Prices.





MAPLE (Acer)

Ash-Leaved or Box Elder (Acer Negundo).—A fine, rapid-growing avenue tree; withstands both cold and drought. **Eight to ten feet, \$1.00 each; 10-12 feet, \$1.50 each.**

Silver Maple (Dasycarpum).—A large tree with wide-spreading branches and drooping branchlets. Very fast grower, makes dense shade and thrives in any soil. **Eight to ten feet, \$1.00 each.**

Norway Maples (Platanoids).—A large handsome tree, of spreading rounded form, with shiny, deep green foliage. Usually very symmetrical. Its compact habit and stout, vigorous growth render it one of the most desirable species for the street, park or lawn. **Eight to ten feet, \$2.00.**

Schwedieri.—The Purple Norway Maple's beautiful leaves attract attention at all seasons, but are especially fine in spring, when their gleaming red and purple contrasts brightly with the delicate green of other trees. In mid-summer they are purplish green in autumn, golden yellow. **Six to eight feet, each \$2.25.**

SUGAR OR ROCK MAPLE

Straight, spreading, symmetrical, often 100 feet in height. It grows well in all except damp, soggy soils, and roots deeply, allowing the grass to grow close about its trunk. Its bold leaves have very rich autumn tints of clear-yellow and scarlet. **Six to eight ft., \$1.75 each.**

PLANE (Platanus)

Oriental Plane or European Sycamore—One of the finest trees for street or lawn, with fine, straight trunk, handsome symmetrical head and beautiful foliage. **Six to eight ft., \$1.25 each.**

POPLAR

As a class the Poplars are vigorous, cost little and grow quickly.

Bolleana—A tall columnar tree of picturesque and very formal aspect. Widely planted; a very rapid growing and hardy tree. Leaves triangular, the borders serrate, glossy green above and silvery beneath. One of the best for street or park planting. **Six to eight ft., \$1.00 each; 8-10 ft., \$1.25 each; 10-12 ft. \$1.75 each.**

Carolina Poplar—Of rapid growth. Very desirable when quick shade is wanted. **Six to eight ft., 75c each; 8-10 ft., \$1.00 each; 10-12 ft., \$1.50 each.**

FLOWERING PLUM (Prunus)

Purple-Leaved (Prunus Pissardi)—Handsome form, with rich purple leaves, which retain their color the best of all purple-leaved trees and recommended where colored foliage is desired. Covered profusely in early spring with beautiful white flowers and later with wine-red fruits. Beautiful and hardy. **Three to four ft., 75c each.**

HARDY EVERGREENS

Evergreens include some of the most beautiful trees in cultivation and varieties may be selected which are adapted to almost any soil or climate. We are giving attention to perfectly hardy species and varieties which are the most useful to the general planter.

To be successful, transplanting should be done during the spring, April or May.

COLORADO BLUE SPRUCE

This variety of spruce was found in the Rocky Mountains, and wherever planted has given the greatest satisfaction, thriving well in all conditions of climate, proving entirely hardy, and is universally esteemed as the most beautiful of all Evergreens. It will make a very large tree, but the best specimens are grown from quite small trees from the nursery. **Balled, 18 in. high, \$3.00 each; balled, 18-24 in. high, \$4.50 each.**

ARBORVITAE

American Arborvitae—A very pretty, shapely tree of pyramidal form. It is a native of America and grows easily. The foliage is a fresh, vivid green, mellowing to a softer shade on the under side of leaf, turning in winter to a bronze. It makes a valuable plant for winter decorations to be kept in vases or tubs. **Balled, 18-24 in., \$1.25 each; 2-3 ft., \$1.75 each.**

ROCKY MOUNTAIN RED CEDAR

Of vigorous growth, pyramidal form; dense foliage, every thick on upper side of the branches. Hardy and valuable. **Balled, 18-24 in. high, \$1.25; balled, 2-3 ft. high, \$1.75.**

IRISH JUNIPER

Forms dense, close, columnar tree, 15 to 20 feet in height. The branches regular, very compact and densely covered with a rich, deep green foliage. A pretty little tree and very useful in formal work. Succeeds best in well drained soils. **Balled, 18-24 in. high, \$1.25; 2-3 ft. high, \$1.75.**

The above prices are by Freight or Express at purchasers expense. All are too large for Parcel Post. Ask for prices on large sizes and quantities if interested.



Colorado Blue Spruce



Bolleana Poplar

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.

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

GUARANTEE OF GENUINENESS

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 us for the trees, etc., which may prove untrue.

SIZE AND GRADE OF FRUIT TREES

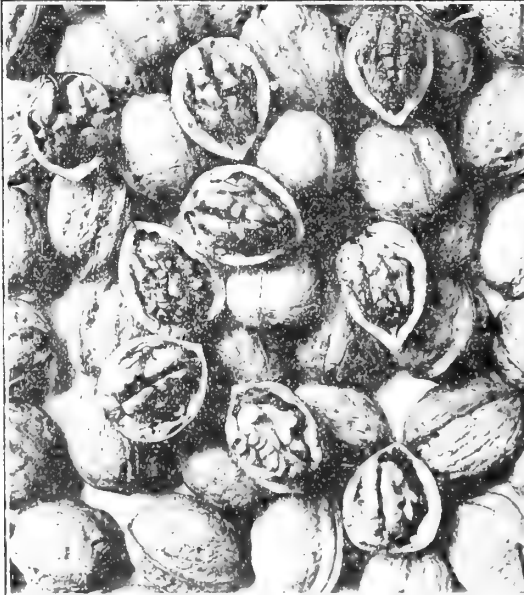
"MAIL SIZE"—All stock offered under this classification will be delivered charges prepaid to your Express or Post Office at prices named. This grade includes strong, vigorous one-year buds and the smaller two-year stock which has been sorted from "Standard Size." Please note the "Mail Size" are not "culs," but clean, healthy, vigorous trees of just size and height suited for Parcel Post shipment.

"STANDARD SIZE"—All trees in this classification are two-year-old, healthy, vigorous stock of good caliper and well branched. They are too large to send through the mail and should be forwarded by Freight or Express. Packing is free but transportation charges are to be paid by the customer. The weight packed is 1½ to 2 pounds per tree.

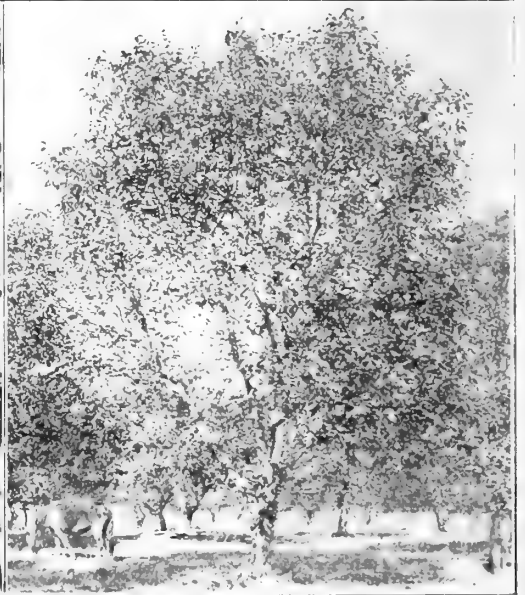
FULL DIRECTIONS FOR CARE AND PLANTING FREE WITH EACH ORDER

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 followed, your trees, plants, etc., can be set out with the surety of a reasonable degree of success.



Utah English Walnut



The Great Utility Tree, Both Fruit and Shade

UTAH ENGLISH WALNUT

The Very Shapely and Beautiful Shade Tree That Pays its Owner an Extra Dividend of \$30.00 to \$50.00 Annually, just for Good Measure. Hardy in any Section or Situation Where Apricots and Peaches can be Grown. No Home Orchard or Grounds is Complete Without Some of These Trees.

Before the Utah English Walnut was developed it was generally believed that the climate in most Western States was too cold to even consider the culture of walnuts. Experience with this hardy type has proved that it can be grown in every section of the West suitable to apricots, cherries or peaches. From our observations of the wonderful results obtained by growers in the Salt Lake Valley as well as in colder sections, we have no hesitancy in recommending this tree for general cultivation wherever "stone fruits" can be grown. Not only does it make a shapely and beautiful ornamental shade tree, but in six or eight years from planting it produces nuts of good size and superior quality. At the present price of nuts, single mature trees yield a crop worth thirty to fifty dollars annually.

Mailing Size (Two Year Stock): \$1.35 each; \$11.00 per 10, Charges Prepaid.

Standard Size (Three Year Stock) each \$2.00; \$17.50 per 10, Not Prepaid.

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. With proper selection of varieties, location of soil, and subsequent intelligent management, there can be but little risk in planting the apple, which is now no longer a luxury but a staple article of food. The apple 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.

Standard Size: 80c each; \$7.00 per 10; \$60.00 per 100. Express or Freight Charges Not Prepaid.

Mail Size: 55c each; \$4.50 per 10, Postpaid. Write for prices on larger quantities.

See page 95 to determine the number of trees required for an acre.



A Thrifty Looking Field of Apple Trees at Our Centerville Nurseries

SUMMER VARIETIES

③ **Red Astrachan**—Fruit large; beautiful deep crimson over yellow. Flesh white; crisp, juicy; quite acid; good quality; excellent for cooking. Ripens July and August.

Early Harvest—A very popular summer variety; good bearer; very medium size, nearly round; flavor good. July and August.

Maiden's Blush—Medium size, flat quite smooth and fair; pale yellow with beautiful red cheek; tender, pleasant acid flavor.

Yellow Transparent—One of the earliest apples; fruit medium large; smooth, transparent; skin clear white, turning pale yellow when ripe; good quality. Succeeds well in thin soils and in cold climates. July.

Red June—Tree a fine grower and abundant bearer, continuing a long time in use. Fruit medium size, roundish, inclining to oblate, greenish-yellow, striped, splashed and shaded with dull red. Flesh white, tender, moderately juicy, rich, pleasant, sweet; very good flavor. June and July.

AUTUMN VARIETIES

Porter—Fruit medium; skin pale yellow; flesh crisp, tender, juicy, sharp acid; one of the best for drying. October.

③ **Gravenstein**—Yellow red striped, very large. Tender, crisp, juicy, sub-acid. Tree vigorous and productive. One of the best. September.

Twenty Ounce Pippin—A very large, showy, striped apple of good quality; flesh coarse, but of pleasant flavor.

Wealthy—A variety highly valued for its extreme hardness in the far north. Fruit medium, roundish, skin smooth, mostly covered with dark red; flesh white, quality juicy; sub-acid; good bearer. Trees bear very young.

Wolf River—Originated in Wisconsin; handsome light yellow, with stripes and splashes of bright red. Flesh white; fruit pleasant flavor; quality fairly good; good cooker.

CRAB APPLES

✓ ③ **Hyslop Crab**—A very popular variety in the West on account of its size, beauty and hardness; fruit deep crimson, covered with blue bloom. Ripens September.

✓ **Transcendent Crab**—Tree remarkably vigorous and immensely productive. Fruit large; skin yellow, striped with red. Fruit especially fine for preserves and jellies, being of a pleasant, aromatic flavor. September.

Orchardists and everyone else interested in ridding their Orchards, Farms and Gardens of Insect Pests, will find something of remarkable merit on Pages 95 and 95. Ask for Free Booklet on Control of Garden and Orchard Pests.

WINTER VARIETIES

✓ **Arkansas Black**—Fruit large and rounding shape; color rich, dark red; flesh orange yellow; very hardy. Trees bear well, even when young.

Bellefleur, Yellow—Large, oblong, yellow sometimes a blush in the sun; flesh firm, crisp, juicy, sub-acid; tree a good grower and very productive. October to January.

③ **Delicious**—Large, handsome shaped winter apple. A magnificent new and scarce variety of fine appearance and delightful flavor; brilliant red of large size, rather conical in form. Tree has good, strong habit of growth and excellent bearing qualities. Ripens late fall.

Gano—Seedling of Ben Davis Better flavor; more productive than its parent. Fruit good size, deep red; attractive; good keeper and shipper.

Grimes Golden Pippin—Very popular. Rich, golden-yellow; flesh tender, juicy and rich. Tree hardy and vigorous, bearing young. November to December.

③ **Jonathan**—Probably the best apple in regard to flavor and quality ever grown in America. Fruit deep red, with yellow at both ends. A medium size; very productive and a young bearer. Fruit keeps well until February; very profitable market sort. Excellent for family use.

Mammoth Black Twig—Very large roundish; somewhat flattened; dark red, slightly streaked; flesh firm yellow; a good keeper.

✓ **Northwestern Greening**—Extremely hardy; fruit large; green, becoming yellowish-green when ripe. Flesh yellow and fine grained. A very smooth and attractive apple; productive and reliable.

Rhode Island Greening—Large greenish-yellow, rich acid and tender and juicy.

McIntosh Red—Large, all red apple; flesh white; mild, sub-acid. Good keeper.

Rome Beauty—A very fine sort, of which large orchards are planted in the northwest. Fruit large, yellow with red; good quality and long keeper; fine market apple.

Wine Sap—An early bearer and very productive; medium round. Smooth, greenish-yellow, splashed and striped with red and purple; a great drouth resister; thriving on thin soils.

③ **Winter Banana**—Hardy; very productive; surpasses all in flavor; flesh golden-yellow; fine grained and juicy. Will bring quicker returns than any other apple.

Winter Pearmain—Fruit medium large; pale yellow; flesh yellow, juicy, tender; unsurpassed for family use; not always an annual.

APRICOTS

Standard Size: 90c each; \$8.00 per 10; \$65.00 per 100, Not Prepaid.
Mail Size: 55c each; 3 for \$1.50, Postpaid.

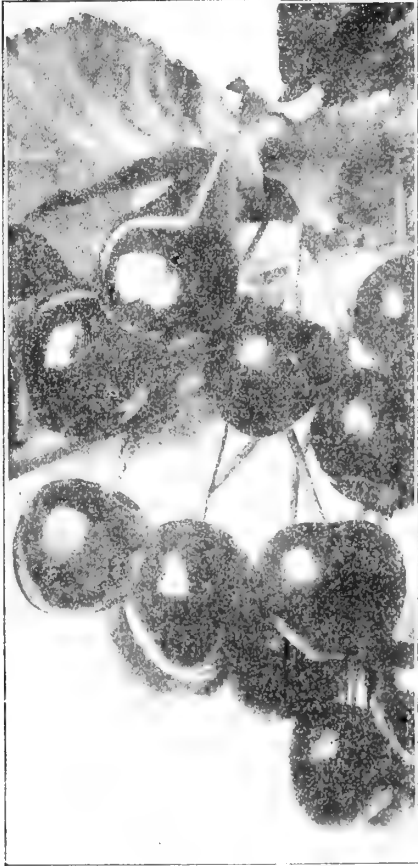
Alexander—Hardy Russian variety. Fruit slightly acid, but rich, good bearer. July 15.

J. L. Budd—Another hardy Russian type. Large size, yellow with red cheek. Extremely hardy and productive.

Ⓜ **Moorpark**—Very large, yellowish-green; brownish-red on sunny side; marked with numerous specks and dots; most popular variety for northwest states. The best variety for no colder sections than the Salt Lake valley. Late June.

✓ **Royal**—French origin; fruit medium, oval, slightly compressed; flesh pale orange, with rich vinous flavor; very desirable; excellent for canning and drying. June.

✓ Ⓜ **Superb**—A hardy seedling from Kansas. The best flavored, most productive hardy apricot yet produced. Medium size, light salmon color.



Black Orb

CHERRIES

Standard Size: \$1.00 each; \$9.00 per 10, Not Prepaid.
Mail Size: 75c each; 3 for \$2.00, Postpaid.

SWEET CHERRIES

✓ **Bing**—Very large, dark brown—almost black; flesh firm, sweet, rich and delicious. One of the most profitable sorts. July.

Ⓜ **Black Orb**—Of recent introduction, and is an improvement on Black Tartarian in size, color, productiveness and flavor. Ripens in July.

Black Tartarian—Very large fruit of purplish-black color; flesh mild and sweet, of superb quality; immense bearer; very popular market sort. Ripens first of July.

Ⓜ **"Dals" Early Red**—New. Very large, deep red. The first to reach the market; ripens here the last of May or first part of June. Delicious sweet flavor. Decidedly the best early variety for home or market.

✓ Ⓜ **Lambert**—Fruit of largest size and of fine quality; color deep, rich red; flesh firm and of fine flavor; a fine market variety. Mid-July.

✓ **Napoleon Biggareau**—Very fine cherry of large size; pale yellow, becoming amber in the shade; richly dotted and spotted with deep red, and brighter red cheek; most popular, hardiest and best of sweet yellow sorts; ripens in June.

Reine Hortense—New. Slightly sub-acid; sweeter and much larger than May Duke, so we classify among Sweet Cherries. Color beautiful deep red. Ripens in August.

Ⓜ **Winsor**—Fruit large; roundish oblong, very firm; good quality; heavy bearer; beautiful dark color, almost black. Very hardy, unexcelled for home or market use.

Yellow Spanish Bigarreau—Fruit very large, heartshaped, pale yellow with bright red cheek when exposed to the sun. Flesh firm, juicy and delicious. Ripens late in June.

SOUR CHERRIES

✓ **May Duke**—Fruit dark red; juicy and rich; almost sweet; one of the most dependable of the Duke class. Ripens in June.

✓ **Montmorency**—Large red; very productive; 10 days later than Richmond. Late June to Early July.

✓ **Early Richmond**—Medium, dark red; melting juicy, rich acid.

PEARS

Standard Size: 90c each; \$8.00 per 10; Not Prepaid.
Mail Size: 70c each; 3 for \$1.85, Postpaid.

Ⓜ **Bartlett**—Fruit large; skin very thin; clear lemon yellow with soft blush on sunny side; highly flavored; very juicy. The best summer pear in existence. Ripens in September.

Beurre D'Anjou—A large, handsome pear; flesh buttery and melting, with sprightly vinous flavor; tree a vigorous grower and good bearer; one of the leading late autumn and early winter varieties.

Keiffer's Hybrid—Tree a remarkable grower with so vigorous constitution that it rarely, if ever, blights. Fruit of fine size, rich color and good quality. Brings high price in competition with other varieties. Best when picked at maturity and house ripened. October and November.

✓ **Parrish Favorite**—New. Beautiful large winter pear, ripening in November-December; will keep until late spring in fine condition, retaining its deliciously captivating flavor. Always vigorous, never blights. Without qualification the best winter pear we know of to date.

✓ **Flemish Beauty**—Fruit large, beautiful; very sweet, rich and melting. Pale yellow, turning reddish-brown when ripe; especially recommended for north. Ripens in September.

Clapp's Favorite—A splendid summer pear, resembling Bartlett. Ripens in August.

✓ **Seckel**—Very small, yellowish-brown pear of highest quality; tender, juicy, melting. Ripens in September.

QUINCE

Standard Size: \$1.00 each, Not Prepaid.

In quinces we have a very desirable fruit. It is used a great deal for preserves and canning, especially with other fruits. A small part of quince will impart the quince flavor to three or four times as many apples. Quince syrup is very delicious, even excelling the finest maple syrup. The tree is easily transplanted and does well on any good soil on which corn grows well.

Orange (Apple Quince)—One of the largest quinces, yellow, handsome, rich and aromatic, excellent flavor, a long keeper. Always sells well and at highest prices. Tree bears young and is very prolific. The most extensively cultivated and one of the best and finest varieties.

Let us prove that Mountain Grown Trees
are more vigorous.

PLUMS AND PRUNES

Standard Size: 90c each; \$8.00 per 10, Not Prepaid.

Mail Size: 75c each; \$7.00 per 10, Postpaid.

Abundance—Fruit large; lemon yellow. Oldest and best known Japanese variety. August.

Burbank—A favorite Japanese Plum, ripening in August. Large, round, mottled red and yellow; productive and profitable. Tree hardy and vigorous. July.

Bradshaw—Very large, oval; dark violet red; juicy, sweet and good. A valuable market variety. August-September.

Peach—Very large; brownish-red; flesh pale yellow; valuable for shipping. Early June.

Damson—Medium dark blue; flesh amber; good for preserving.

Lombard—Medium violet-red; good, juicy, hardy and productive. August.

Pottawatamie—Quality excellent; an immense early annual bearer; fruit medium size; tree perfectly hardy; a strong, vigorous grower.

Red June—A great early market plum; large; deep vermilion-red, with beautiful bloom; very showy; flesh light lemon-yellow, firm, slightly sub-acid, delightful; half cing, with small stone. Ripens early in August.

Satsuma—A fine large plum; purplish-crimson; pit exceedingly small, not very much larger than cherry stone. Delicious flavor; popular variety in West. July.

Yellow Egg—A very large and beautiful egg-shaped plum; a little coarse, but excellent for cooking. Late October.

Italian-Felleberg Prune—Large oval, tapered at both ends; dark purple; flesh greenish-yellow; separates freely from the stone; best for drying and market. August-September.

PEACHES

Standard Size: 90c each; \$7.50 per 10, Not Prepaid.

Mail Size: 70c each; \$6.50 per 10, Postpaid.

Alexander—Handsome and regular in form, with deep maroon shade, covered with richest tint of crimson; rich and good in quality. Should remain on tree until fully ripe, which is about July 4th.

Crawford's Early—Freestone. This beautiful yellow peach is highly esteemed for market purposes. Large orchards of same being planted, especially in the Pacific States. Fruit very large, oblong, yellow with fine red cheek. Flesh yellow, juicy, sweet and productive. August.

Crawford's Late—Freestone. Resembles the Early Crawford in color, quality and productiveness. Ripens in September.

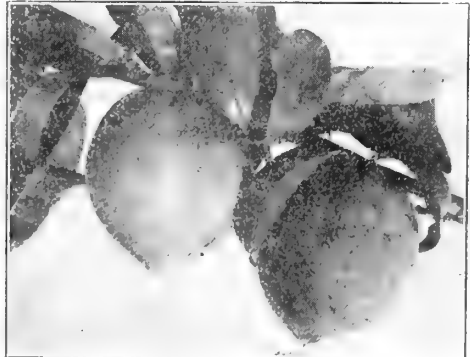
Elberta—A leading market variety that thrives and produces well in all peach growing districts. Fruit is large, handsome, bright yellow overspread with crimson; juicy; good; fine shipper, as it can be gathered while hard, and will ripen without rotting. Freestone.

Orange Cling—Very large; yellow with dark crimson cheek; flesh golden-yellow; a heavy and regular bearer.

Heath Cling—Large oblong, creamy white, rich and luscious; valuable canning peach.

May Flower—The earliest peach on the market; a week earlier than Alexander; good size; fine color, red all over; flavor excellent.

Carman—Resembles Elberta in shape; color creamy white or pale yellow, with deep blush; promises to stand at head for long distance shipping. Freestone. Ripening August to September.



Elberta Peach

Early Canada—Follows Alexander and resembles same in color, shape and size.

Red Bird Cling—The earliest of the large clings. Color creamy-white, overspread with bright, glowing red. Delicious flavor.

Dal's Cling—New. Extremely desirable for canning, sweet pickles or preserves. Large, handsome, deep red of rich, luscious flavor. No home orchard would be complete without it.

CHOICE SELECTION OF SMALL FRUITS

Nothing in fruit growing at the present time is attracting more attention than berry growing. Under suitable conditions as to soil, proximity to market or shipping point, there is nothing more profitable. Our local markets, even in small towns, are never overstocked and will take everything offered at remunerative prices.

GRAPES

Price of all varieties listed, 2-year old stock, each 50c; per 10, \$4.00; per 100, \$25.00 charges prepaid.

Agawam—One of the best red varieties; large, pulp tender, sweet. August.

Campbell's Early (King of All American Grapes)—Large, nearly round, often an inch or more in diameter; black, with light purple bloom; skin thin; flavor rich and sweet.

Brighton—Dark Red, bunches large; medium size; skin thin, flesh tender, quality the best. Must be grown with other sorts, as it does not pollinize itself.

Catawba—Red; well known as wine grape.

Ⓜ **Concord**—Well known; deep purple. An old stand-by.

Delaware—Small round; skin thin, light red; very juicy.

✓ **Niagra**—Light greenish-white; semi-transparent; skin thin, tough; sweet to center.

✓ Ⓜ **Moore's Early**—Bunch medium; berry large, round, black.

✓ **Worden**—Black, handsome, compact bunch; ripens early.

BLACKBERRIES

Price: 25c each; \$2.00 per 10; \$15.00 per 100, Charges Prepaid.

Early Harvest—Berries uniform, glossy black; very early.
Dewberry, Lucretia (or Creeping Blackberry)—Conceded to be the finest of its class, as early as Early Harvest. Fruit very large; superb quality.

CURRENTS

Price: Large 2-year old roots 50c each; 10 for \$4.00; \$25.00 per 100, Charges Prepaid.

Fay's Prolific—Fruit large, bright red and of good flavor, less acid than the old "Red Cherry," which it has superseded. In every way as superior variety.

Utah Black (Native)—Black, rich, fine for jellies and wine. Productive and vigorous.

GOOSEBERRIES

Price: 2-year-old strong plants, 50c each; \$4.00 per 10, Charges Prepaid.

Houghton—Vigorous grower; branches rather slender; very productive; not subject to mildew. Fruit of medium size; skin smooth, pale red; flesh tender and good.

Smith's Improved—It is the best red gooseberry in existence; has good foliage; mildew proof; yields well.

Snyder—Hardy, vigorous, productive; medium in size, very sweet, juicy and of fine flavor.

✓ **Ward**—Exceptionally sweet and melting, being without core; an enormous yielder.

RASPBERRIES

Price: 25c each; \$1.75 per 10; \$12.50 per 100, Charges Prepaid.

✓ **Cuthbert**—A strong growing hardy variety; berries very large, firm; flavor is sweet, rich and luscious. The best late red raspberry.

London—The large berries are of a beautiful, rich, dark crimson color, of fine flavor and excellent quality.

✓ Ⓜ **Gregg**—Best for evaporating of any variety, as it is said to give more pounds to the bushel than any other kind. A good all-around black-cap. Gregg will not disappoint you. Well and favorably known in every fruit district.

STRAWBERRIES

All our plants are put up uniformly in bunches of 25 plants. The number ordered always should be for 25, 50, 75, 100 plants, and so on up to whatever number you desire. Plants will be in bunches of 25 whether you order 100 or 100,000.

Write for quantity prices.

NEW EVERBEARING

Everbearing Strawberries, that yield fruit continuously from May or June until frost, have been known for a long time, but it is only recently that varieties of value have been produced. Reports from various parts of the country agree that they are as practical croppers as many of the standard summer berries, and coming out of ordinary season, bring very profitable prices for market.

✓ Ⓜ **SUPERB**—The best and most profitable of the Everbearing sorts; yields good crops in June, on the same plants that produced fruit the previous fall. Plants are strong and stand the winter well after producing a heavy crop of fruit from about August 15 until November 15, according to season. Fruit is very large, round, rich, dark colored, glossy, attractive and smooth. Each berry is of good shape and ripens all over at once. Price: 25 plants, \$1.50; 50 plants, \$2.50; 100 plants \$4.00, Charges Prepaid.

STANDARD SORTS

Clyde—Early. The most productive variety yet introduced. Immense size. The berries are large, bright scarlet color with pink flesh of mild and pleasant flavor.

Marshall—Midseason. As a large berry for home use it is peerless. The color is a rich, glossy crimson that everyone admires; the quality is far above the average.

Price: 25 plants \$1.00; 50 plants, \$1.50; 100 plants, \$2.50, Charges Prepaid.



Superb Everbearing Strawberries

POULTRY AND STOCK SUPPLIES

CASH MUST ACCOMPANY ORDER

All goods delivered F. O. B. Salt Lake City, without extra charge. If wanted by mail please refer to Page 2 to ascertain cost by Parcel Post to your postoffice and remit accordingly. Whenever possible we publish the exact weight of each article packed for shipment, so that express, freight or postal charges may be easily determined.

Poultry Keeping Cuts the "Hi-Cost"

It pays out only in dollars and cents, but because its possession insures an abundant and regular supply of eggs and table fowls of the highest quality that otherwise could not be secured at all, or only at prohibitive prices.

Even where all the feed for the fowls is purchased, the cost of producing eggs in the back-yard flock is remarkably low. The average family has a great deal of expensive poultry feed in the form of table scraps and waste products.

The back-yard flock is of special value in this particular if the fowls and eggs are produced largely by the use of feed that would otherwise be wasted, a double service is rendered.

Cheapest and Best for the Home Table

Eggs form one of the most palatable and nutritious of foods and can be economically substituted for meat, even at comparatively high prices. Back-yard poultry keepers find that with a low-cost supply of eggs always at hand they are able to reduce purchase of meat to a small percentage of what they found it necessary to use before beginning to keep fowls, in many cases limiting their visits to the butcher's shop to once a week, and doing so without any inconvenience. In addition to the use of eggs as a meat dish, prepared in the great variety of appetizing ways known to all good cooks, there is practically no limit to the extent to which eggs can be used in cooking, and in the preparation of various palatable and inexpensive dishes.

No Excuse for Failure

Any average industrious person who is willing to follow directions and profit by the experience of recognized authorities on poultry raising, can't help but succeed.

In making this statement, we do not overlook the advantages of experience. As the poultry keeper becomes familiar with his fowls and their requirements he can expect to be increasingly successful. Many things in connection with the work can only be learned through experience. But the fact remains that a reasonable measure of success from the start is assured to those who give their fowls a fair chance.

For the Assistance of the Beginner

We recommend the careful reading of the books listed below. Although the war is over, high prices are still with us, and perhaps will be for some time to come. Now is the time to begin operations. The "Lee Library" will be sent free upon request and the other "set" can be secured as indicated:

BOOK OFFER No. 1

Do Not Fail to Get the Two Great Books—"POULTRY FEEDING" and "BACK LOT POULTRY KEEPING"

A copy of each mailed to your address postpaid for 75c. Or we will send them with our compliments free of all charges with your first order of Poultry Supplies amounting to \$10.00 or over. **Just mention Special Book Offer No. 1.**

BOOK OFFER No. 2

LEE'S POULTRY LIBRARY of five books describes all of the Lee products and tells you how to handle chickens in the easiest, most effective and profitable ways; how to diagnose instantly their troubles before they really show sickness, how to see and understand the watery eye, the dirty beak, discolored comb, condition of the droppings, etc. Geo. Engelson, Brooklyn, N. Y., says: "The best I ever saw, because so much real information and so few ads." Jackson Bennett, Libertyville, Ill., says: "Been in the poultry game for years but there are profit pointers in your books I never dreamed of." **This Poultry Library (Five Books) is free. Ask for Special Book Offer No. 2.**

LARGE USERS PLEASE NOTE—The prices quoted in this list are those prevailing at the time of going to press. Since prices fluctuate greatly from time to time we shall be pleased to make special quotations at any time you will submit a list of needs. Shipping what we do not manufacture in carload lots we are always in a position to give you the full benefits of our facilities, not only as to **QUALITY** and **QUANTITY**, but also as to **PRICE**.



Blatchford's **Milk Mash**

Should be Every Chick's First Feed

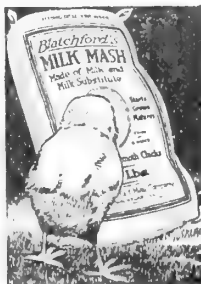


BLATCHFORD'S Milk Mash is the favored starting and growing feed of the most prominent poultry-raisers in the country. It contains all the feeds and nutriment chicks need *right from the start*. It shields them from white diarrhea, bowel trouble and leg weakness.



This mash is neither a tonic nor a medicine but a nutritious, wholesome, palatable body-builder. It promotes health, vitality and growth by building up sturdy, disease-resistant frames.

It does not force, but, by supplying proper nourishment to each and every part of the body, it promotes steady and complete development in the shortest possible time.



Blatchford's Milk Mash contains no screenings, hulls or cheap by-products from the manufacture of breakfast foods, cereal foods or scratch grains. It carries chicks *all the way*—starts, grows and matures — *without change of feed*.

This is the safest, the most economical and best starting feed on the market. Use it. The ideal supplement for the first few days to P.-W.'s CHICK MANNA.

Price: 25-lb. bag, \$2.00; 100-lb. bag, \$7.75, Not Prepaid.

P.-W.'s CHICK MANNA

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. During the last few years we manufactured and distributed throughout the Intermountain region more than a million pounds of P.-W.'s Chick Manna, and we have yet to receive the first complaint. Just how the critical poultrymen regard it is most aptly described in a letter from a large user as follows:

"As long as you maintain the present quality of your chick food, you can count on me. Enclosed find check for 20 bags more. Please ship by first freight."

That's the point—"Maintain the Quality." We have set out to secure the trade of this region and cut out eastern importation, and there is only one way to do it—"highest quality" at reasonable price.

P.-W.'s Chick Manna is made from pure grains, seeds and other essentials, compounded in such proportions as to supply the needs of the baby chicks from one day to six weeks. With P.-W.'s Chick Manna there is no mixing, no mashes, no sick chicks, no bowel complaint. Once tried, you will use no other. Feed dry and always ready. Every user pronounces it the best to date.

Put up in our own printed bags. Three lbs. for 25c; twenty-five lbs. \$1.75; fifty lbs. for \$3.00; 100 lbs. for \$5.25.

HOW TO FEED BABY CHICKS

They should be fed nothing until they are 24 hours old. Keep them good and warm is all that is necessary. Baby chicks are hungry all the time, and have to be fed every few hours. 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. Keep clean, fresh water before them all the time.

Batchford's Milk Mash is an excellent chick starter and should be fed the first few days. See Page 80.

ALFALFA MEAL

This great food product comes nearest to a natural perfect balanced ration of any grain or vegetable obtainable. This meal readily mixes with any kind of mash or ground feed and can be fed to young chicks as well as older birds. It adds greatly to the luster and plumage of poultry and keeps them healthy and vigorous all winter when green feed is scarce and not easily supplied. It is a grand green food for winter. It furnishes protein, lime and other material salts. Fowls relish it immensely. Feeding alfalfa meal insures an increase of fertile eggs. In original sacks of 100 lbs. at market price; write for prices.

P.-W.'s DEVELOPING FOOD AND PIGEON 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. It contains nothing but sound, sweet cracked grains and seeds and other wholesome essential ingredients for quick, healthy growth. A good way to feed it is to scatter on floor among alfalfa meal and make the chicks scratch for it. This food should be used until they are large enough to take whole grain. Three lbs. for 25c; 25 lbs. for \$1.75; 50 lbs. for \$3.00; 100 lbs. for \$5.25.

FLAX SEED MEAL

A little seed occasionally to poultry is very beneficial. One tablespoonful in a mash to each dozen fowls, daily, is a great help during the moulting season. Present price. 1 lb. 25c; 10 lbs. \$2.00. Write for prices on quantities.

GROUND OIL CAKE

It is a greatest flth former, 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 price: 1-lb. 15c; 25 lbs. \$2.25; 50 lbs. \$4.00; 100 lbs. \$7.50.

All prices on Poultry Feeds fluctuate greatly. Write for current Poultry List when you are in the market for quantities.

The above prices are not prepaid. If by parcel post, see Page 2 for charges.

SWIFT'S MEAT SCRAPS

(High Protein)

These beef scraps are a fine clean preparation, made from pure inspected meat. You will get no scavenger product in Swift's. It is hard to estimate the great value of beef scraps for growing chicks or laying hens. Certainly a wonderful factor either in egg production or prompting vigorous growth in young chicks. Two lb. 25c; 25 lbs. \$2.00; 50 lbs. \$3.75; 100 lbs. \$7.00.

COTTON SEED MEAL

The economical Stock Food for the Rocky Mountain States. Farmers everywhere will soon be unable to get along without it. This meal is very rich in protein and it is usually considered worth twice that of corn. Ten lbs. 75c; 50 lbs. \$3.00; 100 lbs. \$5.50. Write for prices on quantities.

JENSEN'S POULTRY MIXTURE

ECONOMY HEN FOOD

Tis is a balanced ration made up of pure, clean, whole grains and seeds, such as wheat, Kaffir corn, oats, barley, corn, sunflower seed, etc., in just the right proportion to promote health and vigor. A trial order will convince you. One-hundred lb. bag \$4.50.

GROUND BONE

Our Ground Bone is prepared from fresh bones from which moisture and grease have been extracted in such a manner as to leave only the desirable food elements. As an egg-shell producer, bone is invaluable. One lb. 10c; 50 lbs. \$3.00; 100 lbs. \$5.25.

GRANITE GRIT

To assist in the proper digestion of their food it is absolutely necessary to supply fowls with plenty of good, clean grit. Our stock is the sharp angular granite grit, manufactured in three sizes: Fine—For small chicks. Medium—For half-grown fowls. Coarse—For mature chickens, turkeys, etc. All grades are the same price. Eight lbs. 25c; 50 lbs. \$1.25; 100 lbs. \$2.00.

CRUSHED OYSTER SHELL

This is the most important article for the poultry yard, and should be supplied to the fowls liberally. Our shell is of superior quality, as all parts of the egg-shell are contained in them; whereas, a goodly portion of the shell offered is nothing more than the refuse of the fertilizer works, and not fit to offer a decent hen. **Six lb. package 25c; 50 lb. sack \$1.25; 100 lb. sack \$2.00.**

Ask for prices on large quantities.

MAMMOTH RUSSIAN SUNFLOWER SEED

Splendid for parrots and poultry. **20c per lb.; 2 lbs. 35c.**

POULTRY CHARCOAL

This 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. The grade of charcoal we offer is of highest quality, free from dirt and dust, having been especially prepared for poultry. We supply it in two sizes:

Fine—Suitable for small chicks and for mixing in mashes.
Coarse—For grown fowls; can be kept in open dish and eaten when wanted.

Price on either size: **2-lb. package 25c; in 50-lb. bags \$3.00 per bag; per 100-lbs. \$5.50.**

SURELAY

The Wonderful Egg Producer

For egg making purposes it is absolutely necessary that pullets and laying hens should receive the right kind of feed, containing, especially, enough protein for the white fat for the yolk and lime for the shells, and as the elements of an egg are derived from so many sources, the greater the variety of the feed ingredients, the better. Nature provides each hen with just so many eggs in the embryo, that is, minute yolks which under ordinary circumstances it would take her six or seven years to produce. Now it is the poultryman's problem to secure these eggs in two or three years, saving the expense of feeding and keeping the chickens these three or four unnecessary years. Therefore, the only way to success in egg production is through

a balanced ration, having the ingredients so assembled as to gain one object—eggs—and SURELAY contains just those things, viz: shorts, middlings, flour, corn grits, bone meal, meat scraps, fish and whale meal, soy bean meal, linseed oilcake meal, cotton-seed meal, coconut meal, and breakfast rolled oats, all thoroughly mixed in the right proportions which laying hens must have if they are to operate their egg factories to the highest point of efficiency. Notice particularly that there are no tonics or medicines to force the laying of eggs, but that all the ingredients are wholesome foods, thus bringing about the greatest quantity egg production in a most natural way. **pound 10c; 25 lbs. \$1.50; 50 lbs. \$2.50; 100 lbs. \$5.00.**

MOLASSES DAIRY FEED

The Great Balanced Ration for Milk Production. Guarantees More Milk for Less Money.

The days of wasteful, unscientific feeding of whole grain and hay to livestock and poultry are numbered. It is impossible for this obsolete system to continue. The human race is demanding more and more of the grain formerly fed to our livestock, and at very high prices—a condition which must become more acute as the world's population increases.

The eastern, southeastern, southwestern, central and Pacific coast states years ago abandoned the feeding of whole grain and hay for the economical, sure, result producing balanced mixed feeds until today it is a rarity to find anyone in these states using anything but a mixed feed

The three cardinal points in any ration are:

**PROPER BALANCE
DIGESTIBILITY, and
PALATABILITY.**

A home-made feed may be palatable, but so lacking in balance and digestibility that the actual cost per pound of grain may be double what it would have been if the right feed was used at the outset. Never before have properly balanced feeds been so vital from the standpoint of net profit as they are today. Never before has variety and palatability in feeds been so essential. The successful feeder would just as soon think of feeding his family bread and potatoes three times a day as he would to feed his livestock whole grain and hay. A ration costing \$40.00 per ton, but improperly balanced and of a low digestibility, is more expensive than a well balanced, highly digestible ration costing twice as much.

Ever Fat Dairy Feed is a highly concentrated, palatable, nourishing feed—a feed that the cows relish and clean up to the last mouthful. Each ingredient used in making this feed is carefully selected, of the highest quality obtainable and all are carefully combined to produce the maximum quantity of milk, rich in butter fat.

Everfat Dairy Feed guarantees more milk for less money—bigger checks coming in and less money going out—and keeps your cow in sleek, plump, and healthy condition. Don't take our word for it. Get the facts first hand by using Everfat Dairy Feed from a 15-day trial, and start that trial today.

Here is the guaranteed analysis: Protein, not under 20 per cent, Fat not under 3-4 per cent, Carbo-Hydrate, not under 45.0 per cent, and Fibre, not over 14.5 per cent. The ingredients are cotton seed meal, wheat bran, barley, beet pulp, gluten-feed, alfalfa meal, molasses, salt and corn meal. All compounded so as to produce the splendid balance ration that will find a place wherever it is tried out.

FEEDING INSTRUCTIONS

It is never good to change a dairy cow's ration suddenly. We recommend that when changing, you give your cows one-half Everfat Dairy Feed and one-half the old ration for the first three days, gradually increasing the quantity of Everfat Dairy Feed until at the end of a week you have your cows on a straight ration of Everfat Dairy Feed of the same weight as the old ration. You will then soon reach a point of maximum milk production with each individual cow. **Write for prices.**

TWO VALUABLE BOOKS

To be sent free to our customers on orders of \$5.00 and over and either one will be sent with order of \$3.00 or more.

"MAKING THE GARDEN PAY"

Is the title of a most valuable booklet containing helpful hints, modern garden plans and cultural directions to assist the beginner in making the garden a success

"YOUR FLOWER GARDEN"

Is another most interesting booklet, brimful of helpful suggestions for the home flower garden. Ask for it when you send in your order.

***Blatchford's* CALF MEAL**

**FIRST ON THE MARKET—FIRST IN QUALITY
—FIRST IN RESULTS**

B LATCHFORD'S Calf Meal is the *original* milk-substitute. It was the *first* on the market. For over one-third of a century it has been successfully used in raising calves by the most progressive farmers and dairymen in this country. It is the *only* calf meal backed by so remarkable a record.



Blatchford's Calf Meal raises calves from babyhood. It is extremely palatable. It is easy to feed. It saves both milk and money. It will *pay* you to use it.

Sold in 100-, 50- and 25-pound bags. Satisfaction guaranteed with every bag.

***Blatchford's* PIG MEAL**

Carries Pigs Safely Through the Critical Weaning Period

This smooth, soluble meal is in composition as near like the sow's milk as it is possible to get it. It contains just the right percentage of vegetable protein, fat, etc., in correctly diversified form to grow bone and muscle. Little pigs relish it and thrive upon it. It "makes the runts catch up."



A trial will convince you that it is to your advantage to use this economical milk-equal. Sold in 100-, 50- and 25-pound bags. Satisfaction guaranteed.

***Blatchford's* LAMB MEAL**

Weans Lambs Quickly—Makes Sturdy Youngsters

This nourishing milk-equal weans lambs properly and produces rapid growth. It is easily assimilated by the tender stomach of the young lamb. It contains all the elements found in natural milk, including oil, sugar and albuminous compounds in correct proportions and in the most digestible form for lambs.

Lambs of every breed can be raised upon it. It matures them rapidly, prevents scours, and avoids the usual setback in the change from the ewe's milk to ordinary feed. It successfully solves the problem of what to do with orphan lambs.

Sold in 100-, 50- and 25-pound bags. Guaranteed satisfactory.



***Blatchford's* RABBIT MEAL**

Solves the Rabbit-Feeding Problem

This inexpensive milk-substitute feed contains all the nutritive elements the rabbit requires for proper development and growth. It will put your rabbits in condition and *keep* them so.

Always feed it to your weanlings, to growing stock, to nursing does and stud bucks. Nothing on the market to equal it—the most economical feed you can buy.

Sold in 5-lb. packages, 100- and 25-lb. bags. Contains no drugs or tonics.



Blatchford's

"Fill-the-Basket"

EGG MASH

Blatchford's "Fill-the-Basket" Egg Mash supplies the hen with the *surplus* nourishment she requires for maximum egg-production. It successfully solves the problem of securing eggs both winter and summer.

Sold in 100- and 25-pound bags. Every bag guaranteed to give satisfaction.



Registered trademark



Singing Praises to Milkoline and Lactein

fied to aid digestion and eliminate harmful disease germs and dead matter from organs. Price: 50c per quart; \$1.60 per gallon. Write for prices in barrel lots.

MILKOLINE

Pure condensed buttermilk feed plus health. There is no sentiment with big hog feeders—quick fattening and greatest profit is the first and all important consideration. Thousands of leading hog feeders use Milkoline and know that it excels every other ration as a top-notch profit-maker.

Milkoline is pure, condensed, modified buttermilk to which has been added a sufficient amount of vegetable oil to form a proper balance of carbohydrates and protein. It is further acidified and worms from the assimilating organs.

LACTEIN

LACTEIN (Condensed Buttermilk) "Makes Hens Lay and Hogs Pay." It is not quite so concentrated as Milkoline. One gallon of Lactein equals 30 gallons of buttermilk. Price: 5 gallons, \$4.50; 10 gallons, \$8.50; 25 gallons, \$19.50; 52 gallon barrel, \$33.50, f. o. b. Salt Lake City.

SNELL'S MAGIC BLOAT AND COLIC CURE

Gives Instant Relief to Alfalfa or Clover Bloat in Cattle or Sheep and for Horse Colic, It has No Equal.

This valuable remedy is manufactured here in Salt Lake City. It is the most effective remedy we have against Colic and Bloat, in cattle and sheep. It is positively guaranteed by the manufacturers to get the results claimed. All livestock owners should have a bottle ready for use as such needs permit of no delay in applying remedy.

DIRECTIONS

CATTLE BLOAT—Three-fourths table spoonful in one pint of water for ordinary cases.

HORSE COLIC—One teaspoonful in pint of water.

SHEEP BLOAT—Half teaspoonful in half pint of water.

Keep well corked in cool place.

Sold only in \$1.00 bottles. If by mail, add 15c extra for postage.

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, Red and White; Kaffir Corn; Whole and Ground Feed Corn, Rolled Oats, Feeding Barley, Bran, Canary Seed, Flax, whole and ground, Hemp, Millet, Sunflower Seed and Field Peas. Weight, Quality and Prompt Service Guaranteed. Phone or write us.

BIRD SUPPLIES AND CANARY BIRDS

PHILADELPHIA BIRD MANNA—The great song restorer. Just the thing you need when your birds are moulting; in fact, when once used you will never be without it at any time of the year. Per cake, 20c, Postpaid.

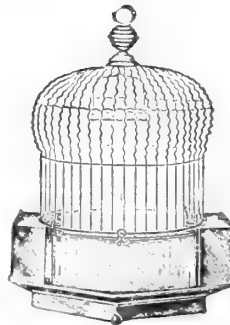
P.-W.'s MIXED CANARY BIRD SEED—Contains only pure, wholesome seeds in just the right proportion to promote health, vigor and song. One lb. carton, 35c, Postpaid.

BIRD SEED, ETC.

Prices Not Prepaid. Special Prices in Quantity

	Per lb.
Canary—Best Re-cleaned	30c
Hemp	20c
Millet	15c
Rape	15c
Cuttle Bone—Large Bone	2 for 5c

Bird Tonic	Postpaid	30c	Each
Song Restorer	Postpaid	30c	Each
Lice Powder	Postpaid	30c	Each
Powder Guns	Postpaid	20c	Each
Mexican Salve	Postpaid	30c	Each
Wire Bird Nests	Postpaid	20c	Each
Bird Nesting	Postpaid	20c	Each



Brass "Bath House" Cage \$12.00, Prepaid.

BIRD CAGES

Bird Cages—In splendid assortment of sizes and styles. Prices range from \$9.00 to \$15.00 each.

Japanned Cages—In assorted styles and sizes. Prices range from \$2.25 to \$10.00 each.

Traveling Cages—50c.

Breeding Cages—Assorted sizes. Prices from \$4.00 to \$7.00 each.

CANARY BIRDS

We have on hand and for sale at all times a choice lot of Canary Birds Hartz Mountain Rollers, etc., guaranteed singers, priced at from \$10.00 to \$25.00 each, delivered to pour station. Also a choice lot of females priced at from \$3.00 to \$5.00.

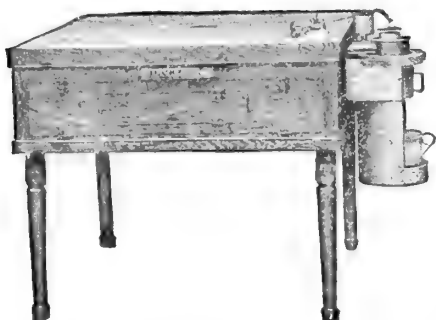
We carry a large stock of Gold Fish and Supplies, which can be forwarded by Express. Write for prices.

DAIRY FARMERS WILL FIND SOMETHING OF VITAL IMPORTANCE ON PAGES 12-13 and 39-40. The profits are waiting. Investigate now.

BUCKEYE INCUBATORS

It is no longer considered a feat to build an incubator that will hatch "some" chickens from "some" of the eggs placed in it (there are many such incubators on the market), but the truly successful incubator is the MACHINE THAT WILL HATCH A CHICKEN FROM EVERY HATCHABLE EGG—the vigorous kind of chicks that start to grow the moment they are hatched, and continue to grow without forcing or doctoring.

THAT'S THE KIND OF HATCHES THE BUCKEYE PRODUCES, and has been producing for twenty-five years. That's why they have been able to sell over four hundred thousand Buckeyes to all kinds of people, in all parts of the world—with such an absolute guarantee—and it's because they have never had as much as one machine out of every thousand go wrong that they so freely and willingly sell them on 40 day's approval—TO BE RETURNED FOR EXCHANGE AT THEIR EXPENSE if they don't do all they claim.



Buckeye Standard, 175-Egg Size

The case is made of California redwood, and beautifully finished like a piece of fine furniture. It has perfectly insulated double top, and the walls are so constructed that the necessary temperature can easily be maintained in any location—even if it be freezing or up to 100 degrees.

A standard Buckeye Metal Thermostat regulates the temperature to a fraction of a degree. With this device it is only necessary to regulate the temperature when the hatch is started—then you forget it—because the regulator stays where you put it and the temperature of the egg chamber cannot change.

The tank is an improved design that absolutely insures a uniform temperature throughout the egg chamber. This means that the temperature of each and every egg will be exactly right, and if there's a chick in the egg—you'll get it.

A Standard Buckeye Thermometer is included with each incubator—also a standard thermometer-holder. With this equipment the correct temperature is always shown and the thermometer is always in its proper position.

Order early. Only a limited number are carried in stock at Salt Lake City.

PRICES OF BUCKEYE INCUBATORS F. O. B. SALT LAKE CITY

	Crated Weight	Egg Lbs. Capacity	Each		Crated Weight	Egg Lbs. Capacity	Each
14—Style E	55	65	\$17.50	2—Standard	135	175	\$ 45.00
16—Style E	85	120	27.50	3—Standard	200	250	57.50
17—Style E	125	210	37.50	4—Standard	230	350	67.50
1—Standard	110	120	39.50	5—Standard	325	600	110.00

"STANDARD" COLONY BROODER

THE WONDERFUL BROODER STOVE

Used Everywhere by Leading Breeders, Both Large and Small.

THE GREATEST COAL-BURNING BROODER EVER INVENTED

Self Feeding. Self Regulating. Everlasting.

Heavy Cast Iron Stove that Requires Coaling but Once Every 24 hours in Any Temperature.

BURN ANY KIND OF FUEL

These stoves burn any kind of fuel with equally satisfactory results. We recommend chestnut sizes in all kinds of fuel and hard or soft coal, coke, charcoal, or briquettes burn equally well. Of course, hard coal will not cause the pipe to become dirty as quickly as the others, but it will give no better heat.

30 DAYS FREE TRIAL

The Standard Colony Brooder is the most practical brooding device ever invented. It will do anything and everything that any other brooder will do, and do it better. It is infinitely more satisfactory than brooders selling at twice the price. We are so positive that it cannot fail that we will permit you to try one thirty days—and

WRITE YOUR OWN MONEY-BACK GUARANTEE

No questions asked if the Standard Colony Brooder does not suit you in every way.

Ask for illustrated "Standard" Catalog or send us your order and your own guarantee.



STANDARD COLONY STOVE BROODER

Made in Two Sizes

No. 18—Capacity 500 Chicks	\$22.50
No. 19—Capacity 1000 Chicks	27.50

Last year we under-estimated the number for this territory, and when the "Rush Chick Time" came, we did not have enough to go around, and the factories were too far behind with orders to supply them in time. To avoid disappointment, order early this year. As the demand may again exceed the supply.

QUEEN INCUBATORS



Stop hatching weak chicks with cheap incubators. A Queen costs but little more, and the extra chicks that live and grow soon pay the difference.

Remember, it is not how many chicks you hatch that counts, but how many you raise. Chicks that hatch out weak and wobbly, and live but a few days, mean nothing to you but trouble and loss. They make one sick of the poultry business.

Most of the chicks you lose in the first few weeks die because they did not have, when hatched, enough strength or vitality for a good start. Queen Incubators are famous the country over for big hatches of strong, healthy chicks that live and grow.

PROPER INSULATION

The Queen in double insulated. First we use double walls of California Redwood, forming a dead air space. Second, corrugated strawboard is used between the wooden walls. Proper insulation adds considerably to the manufacturing cost. However, it is an absolute requirement of a good incubator.

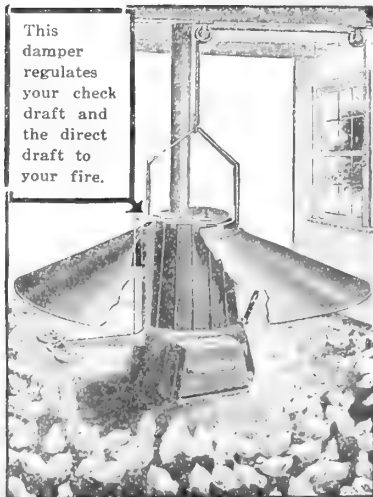
SIZES AND PRICES F. O. B. SALT LAKE CITY

No.	Style K. Capacity	Each	No.	Regular Style Capacity	Each
20	70 egg	\$17.50	1	85 egg	\$26.50
21	130 egg	29.50	2	135 egg	39.50
22	220 egg	38.00	3	180 egg	45.00
			4	275 egg	57.50
			5	400 egg	67.50
			25	600 egg	110.00
			35	800 egg	140.00
			45	1000 egg	180.00

Note—Special Descriptive Booklets on the Queen Incubators and Brooders sent free on request. Plan your requirements early so that your machines will be ready when wanted.

QUEEN BROODER STOVES

Broods 'em Better and Cheaper than "Old Mother Hen"



The Queen Colony Brooder is a new and improved design of brooder stove. It is made of highest quality iron castings that will wear and last indefinitely.

There are no drafts on the smoke pipe of the Queen. The check rests on top of the stove and opens outward when fire is too warm, thus giving a gentle inflow of air to retard the heat. While the opening of the draft to increase the fire is located at the top of the stove it opens in to the fire at the base through an opening extending down the side of the bottom. This feeds the draft into the fire from underneath with no opening below the hover.

As will be seen from the illustration the check and the draft lids are cast together and operated together. Thus when the fire is too hot, the wafer expands and closes the draft and opens the check, both at the same time. When it is too cool, the wafer contracts and closes the check and opens the draft. This keeps an even heat all the time, both night and day, in cold weather or warm, and does it automatically. You don't have to pay any attention to it whatsoever. Just set the regulator for the proper temperature at the start of the season—it will do the rest.

BURNS ANY KIND OF FUEL

The Queen stove burns any kind of fuel with equally satisfactory results. We recommend chestnut sizes in all kinds of fuel and hard or soft coal, coke, charcoal, or briquettes burn equally well. Of course, hard coal will not cause the pipe to become dirty as quickly as the others, but it will give no better heat. Prices f. o. b. Salt Lake: No. 1, 600-Chick capacity, \$22.50; No. 2, capacity 1,200 Chicks, \$27.50.

LEE'S REMEDIES, LICE KILLERS, ETC.

The genuine merit of the Lee Foods and Remedies is their best guarantee, and you can depend upon them absolutely to do all that is claimed for them. The valuable booklets of the Lee Company, are free to poultry-keepers, and contain the most reliable and complete information to date on all poultry problems. We mail them on request.

LEE'S LICE KILLER—FOR 17 YEARS THE STANDARD

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., 50c; ½-gal., 75c; 1-gal. \$1.25. Shipping weight: Quarts 4 lbs.; ½-gal., 8 lbs.; gallons 15 lbs.

LEE'S GERMOZONE—FOR POULTRY

Never fails to cure Bowel Complaints, Cholera, Roup, Colds, etc. Don't be without it. Price: Liquid, 5-oz. bottle, 40c; liquid, 12-oz. bottle 75c; 32-oz., \$1.50. We do not ship the liquid by mail. But furnish tablets at same prices, Postpaid.

LEE'S BEST CONDITIONER STOCK FOOD

Promotes good health, digestion and assimilation. Put up in 50c and \$1.50 packages; 25-lb. pails, net shipping weight 30 lbs., \$4.50.



LEE'S WHITE DIARRHOEA REMEDY

The best medicine for this dangerous disease of little chicks. 12-oz. bottle, 50c. If by mail add 10c extra for postage.

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 all in a healthy, vigorous condition. 2½-lb. pkg., 50c; 5-lb. pkg. \$1.00; 12-lb. pail, \$2.25; 25-lb. pail, \$4.50. Shipping weight 30 lbs.

LEE'S LOUSE POWDER

For direct application to body of fowl. 1¼-lb. can 25c; mailing weight 2 lbs.; 3-lb. package 50c, mailing weight 4 lbs.

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. Anticipate winter needs now. Coat the palms of your hands with Egg-o-latium and then roll and rub the eggs in your hands. You can do a dozen per minute. 50c per Jar—Enough for 50 Dozen Eggs. Add 10c per jar for postage if by mail.

PRATT'S POULTRY SUPPLIES

ONE OF THE OLD RELIABLE POULTRY SUPPLY LINES THE MANUFACTURER GUARANTEES

Cure your sick poultry by using PRATT'S POULTRY REMEDIES. Guaranteed to cure, or your money refunded.

If poultry keepers would regularly spray the chicken houses, roosts, drooping boards and utensils with

PRATT'S POULTRY DISINFECTANT

most all their trouble would vanish. This great disinfectant is a real wonder-worker in the poultry yard.

Three times as powerful as crude carbolic acid. A sure deodorizer, germicide and liquid lice killer. Use it for roup,

colds and other contagious diseases. Price \$1.50 per gallon; 90c ½ gallon; 50c quart.



Healthy birds and lots of eggs the two big things in poultry raising, are made certain by giving

PRATT'S POULTRY REGULATOR

25-lb. pail \$3.00; 12-lb. pail. \$1.75 packages, 30c and 60c and \$1.20.

It builds up vitality, insures sound digestion, sharpens appetite and prevents disease, thus putting birds in condition for heavy egg laying or winning blue ribbons.



When regularly used, hens lay throughout the year.

It will prevent chicken cholera, gapes, roup, rheumatism, expel worms, prevent leg weakness and egg eating. It will greatly improve turkey, geese, ducks, pigeons and guineas—insuring quick growth and keep them free from disease.

PRATT'S ANIMAL REGULATOR

More work out of your horses. More milk from your cows, fatter hogs—these are a few of the benefits which come from using

Always sold on a guarantee that it will satisfy you or money back. 25-lb. pails, \$4.00, Shipping weight 30 lbs. 12-lb. pails, \$2.50 are popular with our customers. Packages at \$1.20, 60c and 30c.

Get prices on 50-lb. and 100-lb. sacks.

If by mail on any above, except where quoted Postpaid, add postage according to zone rates, see page 2.

- Pratt's White Diarrhea Remedy50c and 25c
- Pratt's Powdered Lice Killer 60c and 30c
- Pratt's Roup Remedy Tablets or Powder..60c and 30c

PRATT'S COW REMEDY

Nature's unrivaled assistant to make and keep cows well, to increase the flow of milk, and to prevent Abortion, Barrenness, Garget, Milk Fever, Scours, Indigestion, Liver and Kidney Complications.

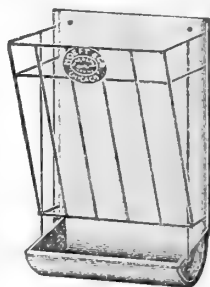
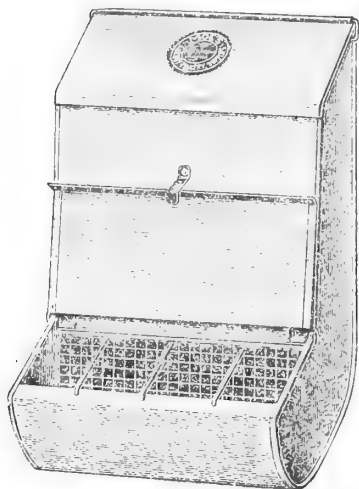


FEEDERS AND RACKS FOR POULTRY

DRY MASH HOPPER

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 the feed. The sloping cover prevents the birds from roosting on the Hopper, and when both covers are closed, it is rat and mouse proof. A trial will convince you that it is a Hopper of the greatest merit. Manufactured of heavy galvanized iron in three sizes.

- No. 35—8½ in. wide, weight 5 lbs. Each.....\$1.75
- No. 36—12 in. wide, weight 6 lbs. Each..... 2.25
- No. 37—24 in. wide, weight 12 lbs. Each..... 3.00



No. 44 Vegetable Rack

STAR MASON JAR FEEDER

Will fit pint, quart, or half gallon Mason Jar. Convenient, cheap, sanitary. Can be used for feed as well as water. One size only, 20c each, Postpaid.



Round Feeder No. 11

POULTRY VEGETABLE RACK

Manufactured from galvanized iron and wire. For feeding Roots, Beets, Cabbage, Sprouted Oats, etc. A big time and feed saver. Every breeder needs one or more.

- No. 44—Weight 2 lbs. Price, each 85c

ROUND BABY CHICK FEEDERS

Pure food for the baby chicks. A great feed saver, as the little chicks cannot get into it and contaminate the feed. Cannot be upset. Can also be used for water or milk. This is a practical, well made feeding device that will last for years. Manufactured in two sizes.

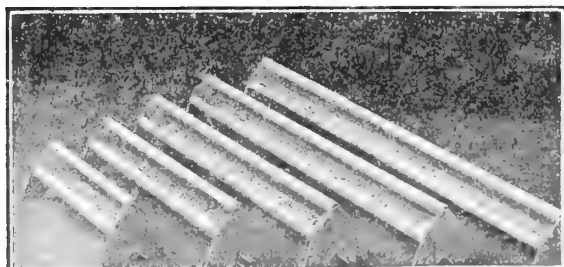
- No. 11—6 inches in diameter, 8 feeding holes, weight ½ lb. Each 30c
- No. 12—8¼ inches in diameter, 12 feeding holes, weight 1 lb. Each 45c



WATER AND FEED CUPS FOR EXHIBITION COOPS

Holds about one pint and hangs straight when applied to the coop. Can be attached to any exhibition coop. One size only

- No. 61—Shipping weight, ½ lb. each 20c



THE McCANDLISH MODEL CHICK FEEDER

It is practically indestructible, made entirely of metal, making it absolutely sanitary, and waste of feed is impossible. It is easy to fill and to clean and also answers for a drinking fountain when the ends are soldered at an extra cost of about 10c.

- Length, 12 in.; weight, 8 oz.—Price, each 50c
- Length, 20 in.; weight 12 oz.—Price, each 70c
- Length, 30 in.; weight, 16 oz.—Price, each 90c

GRIT AND SHELL BOXES

Grit, shell and charcoal have now become a recognized essential part of the diet insuring healthy fowls. They cannot 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. 45—For baby chicks, 2 compartments, weight 1 lb. each \$.50
- No. 9—For grown birds, 3 compartments, weight 3 lbs. each 1.25
- No. 90—For grown birds, 4 compartments, weight 4 lbs. each 1.60



No. 45—Two Compartment Square Bottom

MOE'S CLIP AND PUNCH



AS A POULTRY PUNCH

Does not bruise; punches a clean hole. One Size Only.....35c Postpaid.



AS A CIGAR CLIPPER

Don't delay. Feed is money. Get a Food Saving Hopper and stop the waste.

DRINK FOUNTAINS FOR POULTRY



Bottom Fill Fountain



Brooder Fountain, No. 0



Drop Bottom Wall Fountain, No. 41

BOTTOM FILL FOUNTAIN

A General Utility Fountain at a Low Price

Made in two pieces. Easily cleaned and owing to its shape, it will not burst from freezing. This fountain fills the breeder's needs for an inexpensive fountain. Made of the best grade of galvanized iron in three sizes.
 No. 19—About 1-quart capacity, weight 3-4 lbs., each.... 45c
 No. 20—About 1/2 gallon capacity, weight 1 lb., each.... 65c
 No. 24—About 1-gallon capacity, weight 2 lbs., each....\$1.00

DROP BOTTOM WALL FOUNTAIN

Manufactured from Galvanized Iron. May be hung up on the wall out of the dirt and litter. Nothing to get out of order. Easy to fill and easy to clean. When filled, two, back to back, may be carried in each hand. May be used for Chicks, Fowls or Pigeons. Three sizes.
 No. 40—2-quart, weight 2 lbs. Price, each.....\$.95
 No. 41—1-gallon, weight 3 lbs. Price, each..... 1.15
 No. 42—2-gallon, weight 6 lbs. Price, each..... 1.50

BROODER FOUNTAIN

No Brooder Is Complete Without a Supply of These Fountains. They Are so Constructed that the Baby Chicks Can't Get Wet or Contaminate the Water.

Sits in a corner of the brooder. Takes up little room. Can't be upset. Can be hung up if desired. Absolutely sanitary as you can get at any part of it to clean. Manufactured of heavy galvanized iron in two sizes.

No. 0—1 quart capacity, shipping weight 1 lb. Each \$.50
 No. 26A—Same as No. 0, 1 gallon capacity, shipping weight 2 lbs. Each..... 1.00

MOE'S SELF LOCKING LEG BAND

MOE'S SELF LOCKING BAND READY TO BE USED



A sealed band that requires no sealer. Embossed numbers as desired in sizes shown below. Made of nickel colored metal. Sizes—No. 1 for Pigeons; No. 2 Hamburg and Polish Females; No. 3 Hamburg and Polish Males; No. 4 Mediterranean Females; No. 5 Mediterranean Males; No. 6, American Females; No. 7 American Males; No. 8, Asiatics and Turkeys.

EASILY ADJUSTED WITH THE FINGERS AND IT IS THEN ON TO STAY



Price, all sizes: Doz. 20c; 25 for 30c; 50 for 50c; 100 for 80c; 500 for \$3.75; 1,000 for \$6.50, Postpaid.

SPIRAL KEY RING LEG BANDS

These are made of celluloid and in six different colors: Black, red, green, yellow, cerise and dark blue. They can be taken on and off very quickly and easily and will last a lifetime. 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. Prices of the four poultry sizes: 12 bands 25c; 25 bands 40c; 50 bands 65c; 100 bands \$1.00. Pigeon and day-old chick sizes: 12 bands, 15c; 25 bands 30c; 50 bands 50c; 100 bands 75c, Postpaid.

DOUBLE CLINCH

A new band, very safe; no exposed corners, ends or loops; has double fasteners. Prices: 12 for 20c; 25 for 35c; 50 for 60c; 100 for 95c, Postpaid.

CHAMPION

Best adjustable leg band. Has neat, compact, and smooth fastening, with no catching points; easily attached and absolutely secure. Prices: 12 for 20c; 25 for 35c; 50 for 60c; 100 for 95c.

SMITH 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 30c; 25 for 55c; 60 for \$1.15; 100 for \$1.50, Postpaid. Plain sealers, 75c each.

NEST EGGS

LICE KILLING NEST EGGS

Our Lice Killing Nest Eggs are almost an imitation of the real chicken eggs, and yet contain a powerful disinfectant which is guaranteed to expel lice and vermin. Put up in boxes of one dozen each, at 75c per dozen. Weight, 2 lbs. per dozen.

PORCELAIN NEST EGGS

We handle only the best grade of glass eggs; strong and durable. 8c each; 60c per dozen. Weight 1/4 lb. per dozen.

On all items not priced Postpaid, please include postage with order if by parcel post. See Page 2 for charges.

SIZES



ASIATIC



AMERICAN



MEDITERRANEAN



BANTAM



PIGEON



BABY CHICK

MISCELLANEOUS SUPPLIES

PAPER EGG BOXES

Intended for use in delivering eggs to private families. If you have a "select" egg trade, you should use these boxes.

Made in two shapes and the following grades. All styles made of extra heavy cardboard and will carry eggs safely. Shipping weight 2 lbs. per dozen.

Navajo—3x4. Doz. 30c; 100, \$1.50.
Sewanee—6x2. Extra heavy paper. Doz. 35c; 100, \$1.75.
Write for quantity prices.

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 grains and grasses. Weight 4 lbs. Price \$2.00.

PRUNING KNIVES

These knives are made of the best material that can be produced for the purpose. The blades are of high carbon crucible steel, tempered in lead and drawn in oil, which is the very latest method in tempering. All other parts are of selected stock assembled so that the whole is a harmonious combination of good ideas, fine material, and excellent workmanship.

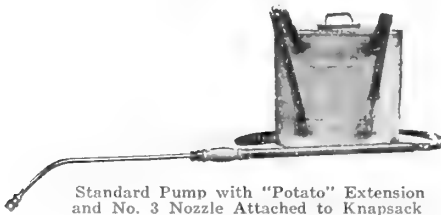


Happy Thought. Price.....\$3.00
Kansas. Price 3.25

PLANT FOOD TABLETS

A new, scientific, odorless fertilizer for house plants and vegetables. Contains nitrogen, ammonia, phosphoric acid and potash (nitrogen 6 per cent, as ammonia 7.3 per cent; phosphoric acid 12 per cent; potash or oxide 6 per cent). Put up in two sized packages, suitable for mailing. The large size contains tablets (sufficient for 35 plants three months). Price 50c, Postpaid. Small or trial size contains 30 tablets (sufficient for 10 plants three months. Price 25c Postpaid.

SPRAY PUMPS AND ACCESSORIES



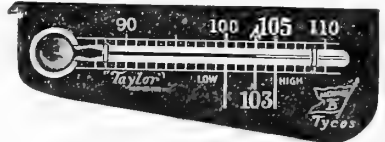
Standard Pump with "Potato" Extension and No. 3 Nozzle Attached to Knapsack

Hand lever pump correctly designed with every unnecessary part eliminated. It is excellent for handling white-wash cold water paint, all insecticides, fungicides and all solutions. It has a capacity of 12 gallons. Plunger style. Graphite packing adjustable from outside by tightening two bolts. Plunger and all valves are brass. Air chamber so constructed that a large reserve capacity is developed than usual in this size of machine. Tank is galvanized iron. Crated weight, complete with truck, 75 lbs. Price, \$30.00.

EYRIE EGG BASKETS

Strong, durable and most satisfactory egg baskets in every way. When handle is inserted the basket is locked and ready for shipment. Made of corrugated paper, reinforced. First size, holding 15 eggs, 35c each; second size, 30 eggs, 50c each.

THERMOMETERS



Many persons using incubators and brooders fail to understand the importance of having a thoroughly tested and reliable thermometer. Many a fine hatch is lost and many a fine brood of chicks killed by using a poor thermometer. Use great care in purchasing a perfect thermometer. Our thermometers are thoroughly tested and accurate.

Thermometer—for incubator..... \$1.25
Thermometer—for brooder 1.00
Tycos Hygrometer 2.50

INCUBATOR AND BROODER LAMPS, ETC.

Brooder Stove Wafers \$1.00
Regulators, complete 2.75
Lamp Bowls, large (6x4) 2.00
Lamp Bowls, 6x2 9-16, complete with either No. 2 or No. 3 burner 1.75
Lamp Bowls, No. 3 ring, no burner 1.25
Lamp Bowls, No. 2 ring, no burner 1.10
Burners, complete, 1 1/2 inch wick, 3 1/2 flue ring90
Wicks, No. 2 or No. 3, per doz.60

NATIONAL CREAM SEPARATOR

When You Buy a Separator

You want the one that skims the closest, summer or winter; that will handle milk from "stripper" cows; that will produce cream of any desired density.

A durable machine that will give everlasting satisfaction and service, at the minimum cost of up-keep; a separator that is mechanically perfect, having the fewest parts, the greatest capacity for its size, the quickest, cleanest and easiest running.

The National Is the Only Separator

That combines all the above and for 22 years has stood the test of time, maintaining its position against all competitors—and many of these first National Separators are in daily use after 20 years of service.

Cleaned in Three Minutes

A child can clean it in three minutes without risk of breaking or haming it. Just wipe off with a wet rag inside and out, and rinse in hot water and the job is done.

Prices

National Separators are made in the following sizes, and all prices are f. o. b. Salt Lake.

Hourly Capacity Pounds	Cows	Shipping Weight Pounds	Price
National No. 22.....	325	3 to 8	160 \$ 60.00
National No. 24.....	500	6 to 14	165 70.00
National No. 28.....	600	12 to 30	172 80.00
National No. 28.....	800	20 to 50	190 100.00

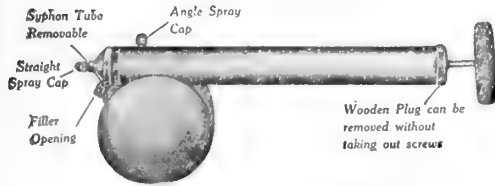
STANDARD SPRAY PUMPS

As used with bucket, knapsack, tank or barrel for spraying orchards, gardens, vineyards, white-washing, disinfecting chicken houses, killing vermin on stock. Made entirely of brass. Nothing to get out of order. "The best and most powerful piece of low-priced spraying apparatus on the market today."

For Pump and Nozzles. Price \$5.50. Weight 3 1/2 lbs.
For Knapsack. Price \$3.00. Weight 5 1/2 lbs.
Extension Rod. Price \$1.75.

SPRAY PUMPS AND ACCESSORIES (CONTINUED)

Prices are not Prepaid. If by Parcel Post, see page 2 for charges.



CONTINUOUS ATOMIZER (Auto Spray) No. 25-B.

This operates continuously on both up and down stroke and throws a fine misty spray. It will handle all solutions, insecticides and disinfectants used in kitchen-garden, greenhouse, rose-garden or poultry house. Weight 2 lbs. Price: One quart size, \$1.25 each.



COMPRESSED AIR SPRAYER (Auto Spray No. 1)

This is the strongest and most simple in its working parts of any compressed air sprayer. Two pumpings of about fifteen strokes on the plunger will discharge the contents under high and constant pressure. It is equipped with a patented, non-clogging nozzle. It consists of a solution tank holding about four gallons made of galvanized steel. Weight empty for shipment 15 lbs.

- No. 1 B—Brass tank with Auto-pop\$12.50
- No. 1 D—Galvanized tank Auto-pop 8.50

AUTO SPRAY DOUBLE-ACTION PUMP No.5.

This pump very much resembles the Standard Spray Pump as shown on Page 90. It is made entirely of brass, doing away with all danger of corrosion. The double action feature makes the spray continuous. Those who have used single action pumps will appreciate this advantage, since this works not only on the upstroke but also on the down, thereby making a continuous spray.

Pump equipped with hose, nozzle and strainer, complete, \$5.50. Knapsack or galvanized iron reservoir, shipping weight 8 lbs. \$4.00.

Extension rod, 70c.

ERADO—IT KILLS WEEDS

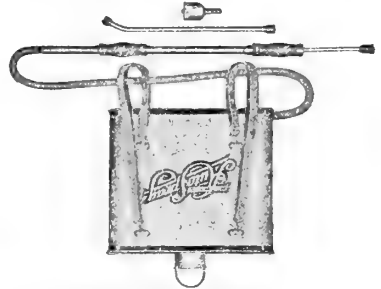
This device does away with the old backbreaking method of digging dandelions and weeds of all kinds by hand. All that is necessary to do is to push the plunger into the center of the plant and the weed-killing solution automatically runs down into the roots. A weed treated in this manner can never spring up again. Gasoline or iron sulphate can be used with this tool. Price, \$1.00.



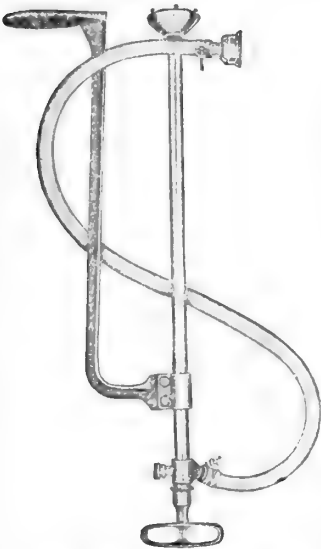
Auto Spray No. 1.

AUTO SPRAY No. 2 BUCKET PUMP

White-wash and general purpose sprayer. Practically indestructible. Brass ball valves, heavy brass air chamber and pump cylinder. Malleable castings, legs clear 12 inches and fit over bucket. It is equipped with strong, inch discharge hose, 3 feet long. Shipping weight 8 lbs. Price: each \$4.00



Auto-Spray Double Action No. 5



Auto Spray No. 2, Bucket Pump



P.-W.'s HANDY SPRAYER

We recommend this handy little 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. Its size makes it handy for use in the hen house, also for spraying rose and raspberry bushes, cucumber vines, etc. At the price asked it is a very cheap and convenient tool. Every poultryman and farmer should have one. Price, each 75c. Weight 1 lb.

CORONA HAND DUSTER



Corona Hand Duster

"Corona Dry" and other Powders for Dusting Application are best applied with this new Hand Duster, which is a mechanically perfect apparatus, emitting powders in clouds of right consistency from any position and in any direction, downward, upward or horizontally. The principle employed in the "Corona" Hand Duster was awarded the Gold Medal for mechanical efficiency at the Panama-Pacific International Exposition and no other dusting device in its class can approach it for efficiency, ease of manipulation, simplicity and durability. Price, \$2.75 each.

PEST AND DISEASE KILLERS

FOR ORCHARD, FARM AND GARDEN

SCALECID

The "Certain Death" to Scale Insects and Destroys Brown Mite and Apple Leaf Roller Eggs and Controls Canker Rot, Root Rot, Twig Blight, and many other Fungus Diseases.

WITHOUT QUESTION OF A DOUBT, THE BEST DORMANT SPRAY ON THE MARKET TODAY.

HOW "SCALECID" DIFFERS FROM OTHER SPRAYS

"Scalecid" is the oldest and best-known miscible oil on the market, and stands alone as a dormant spray. No other spray is made like "Scalecid" or contains the same class or as expensive material. Not that it cannot be done (any good oil chemist knows how), but no one else is willing to make it for the price.

Other dormant sprays may do some one thing as well as "Scalecid," but there is no other spray, either oil or Lime Sulphur, that will do all that "Scalecid" will, while "Scalecid" does all that any other dormant spray or combination of sprays will, and some things never done before by any spray.

The manufacturers have been fortunate in getting just the right combination of the right materials; only certain petroleum oils and certain vegetable oils can be used to make "Scalecid."

Don't judge "Scalecid" by other sprays that look like it. For about half the price, a miscible oil could be made that looks like "Scalecid," works like "Scalecid," but it would not be "Scalecid" or do the work of "Scalecid."

"Scalecid" stands alone among dormant sprays in effect and spreading power. One barrel will do the work of three and one-half to four barrels of Lime-Sulphur, its nearest competitor. "Scalecid" dilutes at the proportion of one to fifteen, but in addition to its mixing at almost half the strength of what it requires of Lime-Sulphur, the oils, when mixed with water have a very creepy and fast spreading nature. Consequently they cover twice the area in half the time, as against Lime-Sulphur, which only stays on whatever part of the tree it happens to hit. But the saving in time and money is in reality only a minor point to the commercial Orchardists with so much at stake. What concerns him is "Does it do the work?" We checked up that very thing most carefully before accepting the agency for "Scalecid." From all critical users, whose experience with other dormant sprays gives weight to their conclusions, comes similar testimony, "That 'Scalecid' is positively the most effective dormant spray ever used to date." It does everything competitive remedies will do and in addition, controls pests and diseases they do not touch.

The manufacturers sell "Scalecid" on this broad guarantee.

That "Scalecid" will make a better orchard than Lime-Sulphur or your money back.

You and your neighbors to be the judges.

To prove it, divide an orchard in two, your worst or best. Spray one-half with "Scalecid" and the other with Lime-Sulphur for three years, everything else (cultivation and summer sprays) being equal. If at the end of that time three disinterested fruit growers say that the part sprayed with "Scalecid" is not in every way better than that sprayed with Lime-Sulphur, we will return you the money you have paid for the "Scalecid."

We know the manufacturers are financially able and morally disposed to live up to the above guarantee. You will take no chances in using "Scalecid" for your dormant spray this year. Price: One-quart can 55c; shipping weight 3 lbs.; 1 gal. can \$1.00, shipping weight 11 lbs.; 5 gal. can \$7.50, shipping weight 50 lbs.; 50-gal. barrel, \$55.00, shipping weight 440 lbs. If desired, "Scalecid" can be sent Parcel Post in small sizes. See page 2 for amount to send for postage.

HOW TO MIX AND USE

"Scalecid" is a soluble or miscible oil that mixes instantly with water when stirred and stays mixed.

It should form a white milky solution without oil floating on top.

It does not burn the face or hands or injure even your eyes, and is not poisonous to man or beast.

It does not corrode or destroy your pump.

"Scalecid" will do more to insure the health and vigor of your trees than anything else.

"Scalecid" as a Fungicide. All "Scalecid" contains a distinct fungicide and shows greater fungicidal action than any other dormant spray.

SIMPLICITY OF "SCALECID"

Any man who can spray with Lime-Sulphur can do twice as good a job with "Scalecid," and cannot go wrong if he follows the simplest directions that any ten-year old boy of average intelligence can understand.

Add 1 gal. "Scalecid" to 15 gals. of water—stir and you are ready to spray any kind of trees that drop their leaves in winter, provided it is not too cold to be comfortable, say 40 degrees Fahr.

Use your finest spray disk on nozzle or spray gun and thoroughly wet the tree from the topmost twig down to the ground and around the base of the tree.

Don't be afraid to get on too much.

You cannot get on one-half as much as you would with Lime-Sulphur, but you will do a better job and not so disagreeable.

WHAT TO SPRAY

Spray any tree, shrub, bush or vine that drops its leaves in winter with "Scalecid," 1 part to 15 parts of water.

Evergreens and Conifers with 1 part "Scalecid" to 25 parts water.

Citrus trees—1 part to 50 or 60 parts of water.

When "Scalecid" is once mixed, it stays mixed.

Don't pour water into "Scalecid," but "Scalecid" into water.

Never mix "Scalecid" with anything but plain water.

See that your spray pump is free from Lime-Sulphur and Arsenate of Lead, as it may curdle or cause chunks of grease to form in the first few tanks.

WHEN TO SPRAY

Spray any nice day after the leaves drop in the fall until the leaf-buds begin to swell and turn green in the spring. Don't spray when there is danger of its freezing before it is dry on the trees.

For Spring and Summer Spray, See Corona Dry Arsenate of Lead, Page 95, also Remedies on next page.

Why raise worms, when with such a small outlay of time and money, you can effectively control these pests. See Page 94 for Spraying Calendar.

DISEASE AND PEST KILLERS (CONTINUED)

Poisons Are Not Admitted to the Mails, so are shipped by Express or Freight only. On all other items not quoted at Postpaid prices, see page 2 for amount to remit for postage.

ANT EXTERMINATOR

A non-poisonous powder, if scattered about their haunts or runs, will kill or drive away ants from lawns, etc. Boxes, 35c and 65c sizes, Postpaid.

STOP FEEDING PLANTS TO CUT WORMS

Cut Worm Killer is a coarse fibrous preparation for strewing near the plants to be protected. It has an enticing odor and the worms are attracted to it. There is no guess work about it doing the "business." The dead cut worms which are found after its use "tell" the story.

Order Cut Worm Killer when you buy your seeds. The worms will not wait for you to buy it so have it on hand ready for use at the right time. The cut worm does most damage at night and in one or two nights may destroy your entire crop. One pound is sufficient for 175 plants when in hills and 100 lineal feet when in rows.

Satisfaction Guaranteed or Money Refunded.
Prices: 1-lb box, 35c, mailing weight 2 lbs.; 5-lb can \$1.25, shipping weight 7 lbs.



COW EASE (Fly Driver)

Is 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.

Stop this loss. Turn it into profits by giving your cows a spray of Cow-Ease before each milking. It will save twice its cost. Yes, it gives added life, added strength, added pulling power to your horses, too.

Price, quart 60c, weight 4 lbs.; ½ gallon, weight 8 lbs. 90c; gallon, weight, 15 lbs. \$1.50.

DUSTING SULPHUR

The most common fungus disease that annoy the gardener and orchardist are Early Blight on potatoes, Scab on apples and pears, and Brown Rot on peaches. Corona Dusting Sulphur is good for all these and can be used by itself or in combination with "Corona Dry," mixing the two in equal proportions. The mixing will save time in application and is to be preferred. Corona Dusting Sulphur is put up in standard packages. Price: ½ lb. carton, 15c; 1-lb., 25c; 5 lbs., \$1.00.

DRY POWDERED FUNGI-BORDO

Fungi-Bordo, the perfect Dry Bordeaux Mixture Concentrate is a dry powder which you will receive in sift-proof, impervious packages. There is no freight to be paid on water, no danger of freezing or of drying out in the package, and the material always reaches you in prime condition for immediate use. For general use, use eight pounds of Dry Powdered Fungi-Bordo to fifty gallon of water will prove an effective insecticide and fungicide. 1 lb., 50c; 5 lbs., \$2.25; 10 lbs., \$4.00.

"BLACK LEAF 40"

Nicotine Sulphate—40% Nicotine

This is the insecticide that is so highly recommended by Experiment Stations. It destroys Aphis (plant lice), Thrips, Leaf-hoppers on all trees, bush and vine fruits, vegetables, field crops, flowers and shrubs; also Apple Red Bug, Pear Psylla and similar soft-bodied sucking insects—all without injury to foliage.

May be combined with other sprays. Highly concentrated. Soluble in water—easy to mix—does not clog nozzle.

"Black Leaf 40" is a concentrated solution of Nicotine Sulphate and contains 40 per cent of Nicotine by weight. The difference between "free" nicotine and nicotine sulphate is that nicotine in the "free" state evaporates much more easily. Hence, the sulphate is to be preferred for purposes requiring more "lasting" properties, such as for spraying outdoor plants and trees, but not for fumigating.

You cannot go wrong by ordering "Black Leaf 40" for sucking insects.

PRICES:

1 oz.	\$.25 makes	6 gallons spray
½ lb.	1.00 makes	40 to 120 gallons spray
2 lb.	3.25 makes	160 to 500 gallons spray

SOAP AS A SPREADER

In order to assist the "Black Leaf 40" to penetrate to and thoroughly wet the insect, it is advisable when spraying with "Black Leaf 40" alone to add 3 to 4 pounds of dissolved whale oil soap to every 100 gallons of spray. When using "Black Leaf 40" in combination with other sprays, do not use soap.

INSECTO

Effective remedy against fungus, since it is put up in powdered form, it is more easily handled than the Bordeaux mixture which it replaces. One lb. package, 55c; 5-lb. package, \$2.25.

LIME-SULPHUR (Dry Form)

A good remedy for San Jose Scale; also an excellent fungicide. One lb., 40c; 5-lb. package, \$1.75; 10-lb. package, \$3.00; 25-lb package, \$6.75; 100 lbs, \$20.00.

"NICO-FUME" LIQUID

"Nico-Fume" Liquid is a highly refined solution of free nicotine and is of exceptional purity. It is guaranteed to contain 40 per cent of nicotine by weight in water solution. It contains no alcohol, camphor or other chemicals or adulterations which might impair its efficiency or injure plants. One-fourth lb. can, 75c; 1-lb., \$2.50; 4 lbs., \$7.00.

"NICO-FUME" PAPER

For fumigating greenhouses, replacing the old tobacco stem method. For the ordinary greenhouse (100 feet long by 20 feet wide) eight or ten sheets will usually furnish a strong fumigation; larger or smaller houses in proportion. Price: 24 sheets, \$1.25; 144 sheets, \$5.00.

POISON BAIT

"Corona Dry" is the best poison that can be used for this purpose. Take the proper amount of bran, mix it with 10 per cent "Corona Dry" and 10 per cent molasses, by weight, and scatter it about the infested territory in small bails, about the size of a plum. The Cut Worms will leave the ground to eat the bait and will be killed in large numbers.

TOBACCO DUST

When dusted over young plants, it is very efficient in repelling many kinds of bugs and in keeping the foliage from Aphis and Lice. Its specific uses have been indicated under the different plants and vegetables enumerated. There need be no fear of using too much because it does no harm and is considered a good fertilizer. Price: One half lb., 15c; lb., 25c; 5 lbs., \$1.00; 10 lbs., \$1.75.



TARRED FELT DISK

Effective protection against the "root maggot." For young plants when first set and such as cabbage, cauliflower, etc. Price, 70c per 100, Postpaid. Write for quantity prices.

FORMALDEHYDE

For the prevention of smut on grains; it is easy to apply. One bottle, diluted with 40 to 50 gallons of water is sufficient to treat thoroughly 30 bu. of wheat or barley, for smut; 40 bu. of oats for smut; or 60 bu. of flax for wilt. Sixteen oz. bottle 75c.

Directions

Spread the grain on the barn floor, then sprinkle the solution over the grain using a sprayer or fine nozzle water pot. Shovel the grain over thoroughly until each kernel is saturated after which allow the grain to dry thoroughly and promptly.

WHALE OIL SOAP

Used in the greenhouse, nursery and anywhere that insect life exists. Per lb., 25c; 5-lb. box for 85c.

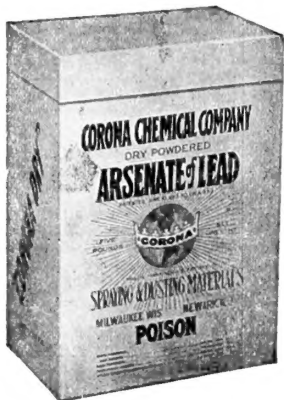
Whale Oil Soap Solution. Dissolve 2 ounces of soap to 1 gallon of water for all small fruit. For large fruit trees, shade trees, etc., use 3 ounces of soap per gallon.

Very effective as a spreader for "Black Leaf 40" Nico-Fume, Liquid etc.

HANDY SPRAYING CALENDAR

Victim	Pest	Remedy	Application
	Red Bugs	Black Leaf 40	1st, when blossoms show pink; 2nd, when they fall.
	Scab and Rust	Fungi-Bordo	1st, before blossoms open; 2nd, just after blossoms drop.
	Brown Spot	Fungi-Bordo	1st, before blossoms open; 2nd, just after blossoms drop.
	Codling Moth	Arsenate of Lead	1st, as blossoms fall; 2nd, 10 days later.
	Head Borer	Scalecide	Saturate tree trunks fall and spring when dormant.
	Bud Moth	Arsenate of Lead	When buds open.
	San Jose Scale	Scalecide	After leaves fall and before they appear in the spring.
APPLE	Aphis or Lice	Black Leaf 40	Spray when buds are green.
CHERRY	Oyster Shell Scale	Scalecide	When trees are dormant fall or spring.
PEACH	Sooty Spot	Scalecide	When trees are dormant fall or spring.
PEAR	Curculio	Arsenate of Lead	1st, as soon as blossoms fall; 2nd, 10 days later.
PLUM, Etc.	Apple Maggott	Arsenate of Lead	July 1st; repeat in 10 days.
	Canker Worm	Scalecide	When trees are dormant.
	Tent Caterpillar	Arsenate of Lead	As insects appear.
	Canker	Scalecide	Fall or spring when dormant.
	Brown Rot	Scalecide	Fall or spring when dormant.
	Slugs	Arsenate of Lead	When they appear.
	Leaf Roller	Scalecide	Fall and spring when dormant.
	Leaf Curl	Scalecide	Fall and spring when dormant.
	Psylla	Scalecide	Fall and spring.
	Shot Hole Borer	Scalecide	Fall or spring when dormant saturate.
	Brown Mite	Scalecide	Fall or spring when dormant saturate.
ASPARAGUS	Rust	Fungi-Bordo	After crop is cut; burn rusted brush.
	Beetle	Arsenate of Lead	After harvest.
BEAN	Anthraxose	Fungi-Bordo	When plants are 3 weeks old; repeat at necessary intervals.
	Leaf Spot	Fungi-Bordo	Same as above.
BLACKBERRY and	Anthraxose	Fungi-Bordo	When needed.
RASPBERRY	Rust	Fungi-Bordo	When needed.
CABBAGE	Aphis	Black Leaf 40	As insect appears.
and	Root Maggott	Tobacco Dust	Around each plant.
CAULIFLOWER	Cabbage Worm	Arsenate of Lead	When pest appears.
	Cabbage Looper	Arsenate of Lead	When pest appears.
	Cut Worm	Cut Worm Killer	When pest appears.
CORN	Corn Ear Worm	Arsenate of Lead	When silk appears.
CUCUMBER	Downy Mildew	Fungi-Bordo	When disease appears
MELON	Squash Bug	Black Leaf 40	When pest appears.
SQUASH	Beetles	Tobacco Dust	Sprinkle vines when pest appears.
WATERMELON	Root Maggott	Tobacco Dust	Around stems to prevent.
CURRENT	Worms	Arsenate of Lead	When insects appear.
GOOSEBERRY	Mldew	Fungi-Bordo	When disease appears.
GREENHOUSE	Red Spider	Nico-Fume	When insects appear.
PLANTS	Aphis	Nico-Fume	When insects appear.
GRAPE	Brown Rot	Fungi-Bordo	When disease appears.
	Downy Mildew	Fungi-Bordo	When disease appears.
	Flea Beetle	Arsenate of Lead	When insects appear.
	Slugs	Arsenate of Lead	When insects appear.
GRAIN	Smuts	Formaldehyde	Treat seed before planting.
		Black Leaf 40 and	
		Whale Oil Soap	When pest appears.
ONIONS	Thrips-Blight		When pest appears.
POTATO	Aphis Lice	Black Leaf 40	When pests appear.
	Early Blight	Fungi-Bordo	When plants are six inches high
	Late Blight-Rot		and repeat to take care of later growth.
	Beetle (Potato Bug)	Arsenate of Lead	When insects appear.
	Flea Beetle	Arsenate of Lead	When insects appear.
ROSE	Plant Lice	Black Leaf 40	When insects appear.
	Rose Scale	Scalecide	When dormant, fall or early spring.
	Rose Slug	Arsenate of Lead	When pest appears.
	Rose Bug	Arsenate of Lead	When pest appears.
	Red Spider	Black Leaf 40	When pest appears.
	Green Aphis	Black Leaf 40	When pest appears.
STRAWBERRY	Leaf Roller	Arsenate of Lead	In August, when fruit has been gathered.
	Rust Leaf Blight	Fungi-Bordo	When disease appears.
SHADE TREES	Borers	Scalecide	Saturate thoroughly fall and spring.
	Elm Leaf Beetle	Arsenate of Lead	About June 15th.
	Tussock Moth	Arsenate of Lead	When needed, as pest appears.
	Brown Tail Moth	Arsenate of Lead	When needed, as pest appears.
	Gypsy Moth	Arsenate of Lead	When needed, as pest appears.
	Oyster Shell Scale	Scalecide	When trees are dormant.
TOMATO	Cut Worms	See Cabbage	
	Worms	See Cabbage	

CORONA DRY ARSENATE OF LEAD



The Leading Insecticide for Spring and Summer Spraying, Either Commercial or Home Orchardists and the "Standard" for Convenience and Efficiency, for Application With Water or in Dry Form on Fruit Trees, Potatoes, Etc. (See Spraying Calendar page 94).

It is formed by the combination of lead oxide and arsenate oxide. It is all active—containing not the smallest fraction of inert material. This product contains one-third arsenic—the most effective known poison for leaf-eating insects—which is closely combined with pure lead, in such a way that there is no free arsenic left to "burn" the foliage.

For the Home Orchard or Kitchen Garden, when used as a dusting application, will rid your place of bugs and worms just as it does the commercial grower. Formerly, there was nothing which the small grower could use conveniently to kill insect pests. But now "Corona Dry" is sold in small packages to meet the urgent need of the man with a small garden or a few fruit trees.

Try the best known method of protecting your plants. This universal insecticide prevents their getting a start, or destroys them after they appear. Ideal for either large or small gardens, small and large fruits, flowers and ornamental trees. It is safe to use and will not "burn" foliage.

Superior to Paris Green because it covers the plant more thoroughly. You can do the work twice as fast. It gets under the leaves better and kills the hidden bugs. Rain does not wash it off easily. "Corona Dry" is applied in dry dust form very efficiently with Hand Duster. See page 91.

"CORONA DRY" kills Corn Ear Worms, Currant Worms and dozens of others, in addition to the many fruit tree pests. Being a poison, it is excluded from the U. S. Mail. Must be sent by Express or Freight.

Price: ½-lb. package, 40c; 1-lb. package 70c.

SEND FOR FREE CORONA BOOKLET, "GARDEN PESTS AND THEIR CONTROL."

We are unable to quote on quantities so far in advance. We are General Agents for Corona Dry Arsenate of Lead in the Mountain States, and can always make bed-rock prices. Write us.

NO. 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
1 by 1 foot	43,560	5 by 3 feet	2,904	15 by 15 feet	193
2 by 1 foot	21,780	5 by 4 feet	2,178	16 by 16 feet	170
2 by 2 feet	10,890	5 by 5 feet	1,742	17 by 17 feet	150
3 by 2 feet	7,260	6 by 6 feet	1,200	18 by 18 feet	134
3 by 3 feet	4,840	7 by 7 feet	888	19 by 19 feet	120
4 by 1 foot	10,890	9 by 9 feet	537	20 by 20 feet	108
4 by 2 feet	5,445	10 by 10 feet	435	25 by 25 feet	69
4 by 3 feet	3,630	11 by 11 feet	360	33 by 33 feet	40
4 by 4 feet	2,722	12 by 12 feet	302	40 by 40 feet	27
5 by 1 foot	8,712	13 by 13 feet	257	50 by 50 feet	17
5 by 2 feet	4,356	14 by 14 feet	222	60 by 60 feet	12
				66 by 66 feet	10

TABLE OF DISTANCES FOR PLANTING FRUIT TREES, ETC.

Apples, Standard, 30 to 40 ft. each way.	Peaches, 16 to 18 ft. each way.	Raspberries, 3 to 4 ft. each way.
Pears, Standard, 20 to 25 ft. each way	Apricots, 16 to 18 ft. each way.	Blackberries, 6 to 8 ft. each way.
Cherries, 18 to 20 ft. each way.	Quinces, 12 ft. each way.	Strawberries, 1½ to 3 ft. each way.
Plums, 16 to 18 ft. each way	Currants 3 to 4 ft. each way.	Grapes, 8 to 10 ft. each way.
	Gooseberries, 3 to 4 ft. each way.	

BOOKS ON HORTICULTURE, ETC.

All Books Sent Postpaid at Prices Named

A Woman's Hardy Garden (Mrs. Ely)—One of the most popular and helpful books for the amateur, beautifully illustrated\$1.75

Apple Growing (M. C. Burritt)—A practical solution of problems confronting the apple grower.....\$1.00

Farm and Garden Rule Book (L. H. Bailey)—A compendium of information on all leading subjects connected with country life\$2.50

Forcing Book (L. H. Bailey)—Full instructions for building forcing houses and list of vegetables with full directions for forcing\$1.25

Fertilizers (Voorhees)—The source character and composition of natural, home-made and manufactured fertilizers and how to use them\$1.60

Flower Garden, The Practical (Mrs. Ely)—The author's latest and best book, finely illustrated, including color plates\$2.00

Fruit Growing Principles of (Bailey)—Revised, new edition, presenting the most approved methods of American growers.\$2.00

Garden Guide (Amateur Gardeners' Handbook)—Tells how to plan, plant and maintain the home grounds, how to grow vegetables, fruits, flowers, etc.75c

Milady's House Plants (Palmer)—Tells of the plants which any woman can successfully grow indoors; 100 instructive pictures.....\$1.00

The Beginners In Poultry (Valentine)—Treats on breeds, breeding, management and marketing from beginners standpoint\$1.75

The Pruning Book (Bailey)—Principles and practices of pruning and training as applied to American conditions\$2.50

Sugar Beet in America (F. S. Harris)—An intensive study of the process of sugar beet production in America\$2.25


The Vegetable Garden (Watts)—Designed for small grower. Selection, cultural directions, cultivation and returns to be expected\$1.00

Practical Landscape Gardening (Cridland)—Of particular value to the owner of the moderate sized suburban home. Nicely illustrated\$1.90

"THE BIG SIX" FOR \$4.00 FRUIT COLLECTION

CONSISTS OF ONE EACH OF THESE LEADING VARIETIES


Delivered All Charges Prepaid, to Your Express or Post Office
FOR \$4.00




Campbell's
Early Grapes
2-year Size




Bartlett Pear
2-year Size



Lambert Cherry
2-year Size



Italian Prune
2-year Size



Delicious Apple
2-year Size



Elberta Peach
2-year Size

P.-W.'s Mountain Grown Trees Are Hardier
LET US PROVE IT

Porter-Walton Co., Salt Lake City

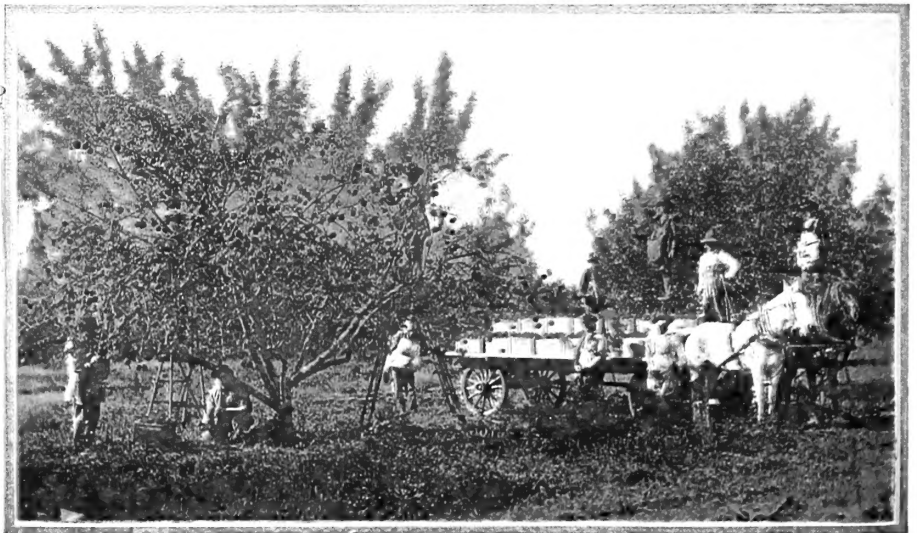
PLANT **P-W**'S MOUNTAIN GROWN
SEEDS & TREES
They're Hardier



Jonathan

Field of two year old
Apple Trees
at our
Centerville Nurseries

A typical crop
Jonathan Apples
from
Mountain Grown
Trees



PORTER-WALTON CO.
Seed & Nursery Specialists SALT LAKE CITY, UTAH