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1918

Catalog

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1918

"HOOVERIZE EVERY NOOK and CRANNY
TO HELP OUT UNCLE SAMMY"

OUR CENTERVILLE "TRIAL GROUNDS"

PORTER-WALTON
• COMPANY •

SEEDSMEN AND NURSERYMEN
SALT LAKE CITY, UTAH.

The Prices in This Catalog Cancel All Previous Prices

HOW TO ORDER BY MAIL

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—pages 60 to 80—these being filled at our Centerville Nurseries, seeds and all other goods being collated at our Salt Lake stores, though all can be shipped together when advisable. Give full shipping instructions in every order sent, and write address legibly.

MONEY SHOULD ALWAYS ACCOMPANY YOUR ORDER. You may remit at our risk, either by express order, bank draft, post office order or registered letter. We accept 2-cent postage stamps the same as cash.

GOODS WANTED C. O. D. must have 25 per cent of the amount **ACCOMPANY THE ORDER.** Plants we do not ship C. O. D.

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 by you after a reasonable lapse of time please notify us at once and send copy of order.

ORDER EARLY. Seed stocks of a number of varieties are very limited and the demand will be exceptionally heavy. Good help to properly care for the extra rush at planting time will be hard to obtain. Freight, Express and Parcel Post movements will be slower than in other years. You will do yourself and us a good turn to **ORDER EARLY.**

PATRONS IN SIGNING ORDERS are requested to use prefix Mr., Mrs. or Miss. Married ladies should invariably use husband's initials.

ABOUT GUARANTEES—We use every precaution in procuring fresh, pure and reliable seeds, etc., but we, in common with other responsible seed houses, sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association, i. e.:—We give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, nursery stock, roots or plants sent out and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are to be returned at once.—Porter-Walton Co.

Parcel Post Rules and Regulations

The prices printed in this catalog do not include postage except seeds in packets and ounces. The weights are all printed so that by referring to following table you can easily find out the extra amount to send for postage.

THE MAXIMUM WEIGHT allowable in local and to the first and second zones is 50 pounds, and to all other zones (third to eighth) it is 20 pounds.

THE SIZE OF PARCEL must not exceed 6 feet (72 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 far 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.

DOMESTIC PARCEL POST RATES				First (over 8 oz. Pound rates 1 lb.)	Each Additional Pound or fraction
Within the United States and Possessions; Alaska, Canal Zone, Guam, Hawaii, Porto Rico and the Philippines					
First	Zone within	50	miles of Salt Lake City.....	4c.	1c.
Second	Zone within	50 to 150	miles of Salt Lake City.....	5c.	1c.
Third	Zone within	150 to 300	miles of Salt Lake City.....	6c.	2c.
Fourth	Zone within	300 to 600	miles of Salt Lake City.....	7c.	4c.
Fifth	Zone within	600 to 1000	miles of Salt Lake City.....	8c.	6c.
Sixth	Zone within	1000 to 1400	miles of Salt Lake City.....	9c.	8c.
Seventh	Zone within	1400 to 1800	miles of Salt Lake City.....	11c.	10c.
Eighth	Zone all over	1800	miles of Salt Lake City.....	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.

Your local postmaster will inform you what zone you are in from Salt Lake City, if you are in doubt, and you can add for postage accordingly.

DON'T FORGET THE WAR TAX. On all Parcel Post orders where the postage exceeds 25c is 1c for every 25c and additional fraction thereof.

Are You "DOING YOUR BIT" for the Meat Supply?

See Page 81

THERE IS A MUNITION FACTORY in your back yard. Are you going to run it for "Uncle Sam" or shut it down for the Kaiser?

See Page 11

[illegible]

If order is to be sent by mail send Postage
See Front Cover Page of Catalog to find amount.

Amount for Postage

If order is to be sent by mail send Postage
See Front Cover Page of Catalog to find amount.

Total Amount Sent

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

NAMIES

P. O. ADDRESSES

(PLEASE DO NOT WRITE IN THIS SPACE)

SHIPPING MEMORANDUM

Shipped Via

Date _____

19.

Shipped via							
Pkgs.	No.	Postage	C. O. D. Fee	Insurance	Total Postage	Freight	Express
Pkgs.....							
Bags.....							
Bals.....							
Boxes.....							
Total							

Bill Lading No.

Express Bill.

Laid out By

Shipping Clerk

Checked By

[illegible]

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

NAMES

P. O. ADDRESSES

(PLEASE DO NOT WRITE IN THIS SPACE)

SHIPPING MEMORANDUM

Shipped Via Date 19.....

Pkgs.	No.	Postage	C. O. D. Fee	Insurance	Total Postage	Freight	Express
Pkgs.....							
Bags.....							
Bals.....							
Boxes.....							
Total							

Bill Lading No. Express Bill Laid out By

Shipping Clerk Checked By

THIS MESSAGE IS TO YOU

If you control even a rod of ground that can be rendered productive this year—listen to this warning—from U. S. Food Administrator Hoover:—

“Food has, since the war began gradually assumed a larger place in the economics, the statesmanship and the strategy of warfare. North America is called upon both by Allies and Neutrals for quantities of food far beyond its normal ability.

During the last year we have exported every last ounce which the country during this period was capable of producing. And our national stock of cereals and animal products, proportionate to our population, was, at the beginning of harvest the LOWEST IN HISTORY.”

The food requirement for this year will far exceed that of last; and the only solution of this tremendous problem is for every red-blooded American, left behind with even a square yard of ground fit for cultivation, “To Do His Bit.

To our old cutsomers it is enough to say our seed stocks, etc., available this year are even above the standard of past years. This, together with greatly enlarged equipment and staff, places us in an enviable position to give you service.

To our new friends who entrust us with their first order, we give the assurance that every packet, yes, every tiny seed or anything else you receive lebeled PORTER-WALTON has behind it the integrity and stability of a responsible house, characterized by dependable quality, high efficiency and a desire to please.

Yours for the Crop that “Goes Over the Top”

PORTER-WALTON COMPANY

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 and Field and Lawn.....	35-41	Plants, Vegetable	34
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For Detailed Index See Last Page

EXTERIOR VIEW OF OUR
SEED MAIL ORDER DEPT.
522-532 SO. 3RD WEST ST.

PACKING ROOM
IN BULB SEED DEPT.

POULTRY SUPPLY DEPT.
WHERE FANDW CHICK
MANTA IS COMPOUNDED

A ROOM IN OUR
MAIL ORDER DEPT.

STATE ST. PLANT AND
FLORAL DEPT 251 STATE ST.

SALESROOM RETAIL
SEED AND POULTRY
SUPPLY DEPT

SHOWING LOCATION OF
OUR RETAIL STORE ON
STATE ST

RETAIL SEED AND
POULTRY SUPPLY DEPT
251 STATE ST

A STOCK ROOM IN
FARM SEED DEPARTMENT

VEGETABLE & FLOWER
BULBS IN FROST PROOF
STORAGE IN WAREHOUSES

HAND PICKING SEEDS AT
OUR WAREHOUSE TO
MAINTAIN P.W. QUALITY

WAREHOUSES REAR 522-532
SOUTH THIRD WEST ST.
STORAGE CAPACITY 100 CARLOADS

CARNATION HOUSE
AT OUR CENTERVILLE
GREENHOUSE

PALM AND SUNDRY
POTTED PLANTS AT OUR
CENTERVILLE GREENHOUSE

OUR PLANT & CUT
FLOWER SALESROOM

No. 2. A Field of Chatenay Carrots in full bloom. See Page 15.

No. 2. Tests on Flower Seeds.

No. 3. Farm Superintendent Headquarters, showing Trials on Roses in foreground.

No. 4. Part of a plat of 50,000 Ever-Blooming Roses.

No. 5. Onion Seed ready for harvesting. See Page 26.

The above cuts were all taken at our Centerville Trial Grounds, Seed Farm and Nurseries, situated 12 miles north from Salt Lake City, right in the heart of the most fertile district in Utah. It is here we established eleven years ago the first seed testing grounds in the Rocky Mountain region. In fact, it is the only one we know of to date, outside of the government experiment stations, between the Missouri river and the coast. Of course, it costs money to maintain these, but we want to know just what seeds are worth planting and so do our customers. It pays us and them, too.

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 need enriching 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 8 and 9 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 shallower 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 arises. 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 of 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 snowstorms 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.

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	1,800-3,000	Early Spring	Next Spring
BEANS, Bush	1 lb.	.60 lbs.	Late Spring	46-65 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 pkt.	.2 lbs.	Spring	45 days
KOHL RABI	1 pkt.	.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	9,680 plants T	Late Spring	150 days
PUMPKIN	2 pkts.	.3 or 4 lbs.	Late Spring	100-125 days
RADISH	2 oz.	.10 lbs.	Spring (S)	30-45 days
RHUBARB	½ oz.	.1 lb.	Spring	Second Spring
“ Roots	33 plants	2,420	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 pkt.	.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, Kohlrabi, 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 7 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 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 ft.	2 ft.	15-20 in.	7 or 8 ft.	2 or 3 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.	2-4 in.	20 in.	4-6 in.
" Mangel	2 in.	18 in.	8 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	½-¾ in.	12 in.	2 in.	22-28 in.	4 in.
CAULIFLOWER	¾ in.	24 in.	14 in.	30-36 in.	24-30 in.
CELERY	½ in.	20 in.	6 in.	4 ft.	6 in.
CHERIVL	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	½-1 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	¼ 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	¼ in.	12 in.	4 in.	24-36 in.	3-6 in.
PARSNIP	¼-½ 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 judgement 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 distances 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 seed 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 firmed 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 are 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. PRICE 50 CENTS PREPAID

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

MEDIUM SIZED GARDEN COLLECTION. PRICE \$1.50 PREPAID

½ lb. Peas, Early	1 pkt. Cauliflower	1 pkt. Egg Plant	1 pkt. Parsley
½ lb. Peas, Late	1 pkt. Carrot	1 pkt. Kohl Rabi	1 pkt. Pepper
½ lb. Beans, String	1 pkt. Celery	1 pkt. Leek	1 pkt. Pumpkin
½ lb. Beans, Wax	1 pkt. Sweet Corn	1 pkt. Lettuce	1 pkt. Turnip
1 pkt. Beet	1 pkt. Cucumber	1 pkt. Muskmelon	1 pkt. Radish, Long
1 pkt. Cabbage	1 pkt. Cress	1 pkt. Watermelon	1 pkt. Radish, Round
		1 pkt. Onion	1 pkt. Tomato

SUBURBAN GARDEN COLLECTION. PRICE \$3.50 PREPAID

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

School Boys and Girls Solving the Food Problem

“DO YOUR BIT”

Make A War Garden

You need not be “a slacker” if to the front you cannot go,
In your own back yard you can serve “Uncle Sam”—use the Hoe.

Last year the “war garden” movement was organized very hurriedly with most of the planting centered on potatoes, beans and corn. Expected results were not obtained by many new beginners, because there was not time for proper preparation of soil before the seed was planted and they were entirely without experience as how to cultivate and fight insect pests. But even with these handicaps, according to authentic reports, over \$350,000,000 worth of food was produced from the total of 1,500,000 acres planted to war gardens in this country last year. This was an average yield of about \$230.00 per acre.

If such results were obtained last year by new beginners and at the “eleventh hour” too, surely “Uncle Sam” has a right to expect since the necessity for such effort has been greatly multiplied, that this year the area planted will be vastly enlarged and the resulting crops a hundred fold more valuable.

While it is neither feasible nor possible for every one to cultivate commercial crops suitable for shipping yet it is the patriotic duty of every American family to make their unproductive back yard or vacant lot supply at least their own table with a good assortment of vegetables during the entire season and have some to put away for winter. So that the farms and commercial gardens that have been heretofore supplying local needs, this year will be planted to crops which can be shipped abroad to our own fighting men as well as to the Allies and the neutral nations that are almost entirely dependent upon this country for food.

With the thought in view of assisting those unfamiliar with the best types of vegetables that will furnish variety for the kitchen table we submit the following collection:

P.-W's. KITCHEN WAR GARDEN COLLECTION

Special Price \$2.75 Prepaid.

1/2 lb. Peas, Laxton	1 pkt. Cucumber, Klondike	1 pkt. Pumpkin, Sugar
1 lb. Peas, Alderman	1 pkt. Cress, Curled	1 oz. Radish, P.-W.'s Sparkler
1 lb. Beans, Green Pod	1 pkt. Egg Plant, N. Y.	1 pkt. Radish, Celestial
1/2 lb. Beans, Pencil Pod	1 pkt. Kohl Rabi, White V.	1 pkt. Rhubarb, Victoria
1 oz. Beets, Detroit D. Red	1 pkt. Leek	1 pkt. Salsify, Main S. Island
1 pkt. Cabbage, Copenhagen	2 pkts. Lettuce, N. Y.	1 pkt. Spinach, Bloomsdale
1 pkt. Cabbage, D. Ball Head	1 pkt. Muskmelon, R. Ford	1 pkt. Squash, Hubbard
1 pkt. Cauliflower, Snowball	1 pkt. Watermelon, Kleckley	1 pkt. Tomato, Jno. Baer
1 pkt. Carrot, Ey. S. Horn	2 pkts. Onion, S. White Globe	1 pkt. Tomato, Stone
1 oz. Carrot, Danvers	2 pkts. Onion, Yellow Globe	1 pkt. Turnip, Ey. Milan
1 pkt. Celery, P.-W.'s G. Crisp	1 pkt. Parsley, C. M. Curled	1 pkt. Turnip, Purple Top W.G.
1 pkt. Sweet Corn, G. Bantam	1 oz. Parsnip, Hollow Crown	1 pkt. Sage, Garden
1 pkt. Sweet Corn, Stowells E.	1 pkt. Pepper, Ruby King	

(The above collection at regular prices would amount to \$3.50) For cultural information see pages 7, 8 and 9.

HOW YOU CAN HELP THE MEAT SUPPLY See Page 81

RELIABLE VEGETABLE SEEDS

To insure offering to you only those varieties of Vegetable, Flower and Farm Seeds that will give a just reward for cultivation, exhaustive soil tests are made each year at our Centerville Trial Grounds. This method enables us to select the most desirable types and varieties that will be sure to give entire satisfaction whether planted for Market or Family Garden.

Heretofore new introductions of novelties have been listed on the front pages, apart from the general list. This has caused some little confusion to some of our patrons in making up their orders. To avoid such in this book, alphabetical arrangement has been followed.

The list submitted here for your selection you can depend on as being wholly reliable in every respect, and "up-to-the minute" list of reputable distinct varieties of both old and new, worthy of a place in your garden, orchard or field.

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.

Large Green Globe. The most popular variety, buds large, globular, deep green with a slight tint of purple at base. Pkt. 10c; oz. 35c; $\frac{1}{4}$ lb. \$1.10; lb. \$4.00.

Jerusalem (Tuberons Rooted). Good Tubers, lb. 15c; 10 lbs. 90c; 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 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.

Pkt. Oz. $\frac{1}{4}$ lb. Lb.

Barr's Mammoth. A favorite of market gardeners. Shoots very large and tender. Quick growing and thick of top.... 5c 10c 25c 80c

Conover's Colossal. The standard variety for all purposes, especially for canning. It makes large, thick, wide shoots of very white color, and we recommend it as one of the very best varieties for all purposes 5c 10c 25c 80c

Palmeto. This is the most popular variety grown for all purposes, especially for shipping. Shots are light green and tinted slightly pink..... 5c 10c 25c 80c

Conover's Colossal

Asparagus Roots. See Page 34.

BEAN—DWARF OR BUSH

One lb. 50 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 on Fertilizers. Best results are obtained in seed inoculation.

BUSH LIMA BEANS

	Pkt.	Lb.	10 lbs.
Henderson's Bush Lima. Early and very productive.....	10c	35c	\$3.00
® Burpee's Bush Lima. A bush form of the large Pole Lima, the beans being large and flat like those of that variety. Productive and good.....	10c	35c	\$3.00
Dreer's Bush Lima. The bush form of Dreer's Lima, the beans growing close together in the pods.....	10c	35c	\$3.00

All Seeds Postpaid in packets and ounces. See front cover page for delivery charges on larger quantities.

BEAN—Dwarf Bush

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. (See cut.)

GREEN PODDED VARIETIES

	Pkt.	Lb.	10 lbs.
Burpee's Stringless. A very excellent green-podded bush bean, as well as a very early variety	10c	35c	\$2.50
Dwarf Horticultural. A late and very productive variety. Stringless and of excellent flavor	10c	35c	2.50
P.-W.'s Early Red Valentine. This variety is valuable not only on account of its earliness, tenderness and good quality, but also on account of its heavy-yielding qualities	10c	35c	2.50
Round Yellow Six Weeks. It is an improved strain having quite fleshy pods, which are brittle and tender.....	10c	35c	2.50
Longfellow. See above specialty.....	10c	35c	2.50
Black Valentine. Pods long, straight, heavy yielder; rust-proof.....	10c	35c	2.50

Longfellow Green Podded Bush Bean

WAX OR YELLOW PODDED VARIETIES

	Pkt.	Lb.	10 lbs.
Challenge Dwarf Black Wax. The pods are quite round, very fleshy, crisp, tender and stringless. Seed jet black, larger and more curved than Prolific German wax.....	10c	35c	\$2.50
Davis' White Kidney Wax. Hardy, productive, desirable where a wax-podded, white seeded midseason sort is wanted.....	10c	35c	2.50
Improved Rust-Proof Golden Wax. Early, productive, pods are long, nearly straight, broad flat and golden yellow, very fleshy and wax-like; good snap bean, shelling well when dry; the highest quality either way.....	10c	35c	2.50
® New Pencil Pod. 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 a mild, sweet flavor.....	10c	35c	2.50
Wardwell's Kidney Wax. A popular variety of wax bean, bearing long, flat pods, of a delicate waxy-yellow, stringless and brittle, producing a heavy crop	10c	35c	3.00

POLE OR RUNNING

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 50 hills.

	Pkt.	Lb.	10 lbs.
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 winter shell beans.....	10c	35c	\$3.00
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	10c	60c	5.50
® Old Homestead or Kentucky Wonder. The pods are very thick, meaty, and deeply saddle-backed, and entirely stringless. Bright yellow in color.....	10c	35c	3.00
Pole Lima, King of the Garden. Pods large, straight and handsome.....	10c	40c	3.50

FIELD BEANS

	Pkt.	Lb.	10 lbs.
Rows 2 ft. apart.			
Mexican Pinto. Decidedly rich in food value; extra heavy cropper	10c	25c	\$2.00
Pink Eye. Large winter shell bean; white with pink spot at center	10c	25c	2.00
White Navy. The well known small white shell bean	10c	25c	2.00
Tepey. Wonderful new dry-land white shell bean; produces in hot, dry situations when all others fail	10c	30c	2.50
English or Broad Windsor. Immense size known as the horse bean	10c	30c	2.50

WRITE FOR QUANTITY PRICES

Detroit Dark Red

Eclipse. Almost as early as the Egyptian, but of much finer quality.
 Improved Blood Turnip. Very regular in shape; deep blood-red color and exceedingly sweet.
 Half-long Blood. The top is medium in size and of a very rich, glossy crimson. The bulb is 3 inches in diameter at shoulder, tapering in pear-shaped form to the slender root, and is entirely free from roughness.

® Early Model. Perfectly globe-shaped; very early, deep blood-red; of finest quality.

Used also for stockfeeding.

BEET—FOR SUGAR

Plant early in spring in drills 22-in. apart.

® Klein Wenzleben.. This variety is without question the best in cultivation; not the largest in size, but the richest in saccharine matter.
 Vitmorin's Improved. A little smaller than Klein Wanzleben. A variety for sugar factories
 Lane's Improved Sugar. A well-known variety, valuable for feeding.

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; ¼ 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 same as Cabbage, which see for cultural directions.

® Odense Market. Produces an abundant crop of firm, well formed sprouts, thickly set around the stalk

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 ground can be worked. When the plants are large enough they should stand six inches apart in rows. Continue planting for a succession as late as the middle of July.

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. 20c; ¼ lb. 60c; lb. \$2.00.

® 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 vermilion flesh.

® Detroit Dark Red. See specialty above

Extra Early Egyptian. Earliest of all the round sorts. Deep blood red...

Pkt. Oz. ¼ lb. Lb.

5c 20c 60c 2.00

5c 20c 60c \$2.00

5c 20c 50c 1.90

5c 20c 60c 2.00

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SEED TESTING

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

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

It is not enough that we have the intent to please and satisfy our customers—we must have the system and organization that almost eliminates mistakes and gives to you the seed of the kind you want and of quality which is the best.

HALF SUGAR BEETS AND MANGELS

Sow six to eight pounds to the acre during early spring, 2 feet apart between rows, thin out to 8 inches in rows.

Grown for stock feeding, they form very wholesome and nutritious food. Of special value for feeding to cows, as they greatly increase the flow of milk. Of great value as well for feeding poultry. For the dairy farmer the most profitable crop to raise.

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

Biggest Yields, Easiest Harvested and Richest in Food Value of All Stock Beets Yet
Developed

Imported by us five 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 its 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; ¼ lb. 30c; lb. \$1.00; 10 lbs. \$9.00.

	Pkt.	¼ lb.	Lb.	10 lbs.
Danish Red Giant Eckendorf. Is of cylindrical form and grows mostly above the surface. Awarded a first-class certificate by the Danish Government as a very heavy cropper.....	5c	25c	80c	\$7.00
Danish Taaroje. Ovoid shape, reddish-yellow. Grows more above the surface than P.-W.'s Giant Sludstrup. Preferred for very heavy soil.....	5c	25c	80c	7.00
® Giant Half Sugar. Roots of enormous size of the high feeding value. It is a cross between a mangel and sugar beet; olive shaped.....	5c	25c	90c	8.00
Golden Tankard. Flesh yellow, thus differing from other varieties; sheep prefer it; heavy yielder.....	5c	25c	90c	8.00
Mammoth Long Red. A valuable improved and distinct variety. Extra large, long roots; blood-red; very nutritious.....	5c	25c	90c	8.00
® P.-W.'s Giant Sludstrup. See specialty above.....	5c	30c	1.00	9.00
Royal Giant or Half Sugar Rose. Similar to Giant Sugar, except color of skin, which is bright rose above ground, white below.....	5c	30c	1.00	9.00
Yellow Globe. Large globular roots; good keeper, adapted for shallow soils.....	5c	25c	80c	7.00

When in doubt use varieties marked ®
Packets and ounces prepaid. See front cover for delivery charges on larger quantities.

CABBAGE

1 oz. 1500 Plants. ½ lb. to Transplant for Acre

There are three good seasons for sowing seed, in September, in cold frames (or in winter in hot-beds) for early spring cabbages; in March for summer and fall cabbages; and in June or July for winter cabbages. The seed sprouts quickly and is likely to come up very thick in the seed bed and it should be thinned early, or the plants become spindly and then do not head well. Transplanted to the field, they should be 12 inches apart, in rows 18 inches apart. To prevent the heads splitting open in the fall before they are ready to be harvested, the plants should be loosened a little at the root. Cabbages require considerable moisture, but too much water causes them to rot very readily. For Plants see Page 34.

EXTRA EARLY POINTED OR OBLONG VARIETIES

	Pkt.	Oz.	¼ lb.	Lb.
Charleston, or Large Wakefield. Large, solid heads of fine quality, a few days later than the Jersey Wakefield	5c	30c	1.00	3.50
Early Express, or Lightning. Very early; small, conical heads.....	5c	30c	\$1.00	\$3.50
Early Winnigstadt. Medium-sized, conical-shaped heads; very hard; one of the best.....	5c	35c	1.25	4.00
® P.-W.'s Selected 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.....	5c	35c	1.25	4.00
® Copenhagen Market. See Specialty below.....	10c	45c	1.65	6.00

® COPENHAGEN MARKET

Offered by us for the First Time in 1913. Last year it proved to be the Best Early Cabbage from Denmark. Remember, as Early as the Charleston Wakefield

A valuable new, early Cabbage, producing round, hard heads very early in the season. As early as the Charleston Wakefield. It is the most popular early Cabbage in the markets of Copenhagen. Market-gardeners here are delighted with it on account of its extreme earliness and solid, ten-pound heads, with a small core and always of excellent quality. The plants are short-stemmed, producing heads almost on the ground. 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. 10c; oz. 45c; ¼ lb. \$1.65; lb. \$6.00.

SECOND EARLY OR SUMMER VARIETIES

	Pkt.	Oz.	¼ lb.	Lb.
All Seasons. A general favorite in this section; heads of good size and fine quality.....	5c	30c	\$1.00	\$3.50
Enkhuizen Glory. Large, early, white and very solid. Produces fine ball-shaped heads and combines large size with earliness.....	5c	35c	1.25	4.00
Fottlers Improved Brunswick. Heads large, flat and solid; a sure header, long standing; short term.....	5c	30c	1.00	3.50
® P.-W.'s Summer Ball-Head. 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 of largest size, but of handsome color and of the finest quality. It is probably the safest variety for an amateur to plant, as it does well at all seasons, and one is almost sure of getting a crop, no matter when it is planted.....	5c	40c	1.50	5.00
Succession. Desirable for medium early, main crop or late use.....	5c	25c	85c	3.00
Volga. This variety is of recent introduction and has much merit. It is early in maturing being ready for use only a few days later than Wakefield, and makes large round heads, which are very solid.....	5c	30c	1.00	3.50
All Head Early. The best of the flat-headed early summer Cabbages. Heads roundish flat, very solid and grows uniform in size and form, sure-heading and adaptable to many soils; equally good as a winter Cabbage.....	5c	25c	90c	3.40

We pay postage on packets and ounces. For larger quantities see front cover for amount to remit for postage.

CABBAGE—Continued
FALL AND WINTER VARIETIES

	Pkt.	Oz.	¼ lb.	Lb.
Autumn King, or World-beater. A beautiful winter variety of vigorous growth and extra large. Solid heads of bluish green.....	5c	35c	\$1.25	\$4.00
Ⓜ 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. The new Danish Round Head has less foliage and is better able to resist blight, than the Danish Ball Head.....	5c	30c	90c	3.25
Ⓜ P.-W.'s Short-Stemmed Danish Ball Head or Hollander. See specialty.....	5c	40c	1.50	5.00
Premium Late Drumhead. One of the largest, most solid and best-keeping late varieties....	5c	25c	75c	2.25
Premium Late Flat Dutch. Standard winter variety.....	5c	20c	65c	2.00
Manimoth Red Rock. The largest and surest-heading Red Cabbage; deep red color; very hard and solid.....	5c	25c	80c	3.00
Marvin's Savoy (or "Crumpled Leaf"). Extensively cultivated in Europe; not so well known in this country. It is almost a sure header, it produces large solid heads. It is a fine cabbage for summer and fall use. Especially desired for boiling and cold slaw.....	5c	25c	75c	3.25

DANISH BALL-HEAD
P.-W.'s Short-Stemmed

P.-W.'s Select Stock. 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. The Ball-Head we offer is the short-stemmed strain. 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. Pkt. 5c; oz. 40c; ¼ lb. \$1.50; lb. \$5.00.

P.-W.'s Short-Stemmed Ball-Head Cabbage

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 to two and one-half feet apart, for tither 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 Magdeburg. Pkt. 5s; oz. 20c; ¼ lb. 60c; lb. \$2.00.

CHIVES—Allium Schoenoprasum

An onion-like plant used as a salad and for flavoring soups. Also, the plant makes an excellent ornamental garden bed edging which may be frequently cut, a new growth of leaves appearing soon after each cutting. One sowing will answer for about three years. Pkt. 10c; ¼ oz. 30c; oz. \$1.00.

COLLARDS

Sow seeds the same as for late cabbage plants. The crop of greens 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 3000 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.

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. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

CRESS

Splendidly 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. 10c; ¼ lb. 30c; lb. \$1.00.

Water Cress. Pkt. 10c; oz. 35c; ¼ lb. \$1.25.

Varities marked Ⓜ are especially recommended

CARROTS

1 oz. 150 ft 4-6 lb. 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 for culinary purposes, and we urge our readers to give some of the early table sorts a trial. For feeding stock, especially horses and milch cows, the carrot cannot be surpassed, and it should be more largely grown by farmers for this purpose.

P.-W.'s Chantenay

Color, green at crown, white below. Flesh white, solid and crisp and of excellent quality..... 5c 15c 40c 1.50
 White Belgian. A very productive, white-fleshed variety for stock-feeding..... 5c 15c 40c 1.50

POP CORN

If by mail, add 8c per lb. postage

	Pkt.	Lb.	10 lbs.
White Pearl. Our common market variety.....	10c	20c	\$1.50
White Rice. A very handsome and prolific variety. Ears short, pointed and resemble rice.			
Color, white. No variety of pop corn superior.....	10c	20c	1.25

FOR FIELD CORN SEE PAGE 39

DANDELION

An early grown plant, not much esteemed for greens, which are cooked like mustard and spinach. Sow the seed in May or June on good rich soil, and thoroughly cultivate, when the leaves will be 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.

P.-W.'s CHATENAY CARROT

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; is a heavy cropper, and is undoubtedly one of the best for both the market and private garden, while its great productiveness makes it very desirable as a field sort. Pkt. 5c; oz. 20c; ¼ lb. 65c; lb. \$2.25.

Pkt. Oz. ¼ lb. Lb.

@P.-W.'s Chantenay. See above specialty	5c	20c	65c	\$2.25
Early French Forcing. A small gloular-shaped reddish orange variety. Very desirable for early garden culture or forcing.....	5c	20c	70c	2.50
Early Scarlet Horn. Deep red flesh, tender and delicate.....	5c	15c	55c	2.00
Danver's Half-Long. Of good quality and exceedingly productive	5c	15c	55c	2.00
Oxheart, or Gueranda. Very distinct and desirable, smooth and handsome, very thick and blunt-rooted, about 6 inches long, a rapid grower and of fine quality; color, orange-red; a good all-season Carrot	5c	15c	55c	2.00

STOCK CARROTS

Improved Long Orange. A well-known standard sort, roots long, thickest near the crown, tapering regularly to a point; color deep orange..... 5c 15c 55c 1.75
 @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.

5c	15c	40c	1.50
5c	15c	40c	1.50

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 or August. For early summer crop, plant the seed in hot-beds in January or early in February and the plant 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 and fifteen inches in the row. 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.

P.-W.'s Danish Giant Cauliflowers

P.-W.'s DANISH GIANT

The merits of this first-class Cauliflower are recognized by increasing sale every year. Heads are pure white and of fine quality.

It is very similar in growth, size and other characteristics to the Early Snowball. Its main feature is the fact that it will stand an unusual amount of dry or warm weather and still produce large, solid heads. In some climates, where heretofore it has been impossible to grow good cauliflower, this fine variety has proven a success. It is ready for market or table about a week later than Extra Early Erfurt. Pkt. 20c; ¼ oz. 80c; oz. \$3.00; ¼ lb. \$10.00.

® Early Snowball, Choice Selected Strain. An extra-early dwarf variety, producing magnifi-	Pkt.	¼ oz.	Oz.	¼ lb.
cent heads of fine quality.....	20c	80c	\$3.00	\$10.00
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 for forcing	10c	60c	2.00	6.50
® P.-W.'s Danish Giant. See specialty above.....	20c	80c	3.00	10.00

EGG PLANT

1 oz., 1000 to 2000 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 where cool nights prevail, as in places where the nights are warm. It needs a warm climate to insure quick and uninterrupted growth.

® Black Beauty. This splendid variety is the earliest and best of all large, fruited egg plants. The grand large fruits are thick and of most attractive form. The skin being of a rich, lustrous purplish black. Intensely brilliant coloring is uniform over the whole fruit. The fruits seed freely and develop quickly, so the entire crop can be gathered before there is any danger of frost.....

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

5c	45c	\$1.75	\$6.75
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Packets and oz. mailed free. For Postage on larger quantities see front cover.

CELERY

One ounce will produce from 5,000 to 10,000 plants. For early or 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 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. 20c; oz. \$2.00; ¼ lb. \$6.00; lb. \$20.00.

Pkt. Oz. ¼ lb. Lb.

® Golden Self-Blanching—French Grown. The best of early self-blanching varieties. Of quick growth, easy 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.

15c \$1.75 \$6.00 \$20.00

Golden Self-Blanching — American Grown. More apt to be pithy than French stock; however, our stock is very good.

10c 90c 3.00 10.00

Giant Pascal. A superior keeping sort. The stalks are very large, thick, solid, crisp and of rich nutty flavor; it blanches very easily and quickly, and retains its freshness a long time.

5c 25c 80c 3.00

White Plume. We offer a choice strain of this valuable and popular variety. Unsurpassed for fall and early winter use, requiring very little earthing up to blanch.

5c 25c 80c 3.00

Winter Queen. Medium height, broad light green stocks, very solid, tender and crisp; blanches perfectly.

5c 20c 80c 3.00

Celeriac, Large Smooth Prague. Forms turnip-shaped bulbs having celery-like flavor.

5c 20c 75c 2.50

ENDIVE

1 oz., 300 ft.; 4-5 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 so as to blanch the inner leaves and heart. It is more palatable after frost, being a little bitter if used in the summer.

Pkt. Oz. ¼ lb. Lb.

5c 15c 45c \$1.50

5c 15c 45c 1.50

5c 15c 40c 1.25

® Broad Leaved Batavian. Broad, more or less twisted and waved green leaves with thick white midribs. The inner leaves form a fairly firm head which blanches nearly white and is crisp, tender and of fine flavor. Unsurpassed for salads.

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 Endive. Very curly. The mid rib being wide and whitish, with the outer edges very much indented and curled, forming a very attractive plant; one of the very best varieties.

Garlic. See Page 27. Horseradish. See page 35.

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 seed 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.

Pkt. Oz. ¼ lb. Lb.

5c 15c 50c \$1.75

® Dwarfed Curled Scotch. The plant 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 its beauty.

Tall Green Curly 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.

5c 15c 50c 1.75

SWEET CORN

In hills 8-10 lbs. In Drills 12-20 lbs. per acre

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 3 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 2 or 3 weeks until last of July.

Ⓢ Varieties are leaders for this climate.

P.-W.'s GOLDEN ROD SWEET CORN

In hills 8-10 lbs. In drills 12-20 lbs. per acre

This best of all yellow varieties is a cross between Stowell's evergreen and Golden Bantum, 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, and in 60 to 70 days from planting—two fine ears 8 to 10 inches in length, filled to the very tips with 12 rows of deep succulent kernels of a rich, translucent cream-yellow color, 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; 10 lbs. \$3.00.

EARLY ARIETIES

	Pkt.	Lb.	10 lbs.
Extra-Early Adams. Not a Sugar Corn, but grown for table use because of its earliness. Plants dwarf; ears short.....	10c	30c	\$2.00
Early Mammoth White Cory. Stalks short; ears set quite low, of fair size, and well filled with large, white grains.....	10c	30c	2.00
Early Minnesota. Ears about 8 inches long; early; kernels broad, sweet and tender.....	10c	30c	2.00
Golden Bantum. Very early and of finest quality; ears small, grains golden yellow; very productive.....	10c	40c	3.00
Kendall's Early Giant. A week later than Cory, and much larger.....	10c	30c	2.00
Peep o' Day. Extremely early and unsurpassed in sweetness. The stalks bear from two to three ears each, and, being of dwarf growth, it can be planted closer than most sorts.....	10c	35c	2.50
Ⓢ P.-W.'s Golden Rod. See specialty above.....	10c	40c	3.00

Ⓢ P.-W.'s Extra Early. Produces large roasting ears of the finest quality, remains free from worms, and comes into market only one week later than the dwarf early varieties. The fodder grows five and six feet high, ear about eight inches.....

SECOND EARLY AND MAIN CROP VARIETIES

	Pkt.	Lb.	10 lbs.
Black Mexican. Grains deep bluish purple of delicious quality; medium-early.....	10c	30c	\$2.25
Country Gentleman. Ears of good size and well filled with deep, white grains of delicious quality. Cobs small.....	10c	40c	3.00
Crosby's Early. An old standard second-early variety, of good medium size and good quality.....	10c	30c	2.00
Davis Co. Excelsior. A very valuable second-early variety. Ears large, cobs small, and grains almost pure white. A heavy yielder. Very sweet.....	10c	35c	2.50
Early Evergreen. Similar to Evergreen, but earlier. Quality best.....	10c	35c	2.50
Ⓢ Stowell's Evergreen. Grown more than any other sort. Ears large, with deep sugary grains; remains fit for use a long time.....	10c	35c	2.50

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 or six inches.

	Pkt.	Oz.	¼ lb.	Lb.
Ⓢ 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.....	5c	40c	\$1.25	\$4.00
Early Purple Vienna. An early variety, with a bright purple bulb. The leaves and stems being green and tinged with purple.....	5c	40c	1.25	4.00

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.

	Pkt.	Oz.	¼ lb.	Lb.
Giant Musselburgh. This is the best variety, having good, thick stems, which are also long, very vigorous, and of a sweet, mild flavor.....	5c	25c	85c	3.00
American Flag. The best leek there is, with long, large stems, which are sweet and white when properly blanched; vigorous grower.....	5c	25c	85c	\$3.00

CUCUMBERS

1 oz., 75 hills; 2-3 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 tearing, every day or at least every other day. Leave none to ripen if you want a full crop.

P.-W.'s Klondike White Spine

P.-W.'s KLONDIKE WHITE SPINE

After several years' experience with this particular variety, we do not hesitate in pronouncing it the best 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 ends, solid, crisp and of excellent flavor. Pkt. 5c; oz. 10c; ¼ lb. 35c; lb. \$1.25.

	Pkt.	Oz.	¼ lb.	Lb.
P.-W.'s Arlington White Spine. Of medium size and good color; excellent under glass.....	5c	10c	30c	\$1.00
Boston Pickling. Of uniform size; dark green, tender and productive.....	5c	10c	25c	90c
⑩ Davis Perfect. Fruit long and slim; color rich, dark glossy green, retaining this color until nearly ripe; flesh tender, crisp and of fine flavor. Very early and a fine forcer.....	10c	15c	40c	1.25
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.....	5c	10c	30c	1.00
Early Frame, or Short Green. A productive variety, plants strong and vigorous, fruits straight but smaller at ends than in middle, bright green color; crisp and tender.....	5c	10c	30c	1.00
Improved Long Green. The leading long-growing sort, and excellent for pickles.....	5c	10c	30c	1.00
⑪ P.-W.'s Klondike White Spine. See above specialty.....	5c	10c	35c	1.25
P.-W.'s Forcing White Spine. A strain of White Spine which has been improved through careful selection with a view to use for forcing in hothouses and frames. When young the fruits are tender and crisp, and when fully grown will measure six to seven inches in length.....	5c	15c	40c	1.25

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 floor where they can dry quickly.

	Pkt.	Oz.
Anise (Pimpinella anisum). Seeds aromatic and carminative.....	5c	20c
Caraway (Carum Carui). Used in flavoring liquors and bread.....	5c	20c
Catnip (Nepeta cataria). Has medicinal qualities.....	5c	70c
Coriander (Coriandrum sativum). Seeds aromatic.....	5c	20c
Dill (Anethum graveolens). Seeds used for flavoring vinegar.....	5c	20c
Horehound (Marrubium vulgare). Has medicinal qualities.....	5c	40c
Lavender (Lavandula vera). True. For oil and distilled water.....	5c	50c
Marjoram (Origanum Majorana). Sweet. Used in seasoning.....	5c	30c
Rosemary (Rosmarinus officinalis). Yields an aromatic oil and water.....	5c	50c
Sage (Salvia officinalis). Common. A culinary herb; also used in medicine.....	5c	20c
Savory (Satureja montana). Winter. Used as a culinary herb.....	5c	40c
Thyme (Thymus vulgaris). Broad-leaved English. Used as a seasoning.....	5c	50c

LETTUCE

1 oz. 3000 plants. 4-5 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 a 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

NEW YORK LETTUCE (OR LOS ANGELES MARKET)

The Leading Summer Curly Head Lettuce Either for Home or Market Garden.

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; ¼lb. 70c; lb. \$2.00.

HEADING OR CABBAGE VARIETIES

	Pkt.	Oz.	¼ lb.	Lb.
Big Boston. Highly recommended for outside; similar to the old Boston Market, but much larger in size.	5c	15c	35c	\$1.25
Deacon. Has very few waste outside leaves, grows very solid, and of a delicious buttery flavor	5c	15c	35c	1.25
® 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.	5c	15c	35c	1.25
May King. A new German variety, fine for forcing and outdoors; heads of medium size; yellowish green in color; very early and a fine variety.	5c	15c	35c	1.25
New York or Los Angeles Market. See Specialty.	5c	20c	70c	2.00
® P.-W.'s Extra Early. Quickest grower of all Head Lettuces. Leaves light brownish tinge, possesses a rich flavor. It is the best smooth leaved head.	5c	15c	35c	1.25

CURLED OR LOOSE LEAVED VARIETIES

Black-Seeded Simpson. One of the best; leaves are large, thin and exceedingly tender.	5c	15c	35c	1.25
Early Curled Simpson. A popular early sort; forming in large, loose heads.	5c	15c	35c	1.25
® Grand Rapids. The most popular variety for greenhouse planting.	5c	15c	35c	1.25
Prizehead. Large, loose-headed sort; leaves tinged with brown; very heavy.	5c	15c	35c	1.25

COS, "CELERY" OR "ROMAINE" VARIETIES

Trianon Cos. The best of the Cos. varieties.	5c	15c	35c	1.25
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MUSKMELONS

One ounce 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 Bordeaux Arsenate of Lead Mixture is always advisable for these crops.

P.-W.'s Delicious Gold Lined Rocky Ford

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

This comes to us directly from the originator at Rocky Ford. The immense success this year 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. (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 flesh is green except a tinge of yellow at center. Pkt. 10c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

GREEN FLESHED VARIETIES

	Pkt.	Oz.	¼ lb.	Lb.
Anne Arundel (Improved Acme). Similar in appearance and habits to the Acme. A little larger and the flesh slightly thicker, heavy yielder, bears shipment well	5c	10c	35c	1.00
Eden Gem. Immensely prolific, twenty to thirty perfect melons to a vine being common. The skin is heavily netted, flesh light green and of excellent quality	5c	15c	50c	1.75
Extra-Early Hackensack. Large, handsome, extra early, of best quality, fruit nearly round, deeply ribbed and very coarsely netted; most delicious	5c	10c	35c	1.00
Honey Dew (Improved Hybrid Cassaba). Unlike the ordinary muskmelon, the outer skin is smooth and hard, nearly white, turning to a lemon tint when fully ripe. Melons are large, weighing 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 a rich honey-like flavor, luscious and juicy, much more so than any variety of musk melon. An excellent keeping melon, and fruits may be laid away for use late in the fall	15c	50c	1.50	5.00
® Rocky Ford. It is of the netted gem type. Oval in shape, 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	5c	15c	40c	1.50
Rocky Ford. Growers' stock seed in 1-lb. sealed bags				1.50

SALMON FLESHED VARIETIES

	Pkt.	Oz.	¼ lb.	Lb.
® Burrell's Gem. (Improved Defender). 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 grain, rich deep yellow; vine is vigorous and very productive. Fruit bears remarkably well	5c	10c	30c	1.00
Stock seed in sealed 1-lb. bags				1.25

MUSHROOMS

Mushrooms may be grown by anyone having a supply of fresh manure and shed or cellar of 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. Frequent importations of superior English Spawn insure freshness and active mycelium. It is sold in bricks weighing about 1¼ lbs., enough to plant a bed about 9 square feet. Cultural direction free with each order.

Weight of brick about 20 ounces. If by parcel post send postage accordingly.

English Mushroom Spawn. This comes in pressed bricks, weighing about twenty ounces. Price: Per brick, 30c;

American-made Pure Culture Mushroom Spawn. This Spawn is made in America from selected Mushrooms grown under cultivation. Such Spawn is fresher than the English, which must be thoroughly dried before its long shipment; the growth of American Spawn is therefore quicker and stronger than the imported. Price: Per brick, 30c; 5 bricks, \$1.25; 10 bricks, \$2.25.

MUSTARD

1 oz. 50 ft. Row

The leaves of the two varieties we list make excellent greens, of sharp, pungent flavor, and are cooked the same as spinach. Sow in drills early in the spring, and at frequent intervals throughout the summer, to procure a constant supply of fresh greens. Mustard is hardy, and easy to grow.

	Pkt.	Oz.	¼ lb.	Lb.
Giant Southern Curled. A true curled leaf, large variety. Very popular	5c	10c	25c	85c
Ford Hook Fancy. Plants have beautiful, dark green leaves, which curl outwardly, like a fine ostrich plume. It is even superior to the best spinach in flavor	5c	10c	25c	85c
When in doubt order varieties marked ®

P.-W.'s Kleckley Sweets Watermelon

WATERMELONS

1 oz. 30 hills. 4 to 5 lbs. per acre.

See directions given under Muskmelons.

P.-W.'s KLECKLEY SWEETS WATERMELON

The Sweetest of All

There is no melon superior in quality to a good 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; ¼ lb. 40c; lb. \$1.50. Sealed 1-lb. bags, \$1.75.

	Pkt.	Oz.	¼ lb.	Lb.
Cuban Queen. Large oval Melons; striped dark and light green; flesh red and of excellent quality; the best late sort.....	5c	10c	30c	\$1.00
Citron. Red seeded. Small round fruits, for preserves only	5c	10c	30c	1.00
Halbert Honey. Ohlong, dark green skin, thin rind, crimson flesh, luscious flavor.....	5c	15c	40c	1.50
Ⓢ Kleckley Sweets. See specialty above.....	5c	15c	40c	1.50
Klob's Gem. A short, thick, very large Melon, dark green, marbled lighter; flesh red; quality fair. As a shipper it has hardly an equal.....	5c	10c	30c	1.00
McIver's Wonder Sugar. One of the sweetest melons grown, medium size, striped, flesh red, stringless and of excellent quality.....	5c	10c	35c	1.25
New National. The outside is pale green, with darker green markings. The flesh is of a brilliant red, and remarkably solid, and entirely stringless.....	5c	10c	35c	1.25
Phinneys Early. Very early, of medium size, stripes light and dark mottled, flesh pink, sweet and delicious.....	5c	10c	30c	1.00
Rocky Ford. Burrels strain, identical with Kleckley's Sweets.....				
Ⓢ Tom Watson. Rind thin but tough, consequently a very good shipper. A dark green in color with flesh a brilliant scarlet. Very large with small seed area. An early variety of delicious flavor	5c	10c	40c	1.50
Extra selected seed in 1-lb. sealed bags.....				1.75
True Dixie. One of the most prolific known, often producing 6 to 8 large oblong shaped dark green with stripes of lighter green melons on a single vine	5c	10c	30c	1.00
Ⓢ Winter Watermelon. 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 a citron—very brittle and deliciously sweet. This melon is round shaped and the skin is a very light green, almost white.....	10c	20c	60c	2.00
When in doubt order Ⓢ varieties.				
Prices on all Seeds in packets and ounces include postage. See cover page for amount to remit for postage on larger quantities.				

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.

	Pkt.	Oz.	¼ lb.	Lb.
Dwarf Green. Prolific, large podded and productive.....	5c	10c	30c	1.00
Ⓢ White Velvet. The pods are not rigid, but are perfectly round, smooth and of an attractive appearance, and of superior flavor and tenderness. Plants comparatively dwarf and of compact branching growth. Pods of extra size, and produced in great abundance	5c	10c	30c	1.00
All varieties listed are good, but if you can't use all, those marked Ⓢ are especially recommended.				

ONIONS

1 oz. 100 ft. 4 to 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 Southport Globe Types

®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 or 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.

From our trials we can highly recommend it for general crop. Pkt. 5c; oz. 35c; ¼ lb. \$1.25; lb. \$4.50.

DARK SKINNED VARIETIES

® Australian Brown. 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. Extra early, sure cropper, and long keeper

Red Wethersfield. Though well flattened, the solid onions are thick through, the outer skin is a deep, rich purplish red, smooth and glossy. Flesh white

YELLOW SKINNED VARIETIES

American Crown Prizetaker. Grows very large, nearly round, with a very thin skin of light straw yellow. Flesh pure white in color, crisp and mild flavor, and especially desirable for slicing ro salad, etc.

P.-W.'s Southport Yellow Globe. One of the finest for keeping. The flesh is snow-white, firm, mild and juicy. The skin is very attractive, light golden yellow. A most popular variety for family use or market. Under favorable conditions, 900 to 1,000 bushels can be raised on an acre

® Yellow Globe Danvers. A very handsome, round or globe-shaped variety, of large size, with thin, yellowish skin, white flesh, fine grained, mild very firm, and the best of keepers. It ripens early

Yellow Flat Danvers. Largely planted. Flesh fine grained; mild

When in doubt order varieties marked ®

Gigantic Gibraltar. An immense light yellow onion; fine grained, crisp, mild flavored and early. They not infrequently measure 18 inches around, and weigh two pounds. 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

Ohio Yellow Globe. See specialty

Pkt. Oz. ¼ lb. Lb.

5c 30c \$1.00 \$3.50

5c 30c 1.00 3.50

Pkt. Oz. ¼ lb. Lb.

5c 40c 1.40 5.00

5c 40c 1.40 5.00

5c 35c 1.25 4.50

5c 35c 1.20 4.25

10c 40c 1.40 5.00

5c 35c 1.25 4.50

ONIONS—Continued

P.-W.'s SOUTHPORT WHITE GLOBE ONION

The best bunching Onion in the List

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. 45c; ¼ lb. \$1.75; lb. \$6.00.

WHITE SKINNED VARIETIES

	Pkt.	Oz.	¼ lb.	Lb.
® Extra Early Barletta. About two weeks earlier than Early White Queen. White color, very mild flavor. From one inch to one and one-half inch in diameter and three-fourths inch in thickness	5c	45c	\$1.75	\$6.00
Extra Early Pearl. One of the earliest white onions of mild flavor and a good keeper. Sometimes grows five to six inches in diameter first year from seed	5c	45c	1.75	6.00
Early White Queen. An extra early, very white skinned variety, of especial value for pickling. If seed is sown out of doors in the spring it will produce bulbs about an inch in diameter	5c	40c	1.50	5.50
Mammoth Silver King. Large, attractive form. Flattened but quite thick through. Average diameter is from five to seven inches, single bulbs often attaining a weight of three pounds. Skin is clear, silvery white. Flesh snow-white, sweet and tender. They grow as well in autumn as in early summer	5c	45c	1.75	6.00
® P.-W.'s Southport White Globe. See specialty above	5c	45c	1.75	6.00
Round Silver Skin (White Portugal). Very early, round skin, which does not turn green upon exposure to sun, as quick as other sorts. Fresh, crisp and tender, and an excellent sort for use in bunching for pickles when fully matured	5c	40c	1.50	5.50

ONION SETS

1 lb. to 50 fet. 250 lbs. per acre.

Bottom Onion Sets produce Onion bulbs much earlier than can be done by showing the seed and allows the planter the early high market prices and permits the sowing of another crop on the land the same year. For green or bunch Onion sets produce a crop in half the time it takes to raise these from seed. Good sets are those of very small size and well ripened. Plant near the surface in drills twelve inches apart and four inches between the sets.

	Lb.	10 lbs.
® Yellow Onion Sets. Grown from Yellow Danvers	25c	\$2.00
White Onion Sets. Grown from White Portugal	30c	2.50
Potato Onion Sets. Early and rapid growth; excellent for pulling green	40c	3.50
Garlic Sets. Esteemed in cookery	35c	2.50
White Multiplier. Very early, mild and sweet	40c	3.50
Prices variable. Write for Quantity Prices.		

"All of the seed that I got from your house was exceptionally good; the onions I raised from the Southport Globe seed, both yellow and white, took first prize at the Cache County Fair.
WILLARD HANCEY, Hyde Park, Utah.

Harvesting Onion Sets at Centerville Seed Farm

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.....	Pkt.	Oz.	¼ lb.	Lb.
Double Curled. A curled variety. Very hardy and easy to grow, deep rich green and by many preferred to the extremely curled varieties.....	5c	15c	45c	\$1.25

PARSNIPS

1 oz. 100 ft. 5-8 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. 50c; lb. \$1.75.

P.-W.'s Chinese Giant Red Pepper

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 plant should be transplanted in rows two feet apart and eighteen inches in the row in good rich ground.

® P.-W.'s 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; ¼ oz. 20c; oz. 65c; ¼ lb. \$2.25.

P.-W.'s Chinese Giant. See specialty above.....	Pkt.	Oz.	¼ lb.
Long Red Cayenne. A late variety. Small, bright, scarlet, cone-shaped, pungent pods, as much used for pickling when green as when ripe.....	10c	65c	\$2.25
Neapolitan. Earlier than other large Peppers. The fruits average 4½ inches in circumference by 4 inches long; they are thick-meated and unusually mild and sweet; flesh and skin bright red when ripe; productive, and continues fruiting throughout the season.....	10c	60c	2.00
Red Chili. Small bright red Peppers, very hot and pungent, and generally used for making Pepper Sauce; very prolific.....	10c	60c	2.00
® 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.....	10c	65c	2.25

PUMPKIN

3-4 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.	Pkt.	Oz.	¼ lb.	Lb.
Cheese. The most popular for pies and table use; large, flat-round; creamy-yellow skin; thick, orange flesh of fine quality; a splendid keeper.....	5c	15c	40c	\$1.25
Common or Connecticut Field. A productive, large, orange-colored, field Pumpkin, usually grown for stock feeding, but it also makes good pies.....	5c	15c	40c	1.25
® King of Mammoth or Jumbo. This strain produces the biggest pumpkins grown, sometimes measuring six feet in circumference and weighing 200 to 250 pounds. Outside color deep orange-yellow, flesh very thick, fine grained, tender, of bright yellow color, and of excellent quality for pies and other uses.....	5c	15c	45c	1.50
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.....	5c	10c	30c	1.00
® Specially recommended.

P.-W.'s Dwarf Gradus or Laxtonian

PEAS

1 lb. 50 ft. of row. 100 lbs. per acre.

Peas will 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. Our seed peas are grown by the most particular growers in America, and are thoroughly rogued and carefully hand picked, and raised only from the finest strains.

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 produce 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. Many people who have tried Dwarf Gradus consider it superior to either the old Gradus or Thomas Laxton and claim it to be the best of all the early dwarf sorts. It is certainly worth a trial. Pkt. 10c; lb. 35c; 10 lbs. \$3.00.

EXTRA EARLY VARIETIES

Pkt. Lb. 10 lbs. 100 lbs.

Alaska. 49 days; 2½ feet. Pods small, but well filled with plump, excellent dark green peas.....	10c	25c	\$2.25	\$20.00
® Gradus or Prosperity (Selected Strain). 49 days; 3½ feet. This is an extra early wrinkled pea, ready for market as soon as the Alaska and requires no staking. Pods are very large and of a bright green color, exceptionally well filled with large sweet peas.....	10c	30c	2.75	25.00
Thos. Laxton. 52 days. Pods large, long and deep green in color; sede wrinkled, sweet and of fine flavor. More productive than Gradus.....	10c	30c	2.75	25.00
® P.-W.'s Dwarf Gradus of Laxtonian. See specialty above	10c	35c	3.00	27.50

EARLY VARIETIES

Pkt. Lb. 10 lbs. 100 lbs.

American Wonder. Vines stout, branching, about nine inches high and covered with well filled pods containing nine to ten exceedingly large, sweet tender peas	10c	25c	2.25	20.00
Nott's Excelsior. An excellent early dwarf pea and possibly one of the most popular of wrinkled varieties for the house garden or market. Vines are larger and more productive than the American Wonder.....	10c	25c	2.25	20.00
® 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 Earlies." The plants are dwarf, growing about 14 inches high, very stout and exceedingly productive, and the quality is all that could be desired. It makes the largest pods of any of the low-growing, wrinkled peas	10c	30c	2.75	25.00
® Premium Gem (or McLean's Little Gem). Similar to American Wonder but a heavier producer, wrinkled seed; height, 18 inches.....	10c	25c	2.25	20.00

MAIN CROP VARIETIES

Pkt. Lb. 10 lbs. 100 lbs.

® Alderman. A valuable variety of recent introduction. The vines are vigorous and average 18 to 20 pods, each containing 7 to 10 large peas of a most delicious flavor.....	10c	30c	2.75	25.00
Bliss Everbearing. 3 feet. A prolific and continuous-bearing pea, giving it especial value for both summer and autumn use.....	10c	30c	2.75	25.00
Dwarf Telephone (Carter's Daisy). 55 days. Pods average 5 inches, containing 7 to 9 peas. Quality fine.....	10c	30c	2.75	25.00
P.-W.'s Dark Podded Telephone. This is an improved strain of the deservedly popular Telephone. The vines grow about four feet in height, and are covered with dark green pods.....	10c	30c	2.75	25.00
Stratagem. Very large pod; peas of first quality. Height 1½ feet. Old stand-by.....	10c	35c	3.00	27.50
Yorkshire Hero. Height 2½ feet. Very productive; fine flavor, long.....	10c	25c	2.25	20.00
P.-W.'s New Defiance. 2½ feet high; large pods, well filled with green tender and sweet peas	10c	35c	3.00	27.50

POTATOES

800-1200 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 a 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.

TREATMENT OF POTATOES FOR ROSETTE (RHIZOCTONIA)

Two ounces of Corrosive Sublimate or Mercuric Bichloride.

Dissolve in one gallon 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.

Red River Early Ohio Potatoes

POTATOES—Early Varieties

Carriage not paid—10 lbs.

Bliss Triumph. Matures a week in advance of the Early Rose. Color light red; shape nearly round; flesh is white and very mealy when cooked. Very profitable on account of its great productiveness and earliness..... 50c

® **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..... 50c

Eureka. A remarkable drought and light resister. The tubers are round, slightly flattened, white and mealy, no core or black specks. Quality unsurpassed..... 50c

® **Early Rose.** True stock and just as good as when it was first introduced; still a standard..... 50c

Irish Cobbler. An extra early variety, maturing about with the Bliss Triumph and Ohio. Color is pure white; good size, with clean, smooth skin..... 50c

MAIN CROP VARIETIES

Carriage not paid—10 lbs.

Peach Blow. Resembles the Peerless in size, shape and habits of growth. It is a pinkish color and matures earlier than the Peerless..... 45c

Peerless. The old standard for main crop; too well known to need description. Our stock is unexcelled..... 45c

® **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..... 45c

Potato market varies. Write for quantity prices. If in doubt order varieties marked ®

Note—Try our dry-land-grown Early Rose.

RADISH

1 oz. 50 ft. 10-12 lbs. per acre

For the best results the soil should be light, well pulverized, rich and mellow to insure quick growing. 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.

P-W's Sparkler Radish

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. 20c; ¼ lb. 60c; lb. \$2.00.

EARLY TURNIP SHAPED VARIETIES

	Pkt.	Oz.	¼ lb.	Lb.
Extra Early Scarlet. Deep scarlet; tender, mild and crisp; quick-growing; tops small.....	5c	15c	45c	\$1.50
Ⓢ P-W's Earliest. Attains good size without getting pithy or hollow; flesh firm, crisp and of the mildest flavor. One week earlier than White Tipped.....	5c	15c	45c	1.50
Ⓢ P-W's Sparkler. See above specialty.....	5c	20c	60c	2.00
Ⓢ P-W's Scarlet Turnip White Tipped. Well known market variety.....	5c	15c	50c	1.75
French Breakfast. A general favorite for forcing or outside use. Oval form, bright scarlet color, tipped with white.....	5c	15c	50c	1.75

LONG VARIETIES

Icicle. White, slender and tapering in shape. It quickly grows to market size, is crisp, brittle, mild and sweet. Quite as good when an inch in diameter as when only half an inch.....	5c	20c	60c	2.00
Ⓢ Long Scarlet, Short Top. Bright carmine; flesh brittle and firm. About six inches long.....	5c	15c	45c	1.50
White Strasburg. Half-long and thick; skin and flesh pure white.....	5c	15c	50c	1.75
White Vienna. Snow-white; flesh crisp, tender and brittle; of rapid growth.....	5c	15c	50c	1.75

WINTER VARIETIES

Chinese Rose. Half-long; flesh pink, solid, of excellent quality.....	5c	15c	50c	1.75
Long Black Spanish. Roots black; the flesh is white and slightly pungent.....	5c	15c	45c	1.50
Ⓢ Round Black Spanish. Globe-shaped; white-fleshed; piquant flavor.....	5c	15c	45c	1.50
Celestial, or White Chinese. Pure white, firm, tender.....	5c	15c	50c	1.75

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, a little later than Linnaeus. This is the variety generally used.....	Pkt.	Oz.	¼ lb.	Lb.
	5c	20c	60c	\$2.00

SALSIFY, OR VEGETABLE OYSTERS

One ounce for 50 feet of drill. 8-10 lbs. per acre

Used the same as Carrots; sometimes made into cakes and fried like oysters, which 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 a 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.	Oz.	¼ lb.	Lb.
	5c	25c	80c	\$3.00

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.	Oz.	¼ lb.	Lb.
	5c	20c	60c	\$2.00

SPINACH

1 oz. 100 ft. 10-12 lb. 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.

P.-W.'s BLOOMSDALE SAVOY SPINACH

The plants are extremely hardy and of good size. The leaves are very thick and blistered. Its hardness 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 and best growers in the Rocky Mountain States. Pkt. 5c; oz 20c; ¼ lb. 60c; lb. \$2.25.

Long Standing. A deep green variety with rather elongated and smooth leaves. Seed round. Stands a long time without running to seed. 5c 20c 60c \$2.25
 P.-W.'s Bloomsdale Savoy. See above specialty. 5c 20c 60c 2.25
 Victoria. This variety is of remarkably fine texture, of the deepest green color, heavily crimped, thick, fleshy leaves, deep red stem. 5c 20c 60c 2.25

Chicago Warty Hubbard

100 ft ½ oz.

SQUASH

2-3 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.

CHICAGO WARTED HUBBARD SQUASH

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 type of Hubbard on account of its warted skin. Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.50.

Early White Bush (Scalloped). An early variety, flat, creamy white scalloped squash, four to six inches in diameter. Of bushy habit and rather dwarf. This variety is the common patty-pan squash. Pkt. 5c 10c 35c \$1.25

Long White Marrow. The skin is a greenish white. Flesh white, soft and of rich flavor. 5c 10c 35c 1.25

Yellow Summer Crookneck. This is a golden yellow variety. Thickly warted. Eighteen inches, brittle and tender. Plants are bushy, very prolific. 5c 10c 35c 1.25

Vegetable Marrow. Skin greenish yellow; flesh white. 5c 10c 35c 1.25

WINTER VARIETIES

Chicago Warty Hubbard. (See specialty above). Pkt. 5c 15c 40c \$1.50

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, flesh being fine grained and sweet. 5c 10c 35c 1.25

Hubbard. Most popular winter sort; excellent keeper; finest quality. 5c 15c 40c 1.50

Mammoth Chili. The flesh is yellow and very thick. The quality is good and nutritious. It usually grows to enormous weight. 5c 20c 60c 2.00

Utah Giant Field. The jumbo of all squashes, often weighing 150 pounds. Splendid for stock feeding. 5c 10c 25c 85c

TOMATO

1 oz. 300 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. Platin 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 frost and ripened under glass.

"John Baer" Tomato

"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 last year show that it is not only remarkably early, but it is also an enormous cropper 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. 15c; oz. 50c; ¼ lb. \$1.75; lb. \$6.00.

EARLY VARIETIES

	Pkt.	Oz.	¼ lb.	Lb.
Acme. An old, well-known, early variety, medium in size, smooth, solid and prolific; color, purplish-pink	5c	35c	\$1.20	4.00
Beauty. Early, prolific; medium sized, smooth and solid; color, purplish-red; fruits until late in the season; the best of the "purple" varieties.....	5c	35c	1.20	4.00
Bonny Best. An early and productive variety. Fruits are round, somewhat flattened at stem end, and are produced in abundance. The color is scarlet	5c	35c	1.20	4.00
Chalk's Early Jewel. One of the best early varieties; about a week later than Earliana. The fruit of Jewel, however, averages larger, is uniform, smooth	5c	35c	1.20	4.00
Early Detroit. Fruit exceptionally uniform in size, nearly globe-shaped, heavy, smooth and well adapted for shipping. Color purplish-pink.....	5c	35c	1.20	4.00
® P.-W.'s Extra Early Earliana. 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. This strain of Earliana we are offering has been specially selected for earliness.....	5c	35c	1.25	4.50

MAIN CROP VARIETIES

	Pkt.	Oz.	¼ lb.	Lb.
Dwarf Champion. Good main crop medium size, early, pink	5c	35c	\$1.25	\$4.50
Greater Baltimore. Produces large bright red tomatoes in clusters at every second joint; the joints are short and sturdy. The vines are vigorous, compact and healthy growers; a heavy cropper of large, smooth, well formed tomatoes; deep from stem to blossom end. Very firm and meaty. It ripens evenly to the stem and is free from ridges, cracks and blight. Recommended for canning or the home garden.....	5c	35c	1.20	4.00
® Landreth's Red Rock. This grand new tomato is entirely free from cracks, always smooth as an apple, with a very small depression at the stem end. It always ripens all over a uniform bright red, brilliant color, extending throughout the entire interior of the fruit, making it most desirable for canner's use.....	5c	30c	1.00	3.75
Livingstone's Hummer. Fine globe shaped, like Livingstone's Globe. Bright scarlet in color; of good size. Quite early and fine quality.....	5c	30c	1.00	3.75
® "John Baer." See specialty above.				
P.-W.'s Imperial. 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.....	5c	30c	1.00	3.75
Ponderosa. Rich purple color; very large size.....	5c	35c	1.25	4.50
Red Cherry. Bears clusters of bright red fruits, the size of a cherry; prolific.....	5c	35c	1.25	4.50
Red Pear-shaped. Bright red fruits, 2 inches in diameter; pear-shaped neck.....	5c	35c	1.25	4.50
Yellow Plum. Oval-shaped, yellow fruits, in inches in diameter	5c	35c	1.25	4.50
If you can't use all, the ® varieties never disappoint.				

New Stone. 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.\$1.20; lb. \$4.00.

Purple Top Globe Turnip

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

The best flavored and largest yielder 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. 20c; ¼ lb. 60c; lb. \$2.00.

⑩ Extra Early 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.

Extra Early White Milan. Similar to the above, but pure white. A very good summer turnip, making wonderfully rapid growth. Fine grained and tender.

Early Purple Top Strap Leaf. A popular variety of quick growth; round, 4 to 5 inches in diameter; flesh white and of excellent quality.

⑩ Purple Top White Globe. See above specialty.

White Egg. An oval or egg-shaped variety, with smooth, thin, white skin and snowy-white flesh; firm, mild and sweet.

Pkt. Oz. ¼ lb. Lb.

5c 25c 80c \$3.00

5c 25c 80c 3.00

5c 20c 60c 2.00

5c 20c 60c 2.00

5c 20c 60c 2.00

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.

⑩ 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. 20c; ¼ lb. 70c; lb. \$2.50.

VEGETABLE PLANTS AND ROOTS

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

If by Mail, add 10c per dozen, or 30c per 100 for Postage.

	Per doz.	100	1000
Cabbage—Early varieties; transplanted plants; ready about April 15	25c	\$1.25	\$10.00
Cabbage—Late varieties, Danish Ball Head, Round Head, Flat Dutch, Red Rock, etc.; ready about May 15.....	20c	75c	5.00
Celery—Early, Golden Self-Blanching; ready May 15.....	25c	1.00	8.00
Celery—Late, Giant Pascal, Winter Queen, P.-W.'s Golden Crisp; ready June 1.....	20c	1.00	8.00
Cauliflower—Snowball, P.-W.'s Danish Giant, Erfurt; ready May 1.....	25c	1.50	10.00
Egg Plant—N. Y. Purple, Black Beauty; ready June 1.....	30c	2.50	20.00
Pepper—Ruby King, etc.; ready May, 1917.....	25c	2.00	17.50
Tomato—Earliana and other standards, transplanted plants; ready May 1.....	30c	1.50	12.00
Tomato—Later varieties, New Stone, etc.....	25c	1.50	12.00

The following Roots ready about March 1st.

Asparagus—1 year old roots of varieties on Page 10.....	20c	1.00	6.00
If by mail postage extra: 10c per doz.; 30c per 100.			
Asparagus—2 year old Roots, same varieties.....	30c	2.00	12.00
If by mail Postage extra: 20c per doz.; 50c per 100.			
Horse-Radish Roots. (By mail 10c per doz. extra).....	30c	2.00	17.50
Rhubarb—Victoria, small strong roots: Each 10c; \$1.00 per doz.; \$6.50 per 100. (40c per doz. Postage if by mail).			

GRASS SEEDS

All prices F. O. B. Salt Lake City. Prices variable, write for quantity prices. Seamless bags extra at cost.

Bermuda Grass (*Cynodon 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 a durable lawn and is also used to hold embankments. This grass is much used for lawns. The seed is very slow to germinate and requires heat and moisture. Sow 10 lbs. per acre.

Per lb. 75c; 100 lbs. at market price.

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.

30c lb.;100 lbs. at market price.

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 lbs. per acre.

20c per lb.; 100 lbs. at market price.

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 lbs. per acre Whole seed, 30c per lb.; 100 lbs. at market price.

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 is 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 lbs. per acre. 35c per lb.; 100 lbs. at market price.

Kentucky Blue Grass. This makes the best, sweetest and most nutritious pasture for all kinds of stock. This grass is the first to start 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 lbs. per acre. 30c per lb.; 100 lbs at market price.

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 lbs. to the acre, if sown by itself. 30c per lb.; 100 lbs. at market price.

English or 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. 20c per lb.; 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. 20c per lb.; 100 lbs. at market price.

Tall Meadow Oat Grass (*Avena Elatior*). 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. 35c per lb.; 100 lbs. at market price.

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 lbs. to the acre, or with clover, 10 lbs. timothy and 6lbs. clover. 20c per lb.; 100 lbs. at market price.

Consistent with our policy to sell only the best, our Grass, Clover and Farm Seeds are most critically grown, harvested and re-cleaned to insure the highest germination and purity which are prerequisite always to the P.-W. Quality.

CLOVER SEEDS

Prices subject to market changes. Prices here quoted do not include delivery. Seamless bags extra at cost.

Alfalfa or Lucerne (*Medicago Sativa*). For our western country, possibly, this variety is the most valuable forage plant. It is so well known and widely cultivated that a description hardly seems necessary. It thrives best on a sandy loam, the richer the better. 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. The seed may be sown early in the spring, as soon as the frost is out of the ground, in order to catch the spring rains, as it needs moisture to germinate. In localities where irrigation is used, it can be sown successfully at any time during the summer months. Twelve to fifteen pounds is sufficient for an acre. Lb. 25c; 100 lbs. at market price.

Alfalfa Turkestan. Produces a crop where the American varieties perish. This variety is far superior to the American product in that it withstands drought and cold weather where the other will perish. In addition to this it yields a larger amount of foliage to the plant, of a finer texture, and without any rough stems, so that stock can eat every particle. Our stock has come from abroad and is guaranteed dodder free. Purity test 99 per cent; germination test better than 95 per cent. Lb. 30c; 100 lbs. at market price.

Bokhara or Sweet Clover (*Melilotus Alba*). Tall shrub plant. Grows from four to six feet high, with branches whose extremities bear abundant small white, extremely fragrant flowers. Sown in the spring in drills sixteen inches apart. Affords an abundance of excellent food for bees throughout the season. Especially adapted for the redemption of alkaline soils. Sow 10 lbs. per acre. Lb. 30c; 100 lbs. at market price.

Alfalfa or Lucerne

Medium Red Clover

Alsike Clover (*Swedish Hybrid*) is recommended both for sowing with Timothy and also with the Red and Mammoth Clovers, as well as for a 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 hardier, 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 mixture, five or six pounds per acre is sufficient. Lb. 40c; 100 lbs. at market price.

White Dutch Clover (*Trifolium repens*). See Lawn Seed. Lb. 65c; 100 lbs. at market price.

Medium Red Clover (*Trifolium pratense*). It is sometimes called June Clover, and is a dependable all round variety for farmers and stockmen. It makes two crops each year. 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. 40c; 100 lbs. at market price.

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

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 hardly be 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 Topped Orchard Grass, Tall Meadow Fescue, Red Clover, Lucerne and White Clover. Sow twenty-five pounds per acre. Lb. 30c; 100 lbs. \$20.00.

P.-W.'s Mixture No. 2. For light sandy soils. Consisting chiefly of Kentucky Blue Grass, Bromus Inermis, White Clover. Sow thirty pounds per acre. Lb. 30c; 100 lbs. \$25.00.

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.

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 twenty-five pounds per acre. Lb. 30c; 100 lbs. \$25.00.

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 forty pounds per acre. Lb. 30c; 100 lbs. \$25.00.

FARM SEEDS

Prices do not include delivery. 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. 50c; 100 lbs. at market price.

Naked, Beardless 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. 55c; 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. 40c; 100 lbs. at market price.

EMMER OR SPELTZ

Emmer or Speltz. 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 the 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. Lb. 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. Lb. 15c; 100 lbs. at market price.

KAFFIR CORN

Unsurpassed for dry alkali land, on which no better fodder and grain crop grows. Its great root system en-

ables 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. Lb. 10c; 100 lbs. at market price.

MILLET

Common. Very early; abundant foliage. Lb. 10c; 100 lbs. at market price.

German. A valuable fodder plant. Makes excellent hay. Sow 25 pounds to the acre. Lb. 10c; 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. Lb. 10c; 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. 45c; 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 80 to 90 days. It is the very best variety to grow in the mountains or in short season districts. 10 lbs. 40c; 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 greed 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. Lb. 20c; 100 lbs. at market price.

RYE

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

Spring Rye. 10 lbs. 60c; 100 lbs. at market price.

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.

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

FARM SEEDS—Continued

Prices are subject to Market Changes. Write for quantity prices.

SALT BUSH

Australian (*Atriplex semi-baccatum*). Will grow on alkaline soils. 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 the crown of the plants. Oz. 15c; lb. \$1.00.

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 of 10 pounds per acre in drills three and a half to four feet apart. Lb. 15c; 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 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 bushel per acre. Price, 10 lbs. 60c; 100 lbs. at market price.

SUDAN GRASS

The new Forage Plant that will solve your hay problems

The U. S. Department of Agriculture introduced this new forage plant into the United States in 1909, the seed being brought from Soudan, Egypt. It was there known as "Garawi" Grass but has been named "Sudan" Grass in this country.

Description

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 work stock. The food value is second only to alfalfa.

When and How to Plant and Harvest

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, it is recommended that the crop be planted in cultivated rows, thirty-six inches apart, using about two pounds of seed per acre. This will bring good results in sections having a rainfall of from fifteen to twenty inches per annum. With double this precipitation, or where irrigated, plant in rows eighteen inches apart, using from 4 to 6 pounds of seed per acre. Any common planter may be used for this planting, regulated to drop a few seed to the hill and the hills not less than eighteen inches apart.

Broadcast seeding for a hay crop, using wheat, alfalfa or similar seeder, requires from twelve to twenty pounds of seed per acre. The cuttings after the first will produce a better quality of hay with the minimum amount of seed used for the reason that the plants fill have more room to stool and throw out stems or shoots.

A rather firm seed bed is best. The ground should be plowed and harrowed down well before planting.

A seed crop should be cut with a row or grain binder and threshed in the same way as grain, while the hay crop is handled in a manner similar to that of any other such crop.

Production

The yield of seed varies from 500 to 1,000 pounds per acre. When cut for hay it yields an immense tonnage of excellent feeding quality. Price, lb. 35c; 100 lbs. at market price.

SOJA BEANS

This produces enormous crops. It grows about 4 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, 10c per pound; 100 pounds at market price.

WINTER WHEAT

Standard Varieties. Turkey Red, Gold Coin, Koford, etc. Sow 30 to 50 pounds per acre on dry land. 10 pounds, 50c; 100 pounds at market price.

SPRING WHEAT

All Standard Varieties. Blue Stem, Dicklow, Club, Sonora, etc. Sow 60 to 80 pounds per acre on irrigated land; 40 to 45 on dry land. 10 pounds 50c; 100 pounds at market price.

Sudan Grass

CORN, Field Fodder and Ensilage

For grain, sow in hills, 3 feet apart, 8 to 10 pounds per acre. For fodder or ensilage, sow in drills, 3 feet apart, 60 pounds per acre, or if sown broadcast, 120 pounds per acre.

There is perhaps no crop of more value to the dairy farmer during the hot summer months when the pastures are dry than a nice green field of fodder corn. Though the varieties of field corn we list can be matured and are profitable as a grain crop, it is our opinion the greater value is secured in most sections of the Rocky Mountain states by feeding the fodder green, or using for ensilage.

Silo and Dairy Barn of S. J. Parrish, Centerville, Utah.

A Field of P.-W.'s Improved Leaming. The Great Silo Corn for the Western States.

P.-W.'s IMPROVED LEAMING CORN
The Leading Fodder and Ensilage Corn of the West
Once Sown Always Grown

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 and 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 15c per lb.

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 stalk.

Iowa Silver Mine. The ears are very large, growing from 10 to 12 inches in length, and are quite uniform in size and sbape, containing 16 to 20 rows of deep kernels, on comparatively small cob. Stalks grow to a height of about eight feet on good soil, and ears are set about three and one-half to four feet from ground.

Pride of the North. Next to P.-W.'s Improved Leaming this by many planters is considered the most valuable corn for the Silo. While it has smaller ears than the later kinds, yet it is valuable to grow, as it matures much earlier. Planted as late as July 4th, it has been known to be fully matured by October 1st.

Yellow Dent. This is an early Dutch variety, ripening about the same time as the flint sorts. It can be grown in almost any locality. The stocks are large, with broad leaves. Ears eight to ten inches in length; 16-rowed; golden yellow, making a good quality for meal.

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; it will produce very large crops. Grows 12 feet high; has broad foliage and tender stalks. Will keep up the flow of milk during hot weather when the grass is burnt up.

Prices on all Field Corn, 15c per lb. Write for prices on quantities.
If by Parcel Post see Page 1 for amount to remit extra for Postage.
Prices on Seed Field Corn will likely be fixed by the Government; we therefore cannot name prices at this time.

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.

Field Peas have forged to the front rank on account of exceptional utility. San Luis Valley in Colorado is now wintering and fattening sheep, hogs and cattle in greater numbers and at less cost accordingly than anywhere else in the United States and this is done simply with Field Peas. What has been accomplished there can be duplicated anywhere in the Rocky Mountain States.

Dairy Farmers especially should read the article under the caption "Soiling Crops" written by Prof. J. C. Hoggenson of the Utah Agricultural College for the Utah Farmer, May 10, 1913, No. 41, Vol. IX. The value of Field Peas, Fodder Corn, Soy Beans and Vetch is there clearly shown by an actual experiment on a 6-acre plat near Salt Lake City, the average net value per acre of the crop after taking out the most of production was \$124.00, this result was accomplished on ground where weevil had destroyed the Alfalfa.

FIELD PEAS ADD TO THE SOIL

And are extremely valuable as a Manurial or Cover Crop for market gardeners, orchardists and farmers for this purpose alone. In this connection an added value is given by treating the seed with Westobac. See Fertilizers, page 93.

"Peas could be made to bring more nitrogen to the soils of this country every year than is now purchased annually by the farmers at a cost of million of dollars."—Yearbook of the U. S. Department of Agriculture.

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, giving full season for matured crop.

Quantity to Sow. When early sowing is made, 30 to 40 pounds of seed per acre makes a crop that covers the ground and produces good tonnage. If late sowing is made, 60 to 80 pounds per acre is advisable, as the crop does not get to matured 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 the 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.

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. 10c; 10 lbs. 85c;

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 at 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. 10c; 10 lbs. 75c.

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

VETCHES

Plant alone or preferably with some Cereal such as Rye, Wheat or Oats for a support. Valuable for both soiling and as cover crop. Sow 60 to 75 lbs. per acre. Additional value may be secured by treating seed with Westobac. See page 93.

Sandvetch, Hairy or Winter Vetch (*Vicia villosa*). A forage plant from Europe, highly esteemed there. The Sandvetch prospers in the most barren soils. Six tons per acre of green forage have been harvested in one cut in poor silicious soils, with second cut for seed or for plowing under. Sow end of August, alone or with a cereal, rye preferred, as this Vetch reaches a height of three and a half to five feet, and must have a support. If good growth before winter it may be cut, and again by March 15, or plowed under, and the ground used for the usual spring crop. Relished by all farm stock. Lb. 30c; 100 lbs. at market price.

Spring Vetch or Tares (*Vicia sativa*). Similar in growth to Sandvetch, though for spring sowing only. Lb. 25c; 100 lbs. at market price.

DAIRY FARMERS WILL FIND
SOMETHING OF PROFIT
ON PAGES 93-94-95

Make Home Surroundings Beautiful by Planting P.-W.'s Velvet Green Lawn Mixture.

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 foul grass, which most soils produce, can be kept down and destroyed by repeated mowing.

P.-W.'s VELVET GREEN LAWN MIXTURE

The best lawn seed experience can suggest or that money can buy. Produces a beautiful permanent lawn in four to six weeks.

The most important thing to consider in selecting seeds for lawn grass, is to obtain a 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 luxuriant turf all over the lawn.

With these facts in mind our P.-W.'s Velvet Green Lawn Grass 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 fould seed. Sow at rate of one pound to 200 square feet. Lb. 40c; 3 lbs. \$1.10; 10 lbs. \$3.20. If by mail see page 7 for Postage.

Extra Fancy Kentucky Blue Grass. Our stock is extra fancy reeleaned heavy seed weighing 26 lbs. per bushel. The purest and cleanest obtainable anywhere. A perfect Lawn Grass. Price 30c lb.; 10 lbs. \$2.75.

White Clover. First-class reeleaned pure seed. Lb. 65c; 10 lbs. \$6.00.

See Page 92 for WIZARD the Great Lawn Fertilizer

FLOWER SEEDS

Choice New and Standard Varieties, Specially Adapted to the Western Mountain States

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.

HOW TO PLANT SEEDS INDOORS

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 to 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.

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 where 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 so much easier when started indoors. The extra trouble is well repaid by their increased bloom period.

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 the 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, transferring them to their permanent quarters the following spring. Our aim is to secure the very best strains obtainable, both of home and foreign growth, adaptable to our intermountain region. And we have spared neither pains nor expense with this object in view.

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

EDGING WALKS, ETC.

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

FOLIAGE

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

CUTTING

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

PLANTS SUITABLE FOR POTS THAT MAY BE GROWN FROM SEEDS

Ageratum	Heliotrope
Antirrhinum	Mignonette
(Dwarf)	Myosotis
Asters (Dwarf)	Nasturtium
Begonias	(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	Verbena
Coreopsis	Vinca
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, VER- ANDA, BOXES, ETC.

Alyssum	Nasturtium
Lobelia	Smilax
Petunia

An unsightly front or back yard is soon transformed into a "Garden Beautiful," with but nominal expense, in a judicious planting and culture of Flower Seeds.

P.-W.'S COLLECTION OF
ANNUAL FLOWER SEEDS
 FOR GARDENS, BEDS, BORDERS, ETC.

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

Ageratum, compact bushes, 8-in. high, blue flowers.
 Alyssum, Little Gem, an improved white Sweet Alyssum.
 Aster, Peony-Perfection, Mixed Colors.
 Calliopsis, Golden Wave, large flowers, freely produced.
 Candytuft, Hyacinth-like spikes of white flowers.
 Colisia, brilliantly showy.
 Cosmos, Giant-Flowering, Mixed, fall-flowering, fine.
 Dianthus, Double Pink, colors, edged and marbled.
 Esch-schooltzia, 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 Tom Thumb, various colors.
 Pansies, Finest Mixed, large flowers, beautiful colors.
 Petunia, Large-Flowering, Single, Mixed, blotched striped.
 Phlox Drummondii, Large Flowering, Mixed, improved.
 Poppy, Giant Double, Brilliant Mixture, immense flowers.
 Portulaca, Double, Mixed, showy for edgings or low beds.
 Salvia, Scarlet Sage, vivid scarlet.
 Scabiosa, Double, Mixed Colors, large-flowering.
 Stocks, Large-Flowering Dwarf, Double, 10 Weeks, Mixed.
 Sweet Peas, Dwarf Cupid.
 Verbena, Mammoth, Mixed, large flowers.
 Zinnia, Large, Double, Mixed Colors, immense flowers.

P.-W.'S COLLECTION OF SEEDS OF
HARDY CLIMBERS

(For permanent positions)

1 Pkt. Each of Kinds Enumerated Below 25c

Ampelopsis Veitchii, Boston Ivy, clings to walls, etc. 30 feet.
 Aristolochia Sipho, Dutchman's Pipe Vine, Luxuriant, 30 feet.
 Bignonia Grandiflora, Trumpet Creeper. 40 feet.
 Clematis Paniculata, mass of white star-like flowers. 30 feet.
 Kudzu Vine. Grows rapidly, pea shaped, purple flowers, 40 to 50 feet.
 Lathyrus Latifolius, Mixed Everlasting Pea, Sweet Pea-like flowers, 6 to 8 feet.

As a special incentive for Home Owners to further the "Home and City Beautiful" movements which have been launched by the Commercial Clubs and other Public Spirited Institutions of the various towns throughout the west, we offer these Flower Seed Collections—collated for purposes indicated by the respective titles. These are composed of only tried and choice kinds carefully selected to furnish varied, profuse and continuous display of flowers throughout the season. As you know, many of the most beautiful gardens are raised from seed, and considering the gorgeous effect at such a low cost, certainly there is no easier way to beautify the home surroundings than by a liberal use of Flower Seeds.

P.-W.'S COLLECTION OF
HARDY PERENNIAL FLOWER SEEDS
 FOR GARDENS, BORDERS AND GROUPS

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

Achillea Ptarmica, fl. pl., double white flowers, profuse.
 Alyssum Saxatile Compacta, spring-blooming.
 Aquilegia or Columbine, Hybrids, beautiful new colors.
 Asters, Hardy, Improved Michaelmas Daisies.
 Canterbury Bells, the "Cup and Saucer" type.
 Candytuft Gibraltica, rose and white, bardy.
 Coreopsis Lanceolata, Harvest Moon, golden-yellow.
 Delphinium, Large Single Hybrids, Mixed Colors.
 Dianthus Plumarius, Double Mixed, Grass Pinks.
 Digitalis Gloxinoides, Mixed, Foxglove, various colors.
 Gaillardia Grandiflora, Mixed, red, yellow, etc.
 Hollyhock, Double, Mixed Colors, beautiful colors.
 Phlox, Hardy Hybrids, Mixed, heads of large flowers.
 Poppy, Hardy Oriental Hybrids, Mixed, immense flowers.
 Pyrethrum, Large-Flowering Hybrids, Mixed, single Daisy-like flowers.
 Scabiosa Caucasica, saucer-shaped flower of lovely light blue.
 Sweet William, Large-Flowering, Single, Mixed, rich colors.
 Wall-Flower, Double, Mixed Colors, fragrant flowers.

P.-W.'S COLLECTION OF SEEDS OF
CLIMBING ANNUALS

1 Pkt. Each of Kinds Enumerated Below 50c
 Mailed Free

Balloon Vine, white flowers, 10 feet.
 Canary-Bird Vine, yellow butterfly-like flowers, 15 feet.
 Coboea Scandens, beautiful climber, rich blue flowers, 20 feet.
 Cypress Vine, Mixed, feathery foliage, star-shaped flowers, 15 feet.
 Dolichos, Wistaria-like clusters of crimson flowers, 10 feet.
 Humulus, Variegated, foliage striped silver and green, 20 feet.
 Moon Flower Vine, with immense white flowers, 50 to 75 feet.
 Morning Glories, Imp. Jap., Mixed, magnificent colors, 30 feet.
 Nasturtium, Climbing, Mixed Colors, new colors, 10 feet.
 Sweet Peas, Grandiflora, Mixed, finest strain; no dull colors.

*Annuals. †Biennials. ‡Greenhouse Plants. §Perennials. ||Stove Plants. §Climbing Plants.

Ageratum

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. 5c; ¼ oz. 15c.

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. 25c.

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. 10c.

Acroclium.* "Everlasting," growing about 15 inches high, bearing lovely white or rose-pink flowers, which, when set 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. 15c.

Single Mixed. Pkt. 5c; ¼ oz. 15c.

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. 20c.

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 Coeruleum; 18-in.; Blue... Pkt. 5c; ¼ oz. 25c.

Albun White. Pkt. 5c; ¼ oz. 25c.

Mixed. Pkt. 5c; ¼ oz. 20c.

ANTIRRHINUM (Snapdragon)*

Snapdragons are now receiving the attention they deserve. They are undoubtedly one of the best cut flowers which can readily be grown from seed, while for beds or borders they are a constant source of pleasure, being in flower all the time. They succeed best in a rather light soil.

Queen of the North. Grows one foot in height, and densely covered with large white flowers. A gem for beds and borders and valuable for pot culture. Pkt. 10c; ¼ oz. 25c.

Half-Dwarf Mixed. Large variety of colors; best for bedding, growing about 18 inches high. Pkt. 5c; ¼ oz. 20c.

Tall Mixed. Extra fine selection; best for cutting. Pkt. 5c; ¼ oz. 20c.

Little Gem Alyssum

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.

ALYSSUM (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. 40c.; oz. 75c.

Sweet Alyssum (A. Maritimum).* 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; ¼ 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. 20c.

Caudatus (Love Lies Bleeding). Pkt. 5c; ¼ oz. 10c.

Cruentus (Prince Feather). Pkt. 5c; ¼ oz. 10c.

AMPELOPSIS (Veitchi)‡§

The well-known Boston or Japanese Ivy. See description on plant pages. Pkt. 5c; ½ oz. 15c.

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. 20c.

Single Varieties. Mixed. Pkt. 5c; ¼ oz. 15c.

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." 30 seeds 10c.

BALLOON VINE*§

Ten feet. Thrives in light soil. One of the prettiest climbers. Remarkable for its inflated membranous capsules containing the seed. It is sometimes called Love-in-a-Puff. Flowers white. Pkt. 5c; 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; ¼ oz. 50c.

Ostrich Feather Aster

P.-W.'s Giant Branching Aster

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.

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.

White, pkt. 10c; $\frac{1}{4}$ oz. 30c.

Pink, pkt. 10c; $\frac{1}{4}$ oz. 30c.

Ostrich Feather. This magnificent aster may be briefly described as being the finest of the Comet type yet introduced, are of immense size; made up of long, loosely formed petals, equaling the best Japanese chrysanthemums. Blooms in August. When used for cutting, the flowers should be picked when about half expanded and allowed to develop in water in a cool room.

White, pkt. 10c; $\frac{1}{4}$ oz. 30c.

Pink, pkt. 10c; $\frac{1}{4}$ oz. 30c.

Crimson, pkt. 10c; $\frac{1}{4}$ oz. 30c.

Light Blue, pkt. 10c; $\frac{1}{4}$ oz. 30c.

All colors mixed, pkt. 10c; $\frac{1}{4}$ oz. 20c.

Paeony-Flowered. A mid-season variety which in vigor of growth, habit, size of 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.

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; $\frac{1}{4}$ oz. 25c.

BEGONIA (Tuberous Rooted)||

Eight to twelve inches. The newer forms of Begonias are among the most brilliantly beautiful of flowering plants. They can be grown from seed, which 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.

Single, Mixed. Pkt. 25c.

Double, Mixed. Pkt. 25c.

P.-W.'s Giant Branching Asters. 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, pkt. 10c; $\frac{1}{4}$ oz. 25c.

Rose Pink, pkt. 10c; $\frac{1}{4}$ oz. 25c.

Crimson, pkt. 10c; $\frac{1}{4}$ oz. 25c.

Lavender, pkt. 10c; $\frac{1}{4}$ oz. 25c.

Purple, 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, pkt. 10c; $\frac{1}{4}$ oz. 50c.

Mixed, pkt. 10c; $\frac{1}{4}$ oz. 40c.

Dwarf Asters. Mixed, all classes and colors. Pkt. 10c; $\frac{1}{4}$ oz. 20c.

Asters, Tall Mixture. All classes and colors. Pkt. 5c; $\frac{1}{4}$ oz. 15c.

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. 10c.

CALIOPHIS*

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; $\frac{1}{4}$ oz. 10c.

All Sorts and Colors Mixed. Pkt. 5c; $\frac{1}{2}$ 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.

All Colors Mixed. Pkt. 5c; $\frac{1}{4}$ oz. 10c.

California Poppy. See Esch-scholtzia.

*Annuals. †Biennials. ‡Greenhouse Plants. §Perennials. ||Stove Plants. §Climbing Plants.

Canterbury Bells

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; $\frac{1}{2}$ oz. 10c.

Double Mixed. Pkt. 5c; 1-16 oz. 10c.

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; $\frac{1}{2}$ oz. 15c.

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.

Queen of Italy. This is probably the most beautiful of all. The plants form dwarf, compact bushes, which are covered with very large pink blossoms. Pkt. 5c; $\frac{1}{2}$ oz. 25c.

Giant Hyacinth-Flowered (White). One foot. The flower heads are of immense size. Pkt. 5c; $\frac{1}{2}$ oz. 25c; oz. 40c.

All Colors and Types Mixed. Pkt. 5c; $\frac{1}{2}$ oz. 10c; oz. 15c; $\frac{1}{4}$ lb. 35c; lb. \$1.00.

Gibraltarica.‡ Lilac shading off to white. Pkt. 10c.

Sempervirens.‡ Pure white. Pkt. 10c.

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; $\frac{1}{2}$ oz. 20c.

CASTOR BEAN (Ricinus)*

Tall, majestic plants for lawns, with leaves of glossy green, brown, or bronzed metallic hue and long spikes of 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. 15c.

Mixed Many Sorts. Pkt. 5c; oz. 10c.

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.

Marguerite Carnations

CARNATION* (Continued)

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; $\frac{1}{4}$ oz. 50c.

CELOSIA

Cristata.* Coxcomb 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; $\frac{1}{2}$ oz. 20c.

Plumosa.* (Feathered Coxcomb). Make fine plants for large beds or groups, and the plumes or flowers can be cut and dried for winter bouquets.

Mixed, feathered varieties in all colors, pkt. 5c; $\frac{1}{4}$ oz. 20c.

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; $\frac{1}{2}$ oz. 15c.

Double Mixed. Pkt. 5c; $\frac{1}{2}$ oz. 20c.

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; $\frac{1}{4}$ oz. 30c.

Gymnocarpa (Dusty Miller).‡¶ Ten inches. Foliage finely cut of silvery gray color. Used for bedding. Pkt. 5c; $\frac{1}{4}$ oz. 30c.

Candidissima.‡¶ One foot. Thick, silvery-white leaves. Used for bedding. Pkt. 10c.

CLEMATIS (Large Flowering Mixed)‡§

Beautiful climber with lovely flowers, blue, white and purple, etc. Hardy, can remain in permanent situation. Pkt. 10c; $\frac{1}{4}$ oz. 50c.

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 full grown. It is a very prolific bloomer and vigorous in vines and flowers. It is very free from insect pests. Pkt. 5c; $\frac{1}{4}$ oz. 20c.

*Annuals. †Biennials. ‡Greenhouse Plants. §Pcennial. ¶Stove Plants. §Climbing Plants.

CHRYSANTHEMUMS—Annual Varieties*

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

Inodorum Plenissimum (Double White). Makes a bushy plant about two feet high, with fine feathery foliage and pure white, intensely double flowers, which are produced from midsummer till frost; splendid for cutting. Pkt. 10c; ¼ oz. 40c.

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

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

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.

PERENNIAL VARIETIES‡

Shasta Daisies, in finest Mixtures. All different types and shades of white. Pkt. 10c; ¼ oz. 40c.

Maximum or Ox-Eyed Daisy. Pure white. Pkt. 5c; ¼ oz. 15c.

Uliginosum (Pyrethrum). 3 to 4 feet. From July to September it is literally covered by a multitude of daisy-like white flowers. Pkt. 10c; ¼ oz. 30c.

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*

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, each with a bright yellow center.

Giant Flowered. Mixed. Pkt. 5c; ¼ oz. 20c.

Early Flowering Hybrids. Mixed. Pkt. 5c; ¼ oz. 20c.

COWSLIP (Primula Veris)‡

Ten inches. Mixed. A beautiful hardy spring-flowering perennial; flowers of different colors, such as yellow, brown, edged yellow, etc. Very fragrant. Pkt. 10c; ¼ oz. 75c.

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 10c.

Giant Flowered. Mixed. 20 Seeds 25c; 10 seeds 15c.

CYPRESS VINE (Ipomoea Quamoclit)*§

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. 15c.

Mammoth Double Daisy

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. 40c.

Double Cactus Flowered. Mixed. With twisted and curled petals. Pkt. 15c; ¼ oz. 40c.

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. **Extra Large Finest Double Mixed.** Pkt. 10c; ¼ oz. 50c.

Shasta Daisy.‡ One of Luther Burbank's hybrids, the result of a cross between the common field daisy and an European sort. It is a hardy perennial, bearing flowers averaging four inches in diameter, on long, stiff stems. It blooms freely for several months, and the flowers remain fresh for two weeks or more after cutting. The petals or rays are pure white. **Finest Mixed.** 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 half-shady places.

Gloxineiflora Mixed. All colors. Pkt. 5c; ¼ oz. 25c.

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. 15c; 2 oz. 25c; ¼ lb. 40c.

*Annuals. †Biennials. ‡Greenhouse Plants. ‡Perennials. ¶Stove Plants. §Climbing Plants.

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.

Chinensis Fl. Pl. (China or Indian Pink. Blooms in clusters, flowers very double and in a large range of bright colors. Pkt. 5c; ¼ oz. 15c.

Laciniatus 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. 30c.

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. 15c.

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. 15c.

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. 10c.

Flore Pleno, Double, Mixed (Pheasant's Eye). Pkt. 10c; ¼ oz. 20c.

ESCH-SCHOLTZIA (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. 30c.

Alba. Pure white. Pkt. 5c; oz. 30c.

Single, Mixed. All colors. Pkt. 5c; oz. 25c.

Double Mixed. All colors. Pkt. 5c; oz. 30c.

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. 15c.

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. 15c.

GAILLARDIA (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. 15c.

Lorenziana. Double Perfection Mixed. Pkt. 5c; ¼ oz. 20c.

Gypsophila Paniculata

GAILLARDIA (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, vermillion, and very often a combination of all these colors in one flower.

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

GODETIA*

One and a half feet. 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; ¼ oz. 10c.

Dwarf Sorts Mixed. Neat globular bushes about 10 inches in height. Pkt. 5c; ¼ oz. 15c.

Golden Feather. See Pyrethrum.

GOLDENROD (Solidago)‡

Two feet. American national flower. Pkt. 5c; ¼ oz. 25c.

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. 10c.

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. 15c; oz. 25c.

All Varieties, Mixed. Pkt. 5c; ½ oz. 15c; oz. 25c.

GRASSES (Ornamental Mixed)*

Two to five feet. These are most useful for winter bouquets. Enormous quantities of them are annually grown in Germany 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.

HELIANTHUS (Sunflower)*

Remarkable for its stately 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.

Doubs Chrysanthemum Flowered. Six feet. Golden yellow flowers. Pkt. 5c; oz. 15c.

Russian Mammoth. Single. Of gigantic dimensions, both flowers and stalk. Oz. 5c.

*Annuals. †Biennials. ‡Greenhouse Plants. §Perennials. ¶Stove Plants. §Climbing Plants.

Double Hollyhock

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; $\frac{1}{4}$ oz. 50c.

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; $\frac{1}{4}$ oz. 25c.

Semi-Double Flowers with Frilled Edges. Pkt. 10c; $\frac{1}{4}$ oz. 25c.

HUMULUS JAPONICUS (Japanese Hop)*§

Twenty feet. One of the most rapid growing ornamental climbers; green leaved. Pkt. 5c; $\frac{1}{4}$ 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; $\frac{1}{4}$ oz. 20c.

Hyacinth (Bean). See Dolichos.

ICE PLANT*

Six inches. Suitable for rock work, hanging baskets, etc. Foliage thick, frosted and waxlike. Pkt. 5c.

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.

Larkspur Giant Hyacinth, Flowered

LARKSPUR (Delphinium)*

The Larkspur is one of the handsomest and most useful of plants, 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; $\frac{1}{4}$ 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; $\frac{1}{4}$ oz. 20c.

PERENNIAL VARIETIES (Delphinium**Larkspur)**

The hardy varieties are of hewitching 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; $\frac{1}{4}$ oz. 15c.

Chinese Azureum Grandiflorum Blue. Pkt. 5c; $\frac{1}{4}$ oz. 25c.

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 blue dark foliage; the finest dark blue for bedding. Pkt. 10c; $\frac{1}{4}$ oz. 50c.

Mixed Compacta Varieties. All colors. Pkt. 5c; $\frac{1}{4}$ oz. 15c.

Marigold, African

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 dwarfer in growth, with beautifully striped flowers, and better suited for bedding purposes or 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; $\frac{1}{2}$ oz. 15c; oz. 25c.

Dwarf African Mixed (Pride of the Garden). Fifteen inches. Immense double flowers, golden yellow, compact dwarf habit, forming dense bushes. Pkt. 5c; $\frac{1}{2}$ oz. 15c.

Tall African Double Mixed. Pkt. 5c; $\frac{1}{2}$ oz. 15c.

Mathiola. See stocks.

Marvel of Peru. See Four-o'clock.

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; $\frac{1}{4}$ oz. 25c.

Sweet Scented (Reseda Odorata). The good, old-fashioned sweet mignonette. Pkt. 5c; oz. 15c.

MATRICARIA (Alba Plenissima)†*

Three feet. Feverfew. Neat, 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.

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. 25c.

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. 25c.

MOONFLOWER (Ipomoea 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; oz. 50c.

NICOTIANA

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.

Sanderæ Hybrids. Very showy mixture which includes many beautiful colors. Three feet. Pkt. 10c.

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.

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. 15c.

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; $\frac{1}{2}$ oz. 25c.

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.

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.

Giant Flowering Double Fringed Mixed. Large, exceedingly double and fringed flowers of most brilliant color. Very desirable. Pkt. 25c.

Petunia Hybrida Nana Compacta. Dwarf, neat, compact bushes 12 to 15 inches high, covered with a multitude of flowers all summer long, valuable for edging and formal bedding.

Dwarf Inimitable. A very free-blooming, dwarf plant; cherry red with white stripes. Pkt. 10c; $\frac{1}{8}$ oz. 25c.

Finest Mixed. Best mixture of small free-blooming colors. Pkt. 10c; $\frac{1}{8}$ oz. 20c.

*Annuals. †Biennials. ‡Greenhouse Plants. §Perennials. ¶Stove Plants. §Climbing Plants.

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 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.

P-W.'s Large Flowering Nasturtiums

DWARF OR TOM THUMB NASTURTIUMS

	Pkt.	Oz.
Beauty. Yellow and scarlet.....	5c	15c
Chameleon. Several colors on one plant.....	5c	15c
Empress of India. Deep crimson; dark-leaved....	5c	15c
Golden King. Large golden yellow flowers.....	5c	15c
King Theodore. Dark maroon; dark foliage.....	5c	1gc
Lady Bird. Orange-yellow, red-spotted.....	5c	15c
Pearl. Creamy white.....	5c	15c
Queen of Tom Thumbs. Scarlet flowers; varie- gated foliage	10c	25c
Rose. Blush-rose.....	5c	15c
Ruby King. Rosy scarlet.....	5c	15c
Vesuvius. Beautiful salmon-red.....	5c	15c
Finest Mixed. Dwarf varieties; ¼ lb. 30c; lb.		
\$1.00	5c	10c

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.

	Pkt.	Oz.
Heinemanni. Chocolate.....	5c	15c
King Theodore. Maroon; dark foliage.....	5c	15c
Orange. Large flowers.....	5c	15c
Pearl. Creamy white.....	5c	15c
Prince Henry. Yellow, spotted scarlet.....	5c	15c
Regelianum. Purplish violet.....	5c	15c
Scarlet. Very bright; green-leaved.....	5c	15c
Schulzi. Scarlet; dark-leaved.....	5c	15c
Striped	5c	15c
Vesuvius. Salmon; dark-leaved.....	5c	15c
Von Moltke. Blush-rose.....	5c	15c
Variegated-Leaved Mixed. Variegated foliage.....	10c	25c
Finest Mixed. Climbing varieties; ¼ lb. 30c; lb.		
lb. \$1.00.....	5c	10c

LOBB'S CLIMBING NASTURTIUMS (Tropaeolum Lobbianum)

A tall or climbing class. The leaves are smaller and the flowers more numerous and prolific than the ordinary tall class.

These are very similar to the ordinary climbing nasturtiums, the chief difference being in the bright shades and darker leaves of some. The flowers are slightly smaller, but are borne more freely. Lobb's Varieties Mixed. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

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 glowing. Finest mixed. Pkt. 10c; ¼ oz. 25c; oz. 75c.

Nana Compacta. Eight inches. Dwarf phlox. Finest mixed. Pkt. 10c; ¼ oz. 25c.

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.

PORTULACA (Sun Plant)*

One of our finest hardy annual plants of easy culture, thriving best in a rather rich, light loam or sandy soil and luxuriating in an exposed, sunny situation; the flowers are of the richest colors, and produced throughout the summer in great profusion; fine for massing in beds, edgings or rockwork; six inches high.

Single Mixed Colors. Pkt. 5c; ¼ oz. 15c.

Double Mixed. Flowers perfectly double. Pkt. 10c; ¼ oz. 75c.

*Annuals. †Biennials. ‡Greenhouse Plants. ‡Perennials. §Stove Plants. §Climbing Plants.

Pansy, Bugnot Giant

Iceland Poppy

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 European specialists, and we claim that seed obtained from us will produce flowers of unsurpassed size and form, beauty of markings, and brilliancy and variety of colors and shades.

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; $\frac{1}{8}$ oz. 75c.

Cassiers 3 and 5 Blotched Mixed. Mostly light shades with dark blotches. Pkt. 10c; $\frac{1}{8}$ oz. 50c.

Giant Trimardeau. Flowers of extra large size; mostly marked with three large blotches or spots. Pkt. 10c; $\frac{1}{8}$ oz. 50c; oz. \$3.50.

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; $\frac{1}{8}$ oz. 75c.

English Finest Mixed. Pkt. 10c; $\frac{1}{4}$ oz. 50c.

Finest French Mixed. Pkt. 10c; $\frac{1}{4}$ oz. 50c.

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.

Mixed. White, rose and purple. Pkt. 5c; oz. 25c.

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 to six or twelve inches.

Double Varieties

"Mikado." (The Striped Japanese Poppy). Very distinct in character and color. Brilliant scarlet and white, with elegantly curved petals, like a Japanese chrysanthemum. Pkt. 5c; oz. 25c.

Carnation Flowered. Splendid double fringed flowers; mixed colors. Pkt. 5c; oz. 20c.

Paeony Flowered. Large, showy, double globular flowers, resembling a double paeony mixed colors. Pkt. 5c; oz. 20c.

Double Mixed. All colors. Pkt. 5c; oz. 20c.

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; oz. 30c.

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. 30c.

Single Mixed, annual sorts, pkt. 5c; oz. 20c.

POPPY‡

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; $\frac{1}{8}$ oz. 20c.

Orientele (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; $\frac{1}{4}$ oz. 15c.

*Annuals. †Biennials. ‡Greenhouse Plants. §Perennials. ||Stove Plants. §Climbing Plants.

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.

Obconica Grandiflora Mixed. Ten inches. The flowers are of a soft lilac, pink, rose, lavender or crimson. It is one of the most useful primulas for pot culture, and also succeeds well in the open border during the summer. Pkt. 10c.

Vulgaris (English Primrose)‡. Canary-yellow; fragrant. Pkt. 10c; ¼ oz. 50c.

PUERARIA THUNBERGIANA‡§ (Kudzu Vine or Jack and the Bean Stalk)

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.

PYRETHRUM PARTHENIFOLIUM AUREM‡ (Golden Feather)

Six inches. One of the best plants for edging; grown for its beautiful yellow foliage. More successfully treated as an annual. Pkt. 5c; ¼ oz. 20c.

Selaginoides. Beautiful variety, with golden, moss-like foliage. Pkt. 10c; ¼ oz. 30c.

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.

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.

Large Flowering, Mixed. Pkt. 5c; ¼ oz. 25c.

SALVIA (Scarlet Sage)*

Three feet. The Salvia Splendens, or Scarlet Sage, is a standard bedding plant that keeps the garden bright with color until late in autumn. This plant lends itself to many uses; it makes a good pot plant, does well in window boxes, and is useful for cutting to give color. Its best use, however, is as a hedge or border plant, where long, broad bands of intense color are desirable. Pkt. 5c; ¼ oz. 50c.

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; ½ oz. 20c.

Caucasia‡. Two and one-half feet. Flowers beautiful, soft lavender. Pkt. 10c.

Ten Week Stock

SCHIZANTHUS (Hybridus Grandiflorus)*

One foot. "The Poor Man's Orchid," near pyramidal bushes covered with a multitude of small butterfly-like flowers of the most brilliant and striking color designs. Pkt. 10c.

SMILAX (Myrsiphyllum Asparagoides)§§

Six feet. In many respects the Smilax is the most useful, and it is 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.

Cut-and-Come-Again—10-Week. 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.

Scarlet	Canary Yellow
Light Blue	Pink
White	

Each of the above. Pkt. 10c; ¼ oz. 75c.

Finest Mixed. Pkt. 10c; ¼ oz. 50c.

MAMMOTH-FLOWERING BEAUTY STOCKS

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.

P.-W.'s GIANT WAVED SPENCER SWEET PEAS

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. Very early in spring, preferably in March and April, sow the seed quite thickly in drills 2 inches deep, and later thin out the plants to 6 inches apart in the row. When the plants are about 5 inches high, or better still, before sowing, place a trellis or brush along the rows for their support. The flowers should be picked frequently, before the seed-pods form, otherwise the plants will soon stop flowering.

Type of P.-W.'s Giant Waved Sweet Peas

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.

King Edward Spencer. Bright crimson-scarlet. Very large.

Margaret Atlee. The best rich pink.

Mrs. Hugh Dickson. Beautiful salmon-pink on a cream ground; extra fine.

Othello Spencer. W. S. Deep rich maroon, very dark and adapted for many attractive combinations.

Queen Alexandra Spencer. One of the first yet introduced. In color a rich bright scarlet; flowers of largest size.

Senator Spencer. Striped purplish-chocolate on white.

White Spencer. A pure wavy white of enormous size and splendid substance; long, strong stems.

Price. Any of the above, 10c per pkt.; 25c per oz.; 90c per $\frac{1}{4}$ lb.

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 the above sorts but many others which are new and striking in this class. Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.

*Annuals. †Biennials. ‡Greenhouse Plants. ‡Perennials. ||Stove Plants. §Climbing Plants.

SWEET PEAS—Standard Varieties**SELECT LARGE FLOWERING AND UNWIN TYPES**

1 Pkt. enough for 5 ft. of Row

1 oz. enough for 25 ft. of Row

The following are the very choicest standard sorts—varieties that stand at the head of their respective color, and that have the endorsement of the leading American and European specialists—and it would be impossible to select a similar list out of the vast number of standard sorts now in commerce that would combine in the same degree all the qualities which go to make up first-class varieties.

Aurora. Striped rosy-orange on white; most attractive.
Blanche Ferry. Rose-red; wings blush-white.
Countess of Radnor. Lovely clear lavender.

Ⓢ **Dorothy Eckford.** A grand, large, open-formed white.
Duke of Westminster. Purple with violet-purple wings.
Emily Henderson. Large, pure white, early and profuse.

Gladus Unwin. Lovely soft pink.
 Ⓢ **Hon. Mrs. E. Kenyon.** A beautiful primrose color; a bold giant flower.

Henry Eckford. Intense orange; wings rose orange.
Janet Scott. Clear pink at the base, shaded to buff at edges.

Ⓢ **King Edward VII.** Rich crimson scarlet.
 Ⓢ **Lady Grisel Hamilton.** Soft lavender.
Lord Nelson. Rich indigo-blue; wings toned purple.
Lovely. Warm rose-pink; large and extra fine.

Ⓢ **Miss Wilmott.** Deep orange pink.
Navy Blue. A true blue, quite distinct.
Nora Unwin. Superb pure white.
 Ⓢ **Othello.** A very deep maroon, particularly rich, with velvety effect. Large size.

Ⓢ **Prima Donna.** Pure pink.
Queen Alexandra. Bright scarlet red.
Senator. Maroon and violet; wings violet-striped on white. Large size; hooded form.

Price of above, except where noted, pkt. 5c; oz. 15c; ¼ lb. 40c.

P.-W.'s SUPERB MIXED STANDARD SWEET PEAS

This grand mixture is made up from about fifty of the finest named sorts. Containing the cream of the novelties, such as Unwin and other new types of the large flowering varieties. In such quantities as to produce the best color effect. Pkt. 5c; oz. 10c; ¼ lb. 25c.

WINTER-FLOWERING SWEET PEAS

A distinct class that has become popular for greenhouse forcing. They begin flowering in from 8 to 12 weeks from seed sowing and flower continuously for weeks. The flowers are of fine size on long stems. Grown in the garden they flower very early, but are smaller.

Price for any of the following: 10c per pkt.; 20c per oz.; 60c per ¼ lb.; \$2.00 per lb.

Christmas Pink. Pink with blush-white wings.
Mrs. Alexander Wallace. Lavender.
Mrs. F. J. Dolansky. Rose-pink.

We pay postage on all seeds in packets and ounces. postage on larger quantities.

We specially recommend varieties marked Ⓢ

Types of Large Flowering Sweet Pea

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.

EARLY SWEET PEAS

The great merit of this class is earliness, commencing to flower within 45 to 60 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 but having shorter stems than tall varieties.

Price of any of the following: 5c per pkt.; 15c per oz.; 50c per ¼ lb.; \$1.50 per lb.

Mont Blanc. Pure white with open flowers; an extra-early Emily Henderson.

Earliest of All. Rose standard with blush wings; an extra-early Blanche Ferry.

Mrs. Chas. H. Totty. Early, lavender and shell shaped.

If by mail see Page 1 to find out amount to remit for

Sweet William

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 flowerets 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; $\frac{1}{8}$ oz. 10c.

Double Varieties. Mixed. Pkt. 5c; $\frac{1}{4}$ oz. 20c.

VERBENA*

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.

Defiance. This is a very brilliant scarlet. Very fine for bedding. Pkt. 10c; $\frac{1}{4}$ oz. 35c.

Mammoth Verbena. Mixed. This embraces all colors. Pkt. 5c; $\frac{1}{4}$ oz. 20c.

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. For a trellis or pillar no annual vine is more chaste, and it will quickly cover an old tree or an unsightly building. Pkt. 5c; $\frac{1}{2}$ oz. 10c; oz. 15c; $\frac{1}{4}$ lb. 40c; lb. \$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.

We could not risk our hard-earned reputation by selling seeds of uncertain quality. Hence we offer only the highest grades obtainable.

*Annuals. †Biennials. ‡Greenhouse Plants. §Perennials. ||Stove Plants. §Climbing Plants.

Double Wallflower

WALLFLOWER*

A hardy and half-hardy perennial. Bearing long spikes or heads of exquisitely fragrant flowers. It is very ornamental for a 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; $\frac{1}{4}$ oz. 15c.

Double Finest Mixed. Pkt. 10c.

VIOLA ODORATA (*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; $\frac{1}{8}$ oz. 40c.

ZINNIS (Youth and Old Aage)*

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.

Mammoth (*Robusta Plenissima*). Flowers of mammoth size, perfectly formed, very double, and of striking colors. A fine strain. Two and one-quarter feet. Pkt. 10c; $\frac{1}{4}$ oz. 15c; oz. 25c.

Double Good Mixed. Pkt. 5c; $\frac{1}{2}$ oz. 15c; oz. 25c.

Large Flowering Dwarf. Mixed. Pkt. 5c; $\frac{1}{4}$ oz. 15c.

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 settled. Do not water too freely until well started, then they should have an abundance.

Mixed Cannas. Comprising good kinds, our selection, superb for bedding or massing. Strong plants, 10c each; 6 for 50c; \$1.00 per dozen, postpaid.

Florence Vaughn Canna

	Color of foliage	Height
Allemanina.	Salmon, bordered yellow.....green	4 ft.
Black Prince.	Very dark crimson.....green	5½ ft.
Buttercup.	Clear yellow.....green	3 ft.
Crimson Bedder.	Deep red.....green	4 ft.
David Harum.	Bright vermillion-scarlet	bronze 3 ft.
Duke of Marlborough.	Crimson.....green	3 ft.
Florence Vaughn.	Yellow, spotted crimson	green 5 ft.
Mme. Crozy.	Scarlet, bordered yellow	green 3 ft.
Mrs. Kate Gray.	Orange-scarlet shaded gold	green 5 ft.
Queen Charlotte.	Crimson, bordered gold	green 3 ft.
Mlle. Berat.	Large pink flowers.....green	4 ft.

Prices—The above Cannas, postpaid, each 15c; 2 for 25c; \$1.25 per doz.

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, 15c; 3 for 35c; doz. \$1.25. Weight 4 lbs. per doz.

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 a 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 5c; per doz. 40c. Add 10c per dozen postage if by mail.

CALLA—SPOTTED LEAF

This magnificent Calla has glossy, dark green leaves dotted with numerous white spots. The flowers are pure white with black centers and are very beautiful. The plants grow and bloom freely in window, or open garden. Strong roots. 15c each; 2 for 25c; \$1.50 per doz. Weight 8 lbs. per dozen.

HARDY GARDEN LILIES

Unless otherwise mentioned, price of single bulbs and lots of three include postage; the dozen, 25 and 100, prices at purchaser's expense.

Auratum (Gold Banded). The most beautiful and popular variety of all the Lily family; should be in every garden. Flowers white, dotted crimson, with a clear golden band running through the center of each petal; very fragrant. Each 25c; 3 for 65c.

Speciosum Rubrum (Crimson Branded). Flowers are white, with a deep rosy crimson band on each petal, with deeper colored spots between. They are five to six inches in diameter, very fragrant. Each 25c; 3 for 65c.

Tigrinum (Single Tiger Lily). Very hardy native Lily. Orange-red, spotted with purple-black. It very pretty and bears from eight to twenty flowers. Each 15c; per doz. \$1.50

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; 25 for 55c; 100 for \$2.00.

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 doz. 10c; 35 for 25c; 100 for 50c; postpaid.

FLOWERING BULBS FOR FALL PLANTING

We carry a full line of bulbs for fall planting ready in September, such as Hyacinths, Tulips, Crocus, Nacissus, Daffodils and Liliums. Ask for fall bulb list, which we will mail free on request.

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 the 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. Plant in rich, light, warm soil, and they will start to grow quickly and will make strong plants.

P.-W.'s Best Mixed Double Dahlia. Where the purchaser is not particular about knowing the names of the different varieties, this mixture gives a superb assortment. They are fine field-grown roots and mixtures without names, of all choice double flowers, of many distinct colors and shadings. We offer these best mixed double Dahlia roots at 10c each; \$1.00 per doz.

P.-W.'s CACTUS DAHLIAS

	Each	Doz.
Countess of Lonsdale. Salmon pink and amber.....	\$0.20	\$2.00
Kriemhilde. Brilliant pink.....	.20	2.00
J. H. Jackson. Crimson-maroon; large.....	.20	2.00
Mrs. Edw. Mawley. Soft yellow; large.....	.15	1.50
Floradora. Pure garnet, splendid form.....	.15	1.50
General Buller. Rich velvety crimson, tipped white	.15	1.50
Winsome. One of the best white Cactus Dahlias	.15	1.50

Type of Cactus Dahlia

P.-W.'s SHOW DAHLIAS

	Each	Doz.
Arahella. Light sulphur-yellow.....	\$0.15	\$1.50
Red Hussar. Pure cardinal-red.....	.15	1.50
Emily. White, tipped soft lilac.....	.15	1.50
Admiral Schley. Rich crimson.....	.15	1.50
A. D. Livoni. Clear soft pink, quilled.....	.15	1.50
White Swan. Large; pure white.....	.15	1.50
Snow Clad. Pure white.....	.15	1.50
Queen Victoria. Yellow.....	.15	1.50
Jamaica. Large Royal Purple, shaded ma- roon	.15	1.50
Prince Bismark. Purple.....	.15	1.50

Type of Decorative Dahlia

P.-W.'s DECORATIVE—Dahlias

	Each	Doz.
Admiral Dewey. Rich purple; very free.....	\$0.15	\$1.50
Madame Van den Dael. Large; white.....	.15	1.50
Jack Rose. Rich crimson; large.....	.15	1.50
Clifford W. Burton. Canary-yellow.....	.15	1.50
Lyndhurst. Brilliant cardinal-red.....	.15	1.50
Sylvia. Deep pink, pure white center.....	.15	1.50
Nymphaea. White suffused with pink.....	.15	1.50
Maid of Kent. Cherry-red, tipped white.....	.15	1.50
Mrs. Roosevelt. Beautiful light pink.....	.20	2.00

Type of Show Dahlia

A Field of Gladiolus at Centerville

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 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 include postage. For large quantities the average weight is about 1 pound per dozen. See page 7 for amount of parcel postage.

America. A beautiful, soft, flesh-pink, slightly tinged with lavender; strong grower, erect spikes of large flowers; grand for bedding. For florists' use it has no equal. Each 5c; per doz. 35c; per 100 \$1.75.

Augusta. Pure white, blue antlers. Each 5c; doz. 30c; 100 for \$1.75.

Attraction. Deep rich crimson, with large white center and throat. Each 5c; doz. 50c; \$3.00 per 100.

Brenchleyensis. Intense fiery scarlet. Very showy. Each 5c; doz. 35c; 100 for \$2.00.

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 5c; per doz. 50c; \$3.50 per 100.

Canary Bird. Clear canary yellow, finest yellow Gladiolus in existence. Each 10c; doz. \$1.00; \$8.00 per 100.

Wm. Falconer. Flowers of enormous size, light pink and blush mottled. Each 8c; doz. 60c.

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 6c; 50c doz.; \$3.00 per 100.

Glory of Holland. Splendid pure white. Each 10c; per doz. 75c.

Panama. Very long spike with large well arranged flowers. Splendid deep pink. Each 10c; per doz. \$1.00.

Niagara. Beautiful cream, blending to yellow, throat splashed with carmine. Each 10c; per doz. 85c.

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. Doz. 35c; 100 for \$2.50.

At Lagoon, Utah, where judicious planting of trees, plants and shrubs has made one of the beauty spots of the Rocky Mountain States. Only a five-minutes ride from our Centerville Nurseries.

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 at that time of the year, 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 instructions 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 it aids us materially if they are written on the 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. or Canada when sent by express.

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. No plants sent C. O. D. unless one-half the amount is sent with the order.

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 off all broken and extra long roots. Peach, Plum, Apricots, 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.

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

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 best be judged. Without any obligation whatever to you it will be a pleasure to show you over the grounds.

A Block of Everblooming Roses (one year old) at Our Nurseries

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 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 heavy soils, 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 required 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 91 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 FREE ON TEN OR MORE ROSES

Charges will be prepaid by us to your Express or Post Office at prices named herein on Dormant Roots, provided that not less than ten are ordered. We do not pay charges on stage routes.

If less than ten are ordered of the sizes mentioned the charges must be paid by the buyer.

In ordering less than ten, if you wish us to pay transportation charges add to the cost listed herein and send extra with remittance as follows:

One Rose, 10c; two Roses, 15c; three, 20c. Above three and up to ten add 5c per Rose for transportation charges.

QUANTITY PRICES ON ROSES

Where the price on the variety is:

40c each, we supply ten for.....	3.50	55c each, we supply ten for.....	5.00
45c each, we supply ten for.....	4.00	60c each, we supply ten for.....	5.50
50c each, we supply ten for.....	4.50	65c each, we supply ten for.....	6.00

See P.-W.'s Special Rose Offer on Page 64.

P.-W's SUPURB, HARDY, EVER-BLOOMING HYBRID TEA ROSES

THE CREAM OF BOTH OLD AND NEW

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 our 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.

NOTE: All the Roses in this collection bloom profusely the first year.

See bottom of page for prices.

Gruss An Teplitz—Blooms from June to Snow

GRUSS AN TEPLITZ (Virginia R. Coxé)

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. Price 45c each.

HERMOSA (Bengal)

It is hardy as an oak, and is always covered with clear, pink blooms.

JOHANNES WESSELHOFT*

Style of growth similar to Kaiserin. Color clear, lustrous-yellow.

Strong, healthy field-grown 2 year old roots of above at 50c each; 10 for \$4.50, unless otherwise noted. See Page 61 for delivery charges.

BETTY

Very large flowers of splendid form. Color cop-perey-rose shaded golden-yellow; deliciously perfumed; without doubt a sterling rose.

DOUBLE PINK KILLARNEY

A combination of exquisite pink—with double the number of petals carried by Killarney, makes this new member of the family one of the most magnificent roses ever grown. Apart from the number of its petals, it is in all respects the same as the Pink Killarney, and no greater praise can be bestowed upon it. Price 60c each.

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.

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.

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 61.

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.

KILLARNEY QUEEN

A cerise-pink "sport" of Killarney, exceedingly strong in growth with excellent foliage. The buds are long and well formed; a fine variety for cutting.

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. Price 60c each.

P.-W.'s SUPERB COLLECTION OF HYBRID TEAS—Continued

See bottom of page for prices.

MABEL DREW. The blooms are large and full, carried on strong and erect flower stalks; the color is deep cream on first opening, passing to intense canary-yellow in the center as the bloom develops; has the delicious, refreshing perfume of the Tea Roses.

MARY, COUNTESS OF LEICESTER. The color is unique and distinct, being a warm crimson carmine, a shade difficult to describe; of great size with large, smooth, circular petals, deliciously scented.

MADAM CAROLINE TESTOUT. Grand bright pink. Flowering freely all summer. One of the best. Known in the northwest as the "Portland Rose."

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 cup-shaped 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.

LYON ROSE (Pernetiana). The result of a cross between Mad, Melaine, Soupert 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 coral red or salmon-pink, shaded chrome-yellow. Very fragrant. Constant bloomer. Perfectly hardy. 60c each.

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, fluffy, 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.

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.

MRS. GEORGE SHAWYER. 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. Price 60c each.

OPHELIA. Color salmon-flesh, shaded with rose; large and perfect shape; of excellent habit, the flowers standing up well on long stiff stems. Excellent for forcing or outdoor culture.

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 shades, extremely brilliant in effect. Price 60c each.

Strong, healthy field-grown 2 year old Dormant Roots of above at 50c; 10 for \$4.50, except where otherwise noted. See Page 61 for delivery charges.

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 and 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 or 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 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. Price 60c each.

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: 50c each; \$1.50 per 10. Strong 2 year old Dormant Roots. See Page 61 for delivery charges.

P.-W.'s GET-ACQUAINTED ROSE OFFER

OF TEN EVER BLOOMERS FOR \$2.00

That you may know the excellence of our Home Grown Stock and our facilities for packing and delivery so that the roses reach you in a live, healthy, thrifty condition we make this exceptionally low offer for one each of the following ten roses, all charges prepaid for \$2.00. Every one is a top notcher, hardy in most any situation and guaranteed to bloom continuously during the entire season, if given just an ordinary chance.

Gruss an Teplitz—Crimson.

Etoile de France—Red.

Kaiserine Aug. Victoria—Blush white.

Mad. Caroline Testout—Pink.

Mrs. John Laing—Delicate pink.

P.-W.'s American Beauty—Deep crimson.

White Maman Cochet—Pure white.

Baby Tausendschoen—Variable.

Ever Blooming Crimson Rambler—Vivid crimson.

Mrs. Aaron Ward—Orange to delicate yellow.

The above are from 3 inch pots and will be shipped with the earth balled about the roots and should not be set out before the latter part of April, at which time delivery will be made.

One each Dormant 2 year old root of the above ten furnished before April 1st for \$4.00. 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.

AMERICAN BEAUTY (Frau Karl Druschki). Best snow-white rose yet introduced. It is a very strong grower. Heavy foliage and magnificent flowers. Immense in size. Produced with great freedom on long, stiff stems. Color marvelously white. Hardy everywhere.

Coquette Des Alps. One of the best and freest-blooming of the hardy white roses. It is finely formed, occasionally shows light blush when first opening.

General Jacqueminot. An old standby. 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

A Plat of Hardy Perpetual Roses at Centerville

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 50c each; \$4.50 per ten.
See Page 61 for delivery charges.

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 miniature 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 TAUSENDSCHOEN. It is a bush form of the "Climbing Tausendschoen" or "Thousand Beauties," having all the charm in the variable coloring in its flowers that its parent has, being firm white, delicately flushed pink, changing to deep rosy-carmine.

BABY DOROTHY. A prolific prouder 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 TESCHENDORFF. 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.

Price on any of above: 50c each; \$4.50 per ten.

See Page 61 about transportation charges.

P.-W.'s HARDY CLIMBING ROSES

Including the Ramblers, Climbing Polyanthas and Wichuraiana

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: 50c each; 10 for \$4.50; two year old field grown shrubs.

AMERICAN PILLAR

A single-flowering variety of great beauty, which appeals to every one. Flowers are enormous 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.

BALTIMORE BELLE. Pale-blush, passing to white; very double flowers in beautiful colors, making a perfect mass of bloom. Frequently grows fourteen feet in one season.

CLIMBING AMERICAN BEAUTY. Same color, size and fragrance as American Beauty, with the addition of the climbing habit. Good foliage, and better blooming qualities.

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. 55c.

CLIMBING FRAU KARL DRUSCHKI. Bloom identical with the parent plant, the bush 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.

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.

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, of Red Dorothy Perkins. A brilliant Crimson Rambler flower on glossy, varnished Wichuriana foliage in unseasonable weather, and its defoliation by insects; the infusion of Wichuriana blood assures an ornamental climber which is nearly evergreen, and this will assure this lovely crimson-scarlet rose a place in every American garden.

Price of any of the above 2 year old field-grown shrubs; 50c each; \$4.50 per 10. See Page 59 for delivery charges. P.-W.'s Special Rose Offer See Page 62.

White Dorothy Perkins (Second Year From Planting)

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

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 its 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. This rose has no rival as a white climber.

Old customers will notice we have eliminated a number of Roses listed in our previous catalogs as well as by other houses. 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.

FLORAL DEPARTMENT OUT-OF-TOWN PATRONS

We are in a position to offer excellent service by Parcel Post or Express to out-of-town patrons. All orders for bouquets, sprays, house decorations, funeral designs, etc., executed promptly and packed in such a manner that they will reach you in good condition. Seasonable cut flowers always in stock at reasonable prices.

Special quotations will be gladly furnished at any time. Should occasion present itself that you haven't the time to get our prices before you need the order, send in the amount you wish to pay and tell us what you want and you can always depend on the same treatment as if you had previously gotten our quotations.

In this department, as in all others, we must have satisfied customers.

DECORATIVE PLANTS

Our facilities are excellent in this line, being in a position to furnish most all desirable and seasonable decorative plants on short notice. We not only have quite 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.

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 to four feet long, of fresh, green, feathery foliage. Vigorous Plants, 60c to \$1.50 each, according to size.

Hanging Baskets, 10 inches in diameter, with sprays, 14 to 24 inches long, \$3.00 each.

Asparagus, Plumosus Nanus, 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, 60c to \$1.50 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 single year. First size, 4-in. pots, each 75c; larger sizes, \$1.00 to \$1.50.

New Ostrich Plume, Whitmani. This beautiful fern is a sport from the Boston, but is indescribably more beautiful. First size, 4-in. pots, 75c each; larger sizes, \$1.00 and \$1.50.

PALMS

Areca Lutescens. One of the most decorative plants, always graceful and artistic. \$1.00 to \$10.00 each, depending on size.

Kentia. The most popular parlor palm we grow. Hardy and rugged under all kinds of treatment. \$1.00 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.

RUBBER PLANTS

We have a splendid stock of this useful and ornamental plant. Fine plants. Price, \$1.00 to \$3.00 each.

BOXWOOD (*Buxus Sempervirens*)

A European shrub of very dense growth, leaves small, dark glossy green, now so popular for planting as individual specimens in vases, window boxes, and for the fine formal and decorative effects that can be produced by the many shapes into which this plant can be trimmed.

PYRAMID-SHAPED BOXWOOD

2½ feet high, 12 to 14 inches diameter at base.....	\$3.00
3 feet high, 14 to 16 inches diameter at base.....	4.00
3½ feet high, 16 to 18 inches diameter at base.....	7.50
4 feet high, 18 to 20 inches diameter at base.....	9.00

BUSH-SHAPED BOXWOOD

18 inches high, bushy, \$1.25 each; 24 inches high, bushy, \$2.50 each; 30 inches high, \$3.00 each.

Summer Bedding Plants At Our Centerville Nurseries

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 15 to June 15. If wanted by mail, add 10c per dozen for postage. Price 5c each; 50c per doz.; \$3.00 per 100.

*Asters—Mixed.
Carnations—Marguerite.
*Cosmos—Mixed.
Fever Few—Mixed.
Double Daisy—Mixed.

Lobelia—Blue.
Marguerite—Mixed.
Pansies—Mixed.
Petunia—Mixed.

Phlox—Drummondii—Mixed.
*Snapdragons—Mixed.
Stocks—Mixed.
Verbena—Mixed.

*Marked varieties can be furnished in separate colors at same price.

Ready From April 15 to June 15—Priced by Express—If Wanted by Mail, Add 5c Each or 25c a Dozen, in 2½-Inch Pots	From 2½-In. Pot		From 4-In. Pot By Express Only	
	Each	Doz.	Each	Doz.
Begonia Vernon. Bright red flowers; compact, dwarf plants. One of the best and most effective plants either for edging or bedding.....	15c	\$1.25	.....	\$.....
Coleus, assorted varieties.....	15c	1.00	.....	.....
Geranium, Double and Single, assorted colors, finest varieties.....	20c	2.00	35c	3.50
Geranium, Variegated, leaved border.....	15c	1.25	25c	2.50
Geranium, Ivy Leaved, assorted.....	15c	1.50	30c	3.00
Geranium, Martha Washington, including everblooming varieties.....	20c	2.00	40c	4.00
Petunia, Giant Double Fringed.....	15c	1.25	.....	.....
Petunia, Giant Single Fringed.....	15c	1.25	.....	.....
Salvia (Scarlet Sage) Fireball.....	15c	1.25	.....	.....
Variegated Vinca. A trailing plant used for hanging baskets and window boxes; green foliage mottled white.....	15c	1.25	30c	3.50
Senecio Scandens (Parlor or German Ivy). Tender climber, indispensable as vase, basket or window box plant in the summer.....	10c	1.00	.....	.....

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 in a basket, for 50c; 3 baskets, \$1.25; 100 plants, not baskets, \$3.00; by mail, add 15c per dozen postage.

Important—Plants sent by mail have but little soil left on roots, and should receive careful attention upon arrival. If they appear withered, place in lukewarm water for an interval of ten to fifteen minutes. This will revive them.

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 dozen, postage.

Alyssum Saxatile Compactum (Basket of Gold, Gold Tuft, Rockmadwort). An indispensable plant for the rocky or border, growing 1 foot high and producing early in the summer masses of broad, flat heads of bright yellow flowers. Each 15c.

Bleeding Heart of *Dielytra*. The old favorite, heart-shaped flowers. Each 20c.

Campanula. In several varieties, including the Canterbury Bell. Each 15c.

Coreopsis Lanceolata. Flowers are bright golden yellow. Each 10c.

Dianthus Barbatus (Sweet William). Continues in bloom most all summer. Large, double flowers. Each 15c.

Delphiniums (Hardy Larkspurs). A very graceful, tall-growing plant, with long spikes of bright flowers; assorted colors. Each 15c.

Digitalis (Fox Glove). A very ornamental plant, growing to about three feet high; assorted colors. Each 15c.

Poppy, Hardy Oriental. Large flowers resembling chrysanthemums, in a great variety of colors. Each 15c.

Pyrethrum (*Aliginosum* Giant Daisy). Very attractive. Each 15c.

Gaillardia Grandiflora. Has a mass of blooms the entire season. Flowers are dark red-brown with petals of orange or crimson. Each 15c.

Feverfew, Little Gem (*Matricaria*). A most useful summer cut flower, with large double-white flowers; June until October; 12 to 15 inches high. Each 15c.

Forget-Me-Not (*Myosotis Alpetris*). Low growing plants, producing an abundance of fragrant small blue flowers. Each 15c.

Plants marked 10c each are \$1.00 per dozen; 15c are \$1.50 dozen; 20c are \$2.00 dozen; 25c are \$2.50 dozen. Add 5c each for postage.

Gypsophila Paniculata (Baby's Breath). Single. Each 10c.

Hollyhocks. The handsome double flower of the improved varieties of this flower makes it a great favorite. One-year-old roots. Assorted. Each 15c.

Lobelia Cardinals (Cardinal Flower). Flowers from July to September; color fiery scarlet; height two feet. Each 15c.

Rudbeckia (Golden Glow). Height four to six feet and producing hundreds of large blossoms of brilliant golden-yellow color during August and September. Each 15c.

Rudbeckia Newmanii (Black-eyed Susan). Golden yellow ray petals around a dark center. Fine cut flowers. Each 15c.

Shasta Daisies. Burbank's new varieties. Each 20c.

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 15c.

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 15c.

Violets. Hardy sweet-scented blue. Per clump, 15c each.

CHRYSANTHEMUMS

Old-Fashioned Large-Flowering, etc. We offer below 5 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.	
20c each; \$1.75 per doz.	

1.50 dozen; 20c are \$2.00 dozen; 25c are \$2.50 dozen.

HERBACEOUS PERENNIAL PLANTS—Continued

HARDY PHLOX

Phlox are a garden in themselves. There is nothing quite equal to them in all-round 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 succeed 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 the very early spring.

B. Compte. A glowing French purple, one of the finest dark colored varieties.

Bridesmaid. Pure white, with large crimson carmine eye.

Eclairer. Brilliant rosy-magenta, with large, lighter halo.

Henry Marcel. Pure red, with bright salmon shadings.

Mrs. Jenkins. The best white variety in our collection; immense panicles; early and free bloomer.

Pantheon. Bright carmine roses, a fine effective variety.

R. P. Struthers. Rose carmine, with scarlet red eye. Very bright.

Selma. A pretty delicate, soft, pale rose with distinct red eye.

Von Lassburg. Purest white, individual flowers, very large. Price: Any of the above 15c each; \$1.50 per dozen; \$12.00 per 100.

Weight, 4 lbs. per doz.: 30 lbs. per 100.

PAEONIA OFFICINALIS

This type is the real old-fashioned "Paeony," and comes into bloom from ten days to two weeks ahead of the other herbaceous sorts. All are strong growers, with large, full, double, fragrant flowers.

Mutabilis Alba. Blush-white.

Rosea. Bright rose-pink.

Rubra. Brilliant glowing deep crimson.

Price: 40c each; \$4.00 per dozen.

PAEONIES (Double Herbaceous)

The Paeony, of all the list of bulbous or tuberous-rooted plants, is perhaps the oldest and best known inhabitant of the flower garden. Paeonies will do well in almost any garden soil, but the better enriched the more vigorous the growth.

An important point to observe in the planting of Herbaceous Paeonies is not to plant too deep. The roots should be placed so that the crowns are covered with two inches of soil. Too deep planting is a frequent cause of shy flowering.

FINEST DOUBLE HERBACEOUS
PAEONIES

Named Varieties

Weight 6 lbs. per doz.; 3-5 eyes, division roots.

Asa Gray. Bright lilac, sprinkled with minute dots of deeper lilac as if dusted on; very large. 50c each; \$5.00 per doz.

Berlioz. Large full flower of a bright currant-red shaded amaranth. 45c each.

Couronne d'Or. One of the finest late-flowering white varieties. 45c each; \$4.50 per doz.

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*. 40c each.

Felix Crousse. Large, ball-shaped bloom; very brilliant red; one of the finest self-colored varieties. 50c each; \$5.00 per doz.

Festiva Maxima. This truly superb variety, the finest white in cultivation, combines wonderful purity of color, freedom and earliness of flower. 50c each.

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. 50c each.

Felix Crousse

Madam Forel. An extra fine silvery-pink, shading darker at the center. A beautiful shaped flower. 50c each.

Mme. Calot. Large, pale hydrangean-pink, with darker shadings in the center; early. 50c each.

MIXED NAMED PAEONIES (Separate Colors)

If by Parcel Post add postage at Zone rates. Weight $\frac{1}{2}$ lb. each; 5 lbs. per dozen. 3-5 eyes, division roots.
Double White Double Crimson Double Rose Pink Double Mixed Colors
Price: 30c each; \$3.00 per doz.

GERMAN IRIS—Fleur de Lis or Flag Iris

German Iris are all sun-lovers and delight in a well drained situation. They almost outrival the Orchid in delicacy and richness of coloring. They are splendid for beds, border or front of shrubbery. Plant in bold groups for best effect. Avoid planting too deep, barely covering the rhizomes (creeping root stems) being quite sufficient.

"S" refers to the three standard or upright curling petals. "F" refers to three falls or drooping petals. We offer the following choice collection:

Charles Dickens. "S" blue; "F" dark blue, suffused and veined dark purple.

Mars. "S" light yellow, blotched and veined violet.

Penelope. "S" pure white; "F" white, veined purple crested yellow.

Pharaon. lilac, very fine.

Queen of Gypsies. "S" lavender bronze; "F" brown, white and purple veined.

Queen of May. "S" lilac pink; "F" lilac, blended with white, distinct, 30 inches.

Trautleib. "S" and "F" delicate pink, 43-30 inches.

All colors mixed.

Price: Any of above 10c each; \$1.00 per dozen. Weight, 6 lbs. per 100.

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 nice, strong field-grown plants at prices given below. If by mail, add 5c each for postage.

Boston Ivy

Ampelopsis Engelmannii (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 withstands drought and heat well. Each 50c.

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 situation. Each 40c.

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 50c.

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, each, 10c.

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 50c.

WHERE THE PRICE IS:

20c each, we supply ten for.....	\$1.75
25c each, we supply ten for.....	2.25
30c each, we supply ten for.....	2.75
35c each, we supply ten for.....	\$3.00

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.

CLEMATIS

Paniculata. 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.

Jackmanni. This is the best of all the large flowering varieties. Color a deep violet purple. A strong rampant grower, succeeding well in all localities. Each 50c.

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 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 50c.

Japonica Halleana (Hall's Japanese). Almost evergreen sort; flowers pure white, changing to yellow July to November. Each 35c.

Trellis of Clematis Paniculata

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 Thunbergiana or Jack-and-the-Bean-Stalk Vine). 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 50c.

40c each, we supply ten for.....	3.50
45c each, we supply ten for.....	4.00
50c each, we supply ten for.....	\$4.50

Five or more at the ten rate. If by mail, add 5c each for postage.

CLIMBING PLANTS—Continued

Madiera 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. Postpaid. Each 15c.

WISTARIA

Chinese Wistaria (*Wistaria Chinesica*). 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 the above with pure white flowers. Each 50c.

Chinese Wistaria (on Porch)

HARDY ORNAMENTAL AND FLOWERING SHRUBS

There is nothing which so quickly, and for so little cost, adds 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, 2-year-old field-grown plants, one to three feet high, depending on the variety, some making higher growth than others.

If to be shipped by Parcel Post, add 10c each for postage. Each specimen will be properly labeled and packed for shipping. Plants reach customers in better condition when shipped by express.

(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.

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.

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.

Meehanii. Variegated leaves; single lilac-pink flowers. 75c each.

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 ideal lawn tree for a small yard. 60c 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 shrubbery. 50c each.

Flowering Currants (*Ribes*). (B) Red-Flowering (*R. Sanguineum*). Blooms abundantly, May, bearing bright pink, almost carmine flowers. 50c each.

Cytisus Laburnum (*Golden Chain*). A native of Europe which takes its name from the long drooping racemes of yellow flowers which appear in June; 2 to 3 feet. 50c each.

Cydonia (*Japan Quince*). (B) Japonica. A single shrub on the lawn is very attractive; brilliant crimson flowers, among the first in spring. Valuable or ornamental hedges. 50c each.

Deutzia. (B) Hardihood, fine habit, luxuriant foliage and profusion of attractive flowers render this among

Upright Tartarian Honeysuckle

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.

Golden-Leaved Elder. The best of all the colored shrubs. A plant of this bush in a bed, or a border on the lawn, is a conspicuous feature, the foliage being as yellow as gold. 50c 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, 35c each.

HARDY SHRUBS—Continued**FORSYTHIA (Fortunei) (Golden Bell) (B)**

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 50c.

HYDRANGEA (Paniculata Grandiflora) (B)

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 50c.

LILACS (True Syringa) (B)

Alba Grandiflora. Flowers pure white and very fragrant. 50c each.

Charles X. A strong, rapid-growing variety, with large, shining leaves; trusses large, of a reddish purple color. Each 60c.

Persian Purple. Flowers are deep purple, and their familiar fragrance is loved by all. Easy culture and grow in any soil. Each 50c.

Mock Orange (Philadelphus Cor.)

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 one-year-old shrubs at 50c per 10; \$3.00 per 100. Strong two-year-old shrubs at 75c per 10; \$5.00 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 50c.

Common (Sterilis). Too well known to need description. Each 50c.

Japan Snowball

SPIREA (B)

Some varieties of this class of shrubs are in bloom at all seasons. Some kinds have a riotous extravagance of bloom that renders them very attractive. They are so varied in flower life and growth that the monotony from planting too many of these is impossible. They are hardy and easily grown in all localities.

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.

SYRINGA OR MOCK ORANGE (Philadelphus Coranarius) (B)

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; 3 to 4 feet. Each 50c.

WEIGELIAS (Diervilla) (B)

These shrubs bloom after the lilacs, in June and July. They make a strong growth, erect when young, gradually spreading and drooping into most 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 50c.

Rosea. A beautiful shrub, with rose-colored flowers in May and June; 2 to 3 feet. Each 50c.

Privet Hedges and Archway

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.

Catalpa Bungei

Get your neighbors to co-operate, agree upon some suitable tree, then plant trees of 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, Tulip Trees 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.

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 each.

Excelsior. European Asb. A lofty tree, of rapid growth, with spreading head and gray bark, pinnate leaves and black buds; 8 to 10 feet. Each \$1.25.

BIRCH (Betula)

Cut-Leaved Weeping (Pendula Laciniata). 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. 6-8 ft., \$1.75 each; fine 1-year head.

Speciosa (Western Catalpa). One of the most rapid growers, producing large panicles of fragrant white flowers delicately marked with violet and yellow. Reliable, hardy and extensively planted. 6-8 ft., 75c each; 8-10 ft., \$1.25.

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. 10-12 ft., \$1.50.

Cork Bark (U. Suberosa). Very desirable for streets and avenues; young branches very corky. 8-10 ft., \$1.50.

Huntingdon (U. Glabra Vegeta). Very erect habit; bark smooth; one of the finest specimen and avenue trees. 8-10 ft., \$1.50.

Scotch. A fine spreading tree; rapid grower. 8-10 ft., \$1.50.

ORNAMENTAL TREES—Continued

HORSE CHESTNUT European (*Aesculus Hippocastanum*)

Showy foliage; white flowers in upright panicles. 5-6 ft., \$1.00; 6-8 ft., \$1.50.

LINDEN, American (*Tilia Americana*)

Basswood. Shapely trees, with large, handsome foliage. Flowers creamy white and very fragrant. 10-12 ft., \$1.50 each.

MAPLE (*Acer*)

Ash-Leaved or Box Elder (*Acer Negundo*). A fine, rapid-growing avenue tree; withstands both cold and drought. 8-10 ft., 75c each; 10 for \$7.00; 10-12 ft., \$1.00 each; 10 for \$9.00.

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

Norway Maples (*Platanoides*). 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. 8-10 ft., \$1.50; 10-12, \$1.75.

Sycamore (*A. Pseudo Platanus*). A rapid upright-growing tree, with bright green foliage. Fine for streets and avenues. 8-10 ft., \$1.50 each; 10-12 ft., \$1.75 each.

MOUNTAIN ASH (*Sorbus*)

These very ornamental trees all have handsome foliage turning orange-red in the fall. The scarlet fruits often remain on the branches all winter.

European (*S. Aucuparia*). White flowers followed by brilliant red berries. 6-8 ft., \$1.00 each; 8-10 ft., \$1.25 each.

PLANE (*Platanus*)

Oriental Plane or Sycamore (*P. Orientalis*). One of the finest trees for street or lawn, with fine, straight trunk, handsome symmetrical head and beautiful foliage. 6-8 ft., \$1.00 each; 8-10 ft., \$1.25 each.

While we have quit growing Evergreens such as Colorado Blue Spruce, Pine, Cedar, etc., we are in touch with a reliable source of supply. Should any of our customers wish a number of these, write for prices.

POPLAR

As a class the Poplars grow fast, cost little and are quickly effective.

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. 6-8 ft., 75c each; 8-10 ft., \$1.00 each; 10-12 ft., \$1.50 each.

Carolina Poplar. Of rapid growth. Very desirable when quick shade is wanted. 8-10 ft., 75c each; 10-12 ft., \$1.00 each.

NORWAY MAPLES **ORIENTAL PLANE** **TULIP TREES****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. 2-3 ft., 50c each.

WALNUT (*Juglans*)

English Walnut (*Juglans Regia*). 4-6 ft., \$1.50 each; 6-8 ft., 2.00 each.

FRUIT TREES

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

Average weight of Fruit Trees packed for shipment as an aid to determine carriage charges: The general run of fruit trees, either in bales or cases, average about as follows: 6 to 8 ft., 2 lbs. each; 4 to 6 ft., 1½ lbs. each; 3 to 4 ft., 1 lb. each; 2 to 3 ft., one-half of a lb. each. Grapevines, one-third of a lb. each. Ornamental trees from 6 to 8 ft. and up to 12 to 15 ft., 3 to 6 lbs. each.

FULL DIRECTIONS FOR CARE AND PLANTING FREE WITH EACH ORDER

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

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

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

APPLES

"APPLE IS KING"

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.

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.

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

Prices on all varieties are as follows, freight or express charges to be paid by the purchaser:

	Each	Per 10
Height 6-8 ft.....	50c	\$4.25
Height 4-6 ft.....	45c	3.75

A Thrifty Looking Field of Apple Trees at Our Centerville Nurseries

SUMMER VARIETIES

®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.

Note—Fruit Trees 3-4 feet and 4-6 feet can be sent splendidly by Parcel Post. The average weight packed is about 1 lb. per tree on the small size and 1½ lbs. on the 4-6 feet size.

APPLES—Continued

For Prices See Preceding Page

AUTUMN VARIETIES

✓ **Porter.** Fruit medium; skin pale yellow; flesh crisp, tender, juicy, sharp acid; one of the best for drying. October.

✓ **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 hardiness 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; juicy, pleasant flavor; quality fairly good; good cooker.

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.

✓ **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.

✓ **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; a 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.

✓ **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.

Delicious

✓ **Wine Sap.** An early bearer and very productive; medium round. Smooth, greenish yellow, splashed and striped with red and purple; a great drought resister; thriving on thin soils.

✓ **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.

CRAB APPLES

✓ **Hyslop Crab.** A very popular variety in the west on account of its size, beauty and hardiness; fruit deep crimson, covered with blue bloom. Ripens September.

✓ **Transcendant 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.

APRICOTS

4-6 ft. each 50c; per 10 \$4.00

✓ **Moorepark.** Very large, yellowish green; brownish red on sunny side; marked with numerous specks and dots; most popular variety for northwest states. 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.

Orchardists and everyone else interested in ridding their Orchards, Farms and Gardens of Insect Pests, will find something of remarkable merit, see page 92.

CHERRIES

4-6 ft. each 50; per 10 \$4.25

Reine Hortense. New. Slightly sub-acid; sweeter and much larger than May Duke; small stone. Color beautiful deep red. Ripens in August. By far the best late cherry of the list.

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.

® Winsor. Fruit large; roundish oblong, very firm; good quality; heavy bearer; beautiful dark color, almost black. Very hardy, unexcelled for home or market use.

Napoleon Bigarreau. 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, hardest and best of sweet yellow sorts; ripens end of June.

® "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.

✓ May Duke. Fruit dark red; juicy and rich; almost sweet; one of the most dependable of the Duke class. Ripens in June.

✓ ® Black Orb. Of recent introduction, and is an improvement on Black Tartarian in size, color, productiveness and flavor. Ripens in July.

Yellow Spanish (Bigarreau). Fruit very large, heart-shaped, pale yellow with bright red cheek when exposed to the sun. Flesh firm, juicy and delicious. Ripens late in June.

PEARS

4-6 ft. each 50c; per 10 \$4.25

✓ ® 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 a 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 the Bartlett. Ripens in August.

✓ Seckel. Very small, yellowish brown pear of highest quality; tender, juicy, melting. Ripens in September.

PLUMS

4-6 ft. each 50c; per 10 \$4.25

3-4 ft. each 45c; per 10 \$4.00

✓ 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.

✓ Red Prune. A great early market plum. Medium to

large; deep vermilion-red, with beautiful bloom; very showy; flesh light lemon-yellow, firm, slightly sub-acid, delightful; half cling, 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.

PRUNES

3-4 ft. high 45c each; \$4.00 per 10. 4-6 ft. high 50c each; \$4.25 per 10

Silver. Seedling of the Coe's Golden Drop; tree vigorous and productive; fruit large and superior; excellent for drying or canning. September-October.

® Italian-Fellemborg. Large oval, tapered at both ends; dark purple; flesh greenish yellow; separates freely from the stone; best for drying and market. August-September.

All are good, but when in doubt order varieties marked ®

PEACHES

4-6 ft. 45c each; per 10 \$4.00

⑩ **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.

✓ ⑩ **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

⑩ **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.

⑩ **Dals' 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.

QUINCES

Price, 2-3 feet, each 45c; 3-4 feet, each 50c

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). On 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.

Champion. Fruit very large, fair and handsome. Tree very handsome, surpassing other varieties in this respect, bears abundantly while young; flesh cooks as tender as an apple and without hard spots and cores; flavor delicate, imparting an exquisite quince taste and odor to any other fruit.

CHOICE SELECTION OF SMALL FRUIT

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 except where noted, 2-year-old stock, each 30c; per 10 \$2.25; per 100 \$20.00

Agawam. One of the best red varieties; large; pulp tender; sweet. August.

✓ ⑩ **Campbell's Early—King of American Grapes.** A grape in all respects better adapted to general use in all sections than any other which has yet been grown and tested. 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 a wine grape. Bunches large and loose, berries large, of coppery-red color, becoming purplish when well ripened.

⑩ **Concord.** Well known, reliable, deep purple. An old standby.

Delaware. Bunches small, compact shouldered; small, round; skin thin, light red; flesh very juicy.

Niagara. Vine hardy; unusually strong grower; bushes large and compact, mostly round; light greenish white; semi-transparent, slightly ambered in the sun; skin thin, tough; sweet to center.

⑩ **Moore's Early.** Bunch medium; berry large, round, black, with a heavy blue bloom; vine hardy and moderately prolific. Its large size and earliness render it desirable for an early crop.

Worden. Black, handsome, compact bunch; ripens three weeks earlier than Concord.

⑩ Varieties are especially recommended.

BLACKBERRIES

Early Harvest. Berries uniform, glossy black. Very early.

Ward. Exceptionally sweet and melting, being without core. An enormous yielder. Fine either for home, table or market.

Snyder. This is one of the best blackberries for market in the north, and very hardy. The canes are vigorous and annually productive. The berries are medium in size, very sweet, juicy and of fine flavor. It also lacks the hard core found in many other varieties.

Ⓢ **Dewberry, Lucretia (or Creeping Blackberry).** Con-ceded to be the finest of its class, as early as Early Harvest, and as large as the Erie Blackberry. Superb quality.

Price of above 15c each; 10 for \$1.00; \$7.00 per 100.

RASPBERRIES

Price 15c each; \$1.00 per 10; \$7.00 per 100. If by mail add 10c per 10 for postage.

Ⓢ **Cuthbert.** A strong growing, hardy variety, stands northern winters well; berries very large, firm; can be shipped long distances to market; flavor is sweet, rich and luscious. The best late red raspberry.

Loudon. The large berries are of a beautiful rich, dark crimson color, of fine flavor and excellent quality. Berries are very firm and will stand shipping long distances. Berries ripen with Cuthbert. One of the heaviest yielders.

Ⓢ **Gregg.** Fruit very fine and covered with bloom. Gregg has been the leading market variety all over the country. Best for evaporating of any variety, as it is said to give more pounds to the bushel than any other kind. A good all-round black-cap. Gregg will not disappoint you. Well and favorably known in every fruit district.

Cuthbert Red Raspberry

CURRENTS

Price: Large 2-year-old roots, 20c each; 10 for \$1.50; \$12.00 per 100. If by mail add 10c per 10 for postage.

Ⓢ **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 a superior variety.

Ⓢ **Utah Black (Native).** Black, rich, fine for jellies and wine. Productive and vigorous.

✓ **Perfection.** It is a beautiful currant; the color is a particularly bright red. A valuable feature is its long stem from the bush to the first berry, making it easy to pick without crushing the fruit. It is a great bearer; rich, mild, sub-acid, plenty of pulp with few seeds. Less acid and of better quality than any other large currant in cultivation. 20c each; \$2.00 per doz.; \$15.00 per 100.

GOOSEBERRIES

2-year-old Storing Plants, 25c; \$2.00 per 10; \$15.00 per 100. If by mail add 10c per 10 for postage.

✓ **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; smooth, bright red color and of excellent quality.

STRAWBERRIES

All our plants are put up uniformly in bunches of 25 plants each. 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.

NEW EVERBEARING STRAWBERRIES

Prices of Everbearing varieties: 25 plants, \$1.25; 50 plants, \$1.75; 100 plants, \$3.00; 1000 plants, \$20.00

Everbearing Strawberries, that yielded 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.

Caution—To obtain the largest size and finest quality of fruit in the fall, keep flowers picked off until about the first of August.

Americus. Large size and wonderfully productive. Plants are strong, healthy and deep rooters. The fruit is medium to large in size, very firm, uniform shape, bright red, and has the native strawberry flavor.

Progressive. Not so large as Superb, and not quite so good quality, but of good size, smooth, good red color. The plants are vigorous and healthy, blooms are well protected by the foliage, giving good pickings for a long time.

✓ **Superb.** The best and most profitable of the fall bearing sorts, also yielding 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.

STANDARD VARIETIES

Prices of Standard varieties: 25 plants, 75c; 100 plant s, \$2.00; 1000 plants, \$15.00

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.

Klondike (Midseason). The fruit is conical, rather long, regular in outline, bright red and glossy. Good yielder.

Ⓢ Varieties are especially recommended.

Kellogg's Prize. This is one of the heaviest fruiting late varieties ever originated. The berries are not only borne in great quantities but are very large and most beautiful, and their quality is ideal in every respect. It has no preference as to locality but produces prolifically everywhere.

✓ **Parsons Beauty.** Makes a fine, large plant, very free from rust, exceedingly productive. Berries large, bright red, conical, firm, a good shipper.

POULTRY SUPPLY DEPARTMENT

CASH MUST ACCOMPANY ORDER

All goods delivered F. O. B. Salt Lake City, without extra charge. If wanted by mail please refer to Front Cover to ascertain cost by Parcel Post to your postoffice and remit accordingly. Wherever possible we publish the exact weight of each article packed for shipment, so that express, freight or postal charges may be easily determined.

HELP YOUR COUNTRY!

In a proclamation to the people of the United States President Wilson said:

"These, then, are the things we must do and must do well besides fighting—the things without which mere fighting would be useless. We must supply abundant food for ourselves, for our armies and for our seamen—not only for them, but also for a large part of the nations with whom we have now made common cause—in whose support and by whose side we shall be fighting. Everyone who helps greatly to solve the problem of the feeding of the nations puts himself or herself in the ranks of those who serve the Nation."

AN EXTRA 100,000,000 LBS. OF POULTRY REQUIRED

In addition to above from the President of the United States, the Department of Agriculture at Washington have made it plain that an additional one hundred million pounds of poultry must be produced this year if we hope to keep ourselves and our allies supplied with meat.

ARE THERE ANY CHICKENS IN YOUR BACK YARD?

Every little helps. Think what it would mean for just ten thousand people to raise ten chickens a piece—400,000 pounds of meat—to say nothing of the eggs.

On this subject Prof. J. C. Graham, of the Mass. Agricultural College in a recent bulletin writes as follows:

"Never before * * * has the necessity been so great as at present for making use of the back-yard in helping to reduce the high cost of living. One of the best ways of doing this is to keep a small flock of hens, or raise a few chickens. Such flocks have long been considered very profitable indeed, due to the fact that much of their feed comes from garden refuse and from the house in the form of table scraps. A profit of from \$2 to \$3 a hen is the usual thing but it is not uncommon to find flocks that yield a profit of from \$4 to \$6 per hen. * * * A coop 6 ft. by 8 ft. or 8 ft. square is plenty large enough for a flock of ten or a dozen hens, and these coops need not be expensive."

THE POULTRYMAN'S CHANCE FOR PROFIT AS WELL AS PATRIOTISM

Mr. George Cugley, President of the Buckeye Incubator Co. and perhaps one of the best authorities on the Poultry situation in America, had this to say in addressing a recent convention of agriculturists:

"As a member of the Committee on Federal Aid in the American Poultry Association, and therefore perhaps more conversant with the actual situation than others, I want to say that you will make a greater profit on the poultry you raise during the next twelve months than you ever made on any you may have raised before, and I say this in spite of the high prices of feed and other supplies that your chickens may consume. For every extra dollar that goes out, you will see two dollars coming back, because we are going to see chickens and eggs selling for prices that we have never dreamed of before."

Of all the years in history this should be the most active in the poultry industry. And so we say, with all sincerity, that we believe it will pay—and pay handsomely—to keep poultry now. Those who have but limited space should maintain small flocks; those who know how to get results, should increase their commercial flocks as rapidly as possible. If the money doesn't interest you, do this as a matter of patriotism because your country needs your help. If profit is the impelling motive, keep poultry and get your share of the war profits.

But under no conditions tolerate half-way measures in poultry management. Work to secure maximum production. The greatest national good and the greatest financial gain both spring from this common source.

To the end that the Best Line of Poultry Supplies and Equipment shall be at the "finger ends" of the new beginner or the old operator who is enlarging, we have greatly increased our stocks of Foods, Remedies and Accessories as well as secured the General Agency for this region, of the two American Leaders, the Buckeye and Queen lines of Incubators and Brooders. So this year as in the past we are "Johnny on the Spot" with Quantity, Quality, Bottom Prices and the right kind of service. Let us help you solve your problems in this line.

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 days' approval—TO BE RETURNED FOR EXCHANGE AT THEIR EXPENSE if they don't do all they claim.

Buckeye Incubator, 110-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

Size—	Crated Weight, Pounds.	Egg Capacity	Price
No. 14—Style E	55	65	\$12.00
No. 15—Style H	75	65	16.00
No. 16—Style E	85	120	20.00
No. 17—Style E	125	210	26.50
No. 1—Standard	110	120	26.50
No. 2—Standard	135	175	32.00
No. 3—Standard	200	250	43.00
No. 4—Standard	230	350	51.50
No. 5—Standard Mammoth	325	600	76.50

ALL MACHINES SOLD UNDER THIS GUARANTEE

This Buckeye Incubator is guaranteed to hatch every hatchable egg, and we further guarantee the perfect working of all its mechanical parts.

Should this incubator fail to fulfil our guarantee in any particular, it may be returned to us at our expense (via freight) any time within 40 days after its receipt, and we will send the purchaser a new incubator in exchange.

(Signed) THE BUCKEYE INCUBATOR CO.

BUCKEYE PORTABLE BROODERS

GUARANTEED to raise more chicks and bigger chicks than any oil-burning brooder on the market.

GUARANTEED to furnish an abundance of heat in any temperature down to freezing.

GUARANTEED to be absolutely free from all gases and odors whatsoever, and to provide a circulation of pure, fresh air every minute in the day.

SOLD ON 30 DAYS' APPROVAL AND YOU WRITE YOUR OWN MONEY-BACK GUARANTEE

THREE SIZES

No. 20—Diameter 19 inches, capacity 60 chicks.....	\$ 8.50
No. 21—Diameter 22 inches, capacity 100 chicks.....	10.50
No. 22—Diameter 30 inches, capacity 150 chicks.....	13.75

THE "STANDARD" COLONY BROODER

No. 18

Complete with
42 inch Canopy

CAPACITY
up to 500 Chicks

\$19.50

No. 19

Complete with
52 inch Canopy

CAPACITY
up to 1000 Chicks

\$22.50

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

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 for thirty days—and

WRITE YOUR OWN MONEY-BACK GUARANTEE

No questions asked if the Standard Colony Brooder does
not suit you in every way

Used by Over 11,000 Large and Small Breeders

Ask for illustrated "Standard" Catalog or
send us your order and your own guarantee

"SECURITY"

PORTABLE BROODERS

The Oil Burner That Broods
.....Like a Coal Burner.....

Capacity 100 to 150 Chicks

PRICE :: :: :: \$13.50 EACH

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 is 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.

QUEEN HOT WATER HEATING

The Queen System of hot water heating prevents the drying-out tendencies found in hot air incubators and provides a soft, uniform heat over every part of the egg chamber—a heat that is most natural for the hatching eggs. The circulation of water through the radiator prevents any moisture being added or taken away from the eggs. When it becomes necessary to remove the lamp, the hot water circulating through the radiator maintains an even heat within the egg chamber without the slightest variation.

BUILT OF CALIFORNIA REDWOOD

Both Queen walls are built of genuine California Redwood, which is unusual in these days of imitation and cheap substitution. Redwood does not absorb the odor from the hatching eggs. Cheaper woods and pasteboard lining in iron and tin machines, retain the odors, to weaken and kill the hatching chicks.

SIZES AND PRICES F. O. B. SALT LAKE CITY

No. 0— 60 egg size.....	\$12.00	No. 25— 550 egg size.....	\$ 76.50
No. 1— 85 egg size.....	19.00	No. 35— 750 egg size.....	155.00
No. 2—135 egg size.....	26.50	No. 45—1000 egg size.....	135.00
No. 3—180 egg size.....	32.00	No. 55—1500 egg size.....	210.00
No. 4—275 egg size.....	43.00	No. 65—2000 egg size.....	275.00
No. 5—400 egg size.....	51.50		

Ask for Free Catalog

As only a limited number of machines are carried in stock at our Salt Lake warehouses, it is well to get your order in early and allow ample time for slow freight service that might delay getting order direct from the factory in time for your needs.

QUEEN BROODER STOVES

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 to 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.

SUPERIOR QUEEN GRATE

The grate in the Queen stove is the rocker type and strikes the fire at four points. This is far superior to any draw center or shaker grate, because it cleans the fire thoroughly, and by striking at four points will break up and remove all clinkers.

COLLAPSIBLE HOVER

The hover used on Queen stoves is collapsible and made of four pieces of galvanized iron. This hover comes knocked down, with holes punched and stove bolts attached, ready for putting together. By being collapsible, it enables you to save room when storing, and lessens the danger of damage, when not in use.

BURNS ANY KIND OF FUEL

The Queen stove burns any kind of fuel with equally satisfactory results. We recommend chest-nut 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. No. 1—Chick size, \$19.50; No. 2—Chick size, \$22.50.

As prices fluctuate greatly during these unsettled times, large users of Poultry and Stock Foods should send for quantity prices, which will be cheerfully quoted by return mail.

LARROWE'S DRIED BEET PULP

A TRULY WONDERFUL FEED

Larrowe's Dried Beet Pulp is the pure shredded root of the sugar beet, with only the sugar and water extracted; dried, sacked and ready for shipment in one hour from the time the beets enter the factory. It is clean, healthful, succulent, and cannot ferment or sour if kept in a dry place.

It improves the health and increases the flow of milk. It furnishes more succulence than silage, greater digestibility, an abundance of carbohydrates—and it is just what is needed with alfalfa to make a perfectly balanced ration.

It is uniform in color; never blackened or burned. It is light and bulky; swells to about six times its original bulk when moistened. Cattle take to it ravenously.

Write for booklet—"Profitable Feeding," with feeding instructions and information

Price 5c per lb; 6 lbs. 25c; 100 lbs. \$2.75.

P.-W.'s CHICK MANNA

The "Acme" of Dry Food for 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 upwards of 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 every need, except for water, of the baby chicks from one day to six weeks. With P.-W.'s Chick Manna there is no mixing, no mashies, 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. 4 lbs. for 25c; 20 lbs. for \$1.00; 50 lbs. for \$2.25; 100 lbs. for \$4.25.

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 fed as much at a time as they eat up clean, and do not over-feed. Keep clean, fresh water before them all the time.

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 \$4.25; 10 lbs. 60c; 50 lbs. \$1.50.

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. 4 lbs. for 25c; 25 lbs for \$1.20; 50 lbs. for \$2.25; 100 lbs. for \$4.00.

See Dried Beet Pulp, a wonderful food for poultry.

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. 1 lb. 10c; 25 lbs. \$1.75; 50 lbs. \$3.00; 100 lbs. \$5.75.

BLOOD MEAL—DEODORIZED

An excellent food to make chicks grow rapidly, and particularly beneficial for fowls during the moulting season. It is recognized by leading poultrymen to be a great egg producer, especially during the cold weather. Always mix Blood Meal with other foods in the proportion of one part meal to fifteen of shorts or bran. One heaping teaspoonful a day fed in a mash for a dozen hens will make an increase of eggs that will be surprising. Per lb. 10c; 25 lbs. \$2.00; 50 lbs. \$3.50; 100 lbs. \$6.75.

See Front Cover for Parcel Post Charges.

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 any time you will submit 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.

COTTON SEED MEAL

The economical Stock Food for the Rocky Mountain States. Farmers everywhere will soon be unable to get along without it. The value of cotton seed meal has been recognized by agricultural authorities for some time and large quantities of it are exported annually to Europe where the farmers, especially those in Denmark, are also aware of its usefulness. This meal is very rich in protein and it is usually considered that its feeding value is at least twice that of corn. Price: 10c per lb.; 10 lbs. 60c; 50 lbs. \$2.25; 100 lbs. \$4.00.

Write for prices on ton and car lots. We are in position to give rock bottom prices as we are Western Distributors and handle it in large quantities.

JENSEN'S POULTRY MIXTURE
OR ECONOMY HEN FOOD

This 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. 100-lb. bag \$3.75.

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. 15c; 10 lbs. \$1.25; 50 lbs. \$5.50; 100 lbs. \$10.00.

GROUND OIL CAKE

It is the greatest flesh former, milk and butter producer in use, and on a fair test will prove to be the most economical cattle food a farmer can use; and it not only increases the value of his land, but it keeps his stock in excellent condition, and at the same time increases the quality and richness of milk. To poultrymen it is likewise of value in keeping fowls in good health. Price fluctuates. Present price: 1 lb. 10c; 25 lbs. \$1.25; 50 lbs. \$2.25; 100 lbs. \$4.25.

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. 1 lb. 10c; 50 lbs. \$3.00; 100 lbs. \$5.25.

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 20c; in 50-lb. bags \$2.25 per bag; per 100 lbs. \$4.00.

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. 8 lbs. 25c; 50 lbs. \$1.00; 100 lbs. \$1.50.

Specify size wanted when ordering.

CRUSHED OYSTER SHELL
(Belle Brand)

This is a 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. 8-lb. package 25c; 50-lb. sack \$1.00; 100-lb. sack \$1.75.

Ask for price on large quantities.

MAMMOTH RUSSIAN SUNFLOWER SEED

Splendid for parrots and poultry. 15c per lb.; 2 lbs. 25c.

GRAINS, SEEDS, ETC.

For Poultry and Pigeons

Write or telephone for special prices on the following:

White Wheat	Bran
Red Wheat	Canary Seed
Kaffir Corn	Flax Seed
Whole Corn	Hemp
Cracked Corn	Millet
Rolled Oats	Field Peas
Feeding Barley	Sunflower Seed

We invite correspondence and shall be pleased to quote market prices at any time, as prices on above fluctuate. We handle in large quantities and are in a position to sell at bottom prices. Weight and quality always guaranteed.

BIRD FOOD

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, 15c, postpaid.

MIXED CANARY BIRD SEED

Contains only pure, wholesome seeds in just the right proportion to promote health, vigor and song. 1-lb. carton 15c.

BIRD SEED

Not for Planting. Special Prices in Quantity.

Canary—Best Re-cleaned	Per lb. 20c
Hemp	Per lb. 15c
Millet	Per lb. 15c
Rape	Per lb. 15c
Cuttle Bone—Large Bone	2 for 5c

If by mail, see front cover for Parcel Post charges.

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., 45c; ½-gal., 75c; 1 gal., \$1.25.

LEE'S GERMOZONE—FOR POULTRY

Never fails to cure Bowel Complaint, Cholera, Roup, Colds, etc. Don't be without it. Price: Liquid, 5-oz. bottle, 25c; liquid, 12-oz. bottle, 65c; 32-oz. \$1.25; tablets, package, postpaid, 65c.

LEE'S BEST CONDITIONER STOCK FOOD

Promotes good health, digestion and assimilation. Put up in 30c and 90c packages; 25-lb. pails, \$3.00.

LEE'S WHITE DIARRHOEA REMEDY

The best medicine for this dangerous disease of little chicks. 12-oz. bottle, 50c.

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., 30c; 5½-lb. pkg., 60c; 12-lb. pail, \$1.50; 25-lb. pail, \$3.00.

LEE'S LOUSE POWDER

For direct application to body of fowl. 1-lb. can, 25c.

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.

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, dropping 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, \$2.50; 12-lb. pail, \$1.25; packages, 50c and 25c.

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 turkeys, geese, ducks, pigeons and guineas—insuring quick growth and keep them free from disease.

More work out of your horses. More milk from your cows, fatter hogs—these are a few of the benefits which come from using

PRATT'S ANIMAL REGULATOR

Always sold on a guarantee that it will satisfy you or money back.

25-lb. pails, \$3.00, are popular with our customers. Packages at \$1.00, 50c and 25c.

Get prices on 50-lb. and 100-lb. sacks.

Pratt's White Diarrhoea Remedy.....50c and 25c
Pratt's Powdered Lice Killer.....50c and 25c
Pratt's Roup Remedy Tablets or Powder..\$1.00, 50c and 25c

DRINK FOUNTS AND FEEDERS

McCandlish Model Chick Feeder

THE McCANDLISH MODEL CHICK FEEDER

It is particularly 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 5 cents.

Length, 12 in.; weight, 8 oz.—Price.....	35c
Length, 18 in.; weight, 10 oz.—Price.....	50c
Length, 24 in.; weight, 12 oz.—Price.....	60c
Length, 30 in.; weight, 16 oz.—Price.....	75c

MASON JAR AUTOMATIC FEEDER AND FOUNTAIN

Any size Mason jar fits it. Will feed water, grit, shell, etc., and is the most sanitary fountain on the market, as it is made of glass and easily cleaned; and you can always see just how much feed or water it contains. Feeder, without jar, weight 2 ozs. Price, 15c; \$1.50 per doz.

GALVANIZED IRON DRINKING FOUNTS

Are well made of heavy galvanized iron. In two sizes, 1½ qt., 35c; weight ¾ lb.; 3 qt., 50c each; weight 1½ lbs.

THE “ALL-RITE” SANITARY FOUNTAIN AND FEEDER

Is designed especially to furnish the chicks with water that will make them thrive. It is hung up out of the dirt and litter. Chicks cannot possibly foul it; they cannot get into it to get wet. It feeds water or grit, grain, mixed chick feed, etc. It is easy to fill. Simply snap out the bottom part, fill the Mason jar, snap the bottom part on again and invert. There is no need of removing the jar from the wire holder. Holds a quart or two-quart jar.

Prices, 15c each, 2 for 25c. Weight, 3¼ lbs. per dozen. We do not include cans or jars with the “All-Rite.” A two-quart fountain holds sufficient water, grit or grain for fifteen hens.

MOE’S LINE OF USEFUL ACCESSORIES FOR POULTRYMEN

MOE’S STAR JAR FOUNTAIN AND FEEDER

TO SNAP ON A MASON JAR

Patent Pending
One Size Only.....25c

REPLACE BOTTOM TURN OVER THEN READY FOR USE

MOE’S TRIPLE COMPARTMENT GRIT AND SHELL BOX

LIFT COVER TO FILL

No. 9 has 3 compartments Price, 75c Each

WHEN FILLED FOWLS CAN NOT HOOD GRIT OR SHELL OR CHARCOAL COMBINATION OUT

MOE’S NEVER CLOG AND WASTE PROOF HOPPER

RAISE COVER AND FILL FROM TOP

Patent Pending

No. 35—12-qt.....\$0.95
No. 36—18-qt..... 1.50
No. 37—36-qt..... 2.00

WHEN FILLED FEED CAN NOT CLOG AND ALL WASTE IS PREVENTED

MOE’S SANITARY BROODER FOUNTAIN

TURN OVER AND REMOVE BOTTOM TO FILL

No. 0—1-qt. Cap...35c
No. 5—1-gal. Cap.85c

REPLACE BOTTOM TURN UPRIGHT READY FOR USE

MOE’S ROUND BABY CHICK FEEDER

SLIDING COVER MAKES FILLING EASY

Patented

No. 11— 8 Holes...20c
No. 12—12 Holes...30c

WHEN FILLED A FEEDS PROTECTED FEEDING ACCORDING TO A NUMBER OF CHICKS

MOE’S CLIP AND PUNCH

AS A POULTRY PUNCH

One Size Only.....25c

AS A CIGAR CLIPPER

MISCELLANEOUS SUPPLIES

LEG BANDS FOR POULTRY

No. 1, for Bantams and small Mediterranean females, etc. No. 2, for ordinary Mediterranean and Pit Game females, etc. No. 3, for Mediterranean males, American females, Pit Game males and French females, Turkey hens, etc.

Leader Adjustable. 12 for 20c; 25 for 35c; 50 for 60c; 100 for \$1.00.

Smith Scaled Stock Numbers. 12 for 25c; 25 for 50c; 60 for \$1.00; 100 for \$1.25.

Sealers. Plain, 50c.

SPIRAL 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, 20c; 25 bands, 35c; 50 bands, 60c; 100 bands, \$1.00. Pigeon and day-old chick sizes: 12 bands, 15c; 25 bands, 30c; 50 bands, 50c; 100 bands, 75c.

DOUBLE CLINCH LEG BAND

This is one of the best and most popular bands on the market. A favorite among poultry and turkey raisers on account of its security. 12 for 15c; 25 for 30c; 50 for 50c; 100 for 75c... Postpaid.

MODEL POULTRY MARKER

This punch is accurately fitted for cutting a clean hole and will not mutilate the web, as many other punches do. It is nickel plated and makes an attractive tool, and is one which just fits the hand, making it easy to hold and operate.

Price, 50c; postpaid, 60c.

EYRIE EGG BASKETS

Are the strongest, most 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, 20c each; second size, 30 eggs, 30c each.

PAPER EGG BOXES

Intended for use in delivering eggs to private families. If you have a "select" egg trade, you should use this box. They ship "knocked down" at very low rates. Weight 12 lbs. per 100.

Prices: 1 dozen size, 20c dozen; \$1.25 per 100; \$10.00 per 1000. Sample box by mail, 5c.

CANARY BIRDS

We are always able to supply guaranteed singers of the following celebrated stock: St. Audreasburg Rollers from \$15.00 to \$20.00; Hartz Mountain Singers from \$8.00 to \$10.00.

Delivery charges to your express office will not exceed \$1.00.

CANARY BIRD CAGES

BRASS CAGES

\$3.50 to \$5.00 Each
Depending on Size

JAPANNED CAGES

75c to \$2.50 Each
Depending on Size

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.

Tycos (incubator thermometer)	\$0.70
Tycos (incubator thermometer with legs)	70
Tycos (certified incubator thermometer)	 1.00
Tycos (brooder thermometer)	65
Tycos Hygrometer	 1.50

PORCELAIN NEST EGGS

We handle only the best grade of glass eggs; strong and durable. 2 for 5c; 25c dozen. Weight, 1/4 lb. per dozen.

INCUBATOR AND BROODER LAMPS, ETC.

Incubator lamp, complete with chimney	\$1.75
Incubator lamp chimney	40
Incubator lamp burner	90
Brooder lamp complete	 1.75
Brooder lamp burner	90
Brooder lamp chimney	40

Lamp Wicks for incubator or brooder lamps. State size of burner and kind of lamp you have, or send small piece of old wick.

Price, postpaid, 3 for 10c; dozen, 25c.

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.

Orchard King

Happy Thought. Price	\$2.50
Kansas. Price	 3.00
Orchard King. Price	 3.00

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, \$1.50.

SPRAYING MATERIALS AND DEVICES

Standard Pump with "Potato" Extension
and No. 3 Nozzle Attached to Knapsack

STANDARD SPRAY PUMP

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 \$5.00. Weight, 3½ lbs.

For Knapsack. Price \$2.50. Weight, 5½ lbs.

Extension Rod. Price \$1.00.

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 60c. Weight, 1 lb.

P.-W.'s Handy Sprayer

CONTINUOUS ATOMIZER
(Auto Spray)

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.

Price: One quart size, brass tank, \$1.00 each.

IT KILLS
Erado
WEEDS

COMPRESSED AIR SPRAYER (Auto Spray No. 1D)

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.

Price, \$5.50 each.

AUTO SPRAY DOUBLE-ACTION SPRAY PUMP

This pump very much resembles the Standard Spray Pump as shown above. 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, \$4.50.

Knapsack or galvanized iron reservoir, \$2.50.

Extension rod, \$0.50.

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.

Ant Exterminator (Watch It Get 'Em). A non-poisonous powder, if scattered about their haunts or runs, will kill or drive away ants from lawns, etc. Boxes, 25c and 50c sizes.

Black Leaf "40." An economical and powerful nicotine extract. Full directions for use given with each order. Price: 1 oz., 25c; ½ lb., 75c; 2 lbs., \$2.50.

Cow Ease 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 0.50 from 10 to 20 per cent more milk. Price per gallon, \$1.25; half gallon, 75c each. quart, 45c.

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. 1-lb. package 50c; 5-lb. package \$2.00.

Lime-Sulphur. The best remedy for San Jose scale. One gallon makes ten. Also one of the best summer sprays, as it is an excellent fungicide. When used in summer dilute with 20 to 30 parts water. Per quart can, 40c; gallon, \$1.00; 5-gallon can, 4.50.

Lime Sulphur. Dry Form. 5-lb package, \$1.00; 10-lb. package, \$1.80.

"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 adulterants which might impair its efficiency or injure plants. ¼ lb. cans, 50c; 1 lb., \$1.50; 4 lbs., \$5.50; 8 lbs., \$10.50.

"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, 35c; 144 sheets, \$4.00.

Tobakine Liquid. A nicotine compound for spraying or fumigating. Very effective against green fly, mealy bug, scales and all soft bodied insects. ¼ pint, 75c; ½ pint, \$1.50; 1 pint, \$2.50.

LARGEST AND MOST PROGRESSIVE GROWERS HAVE RENDERED THE VERDICT THAT

"CORONA DRY" ARSENATE OF LEAD

Is the "Standard" for Convenience, Economy, Efficiency for Applications With Water on
Fruit Trees, Potatoes, Etc.

The ease with which Corona mixes in water makes preparing for the spraying application a simple as well as accurate operation. It is unnecessary to make a paste of Corona and pass it through a strainer to know that the lumps are thoroughly broken up. Experience has shown that it is only necessary to shake the proportional amount of Corona into the spray tank and the agitator will quickly make an even and smooth mixture. For example—in spraying for codling moth, fill the spray tank with 50 gallons of water; weigh out one pound of "Corona Dry" and shake it into the tank; a short period of agitation will give a thorough mixture ready to apply on the trees. A measure sufficient to hold the proportional amount of Corona to the water in the tank will do away with the weighing each time.

It is distinctive for quick poisoning—even application and great adhesiveness.

Its purity and unusual chemical activeness give it highest poisoning power.

Its fineness of subdivision and great suspension properties not only make "Corona Dry" cover more thoroughly, but cause it to adhere to the foliage longer.

One pound of "Corona Dry" will do the work of three pounds of paste and do it better.

It can be kept indefinitely—will not freeze, dry out, cake or lose its strength.

"Corona Dry" contains no water, therefore there is no shrinkage, seepage or evaporation.

It is pure, containing nothing but Lead Oxide and Arsenic Oxide. Every package contains full net weight.

Ask for the Corona Spray schedule.

"CORONA DRY," THE UNIVERSAL INSECTICIDE

For the Home Orchard and Kitchen Garden, when used as a dusting application, will rid your place of bugs and worms just as it does for 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.

PREVENT INSECT PESTS ON VEGETABLES, FRUITS, FLOWERS, SHRUBS AND 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 the home garden, small and large fruits, flowers and ornamental trees and shrubs. Kills all leaf-eating insects on ornamental and fruit trees. It is safe to use and will not "burn" foliage.

BEST FOR POTATO BUGS

Superior to Paris Green because it covers the plant much 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 with Hand Duster.

"Corona Dry" kills Corn Ear Worms, Currant Worms and dozens of other pests.

Price: ½-lb. package, 40c; 1-lb. package, 70c; 5-lb. package, 65c per lb.; 10-lb. package, 60c per lb.; 25-lb. drum, 50c per lb.; 50-lb. drum, 47c per lb.; 100-lb. drum, 45c per lb.

SEND FOR CORONA BOOKLET, "GARDEN PESTS AND THEIR CONTROL."

CORONA DUSTING SULPHUR

The most common fungus diseases that annoy the gardener and orchardist are Early Blight on potatoes, Scab on apples and pears, and Brown Rot on peaches. 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.

CORONA HAND DUSTER

"Corona Dry" and other Powders for Dusting Applications 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, \$2.50 each.

FERTILIZERS

SILTAKA

Composed of the fertile ingredients of fertilizing substances. Nature's fertilizing products compounded and refined. Genuinely guaranteed—positively chemicalless. Contains no weed seeds. Odorless. Keep dry until used.

Directions for Using. For New Lawn use one pound to square yard. For Old Lawn use two pounds to square yard. For Shrubbery and Trees, use 1 to 2 pounds to each, depending on size.

Per lb, 5c; per 100 lbs., \$2.25

"STERLINGSWORTH" 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 25c, postpaid. Small or trial size contains 30 tablets (sufficient for 10 plants three months). Price 10c, postpaid.

P.-W.'s PHOSPHATE LAWN DRESSING ODORLESS—NO WEED SEEDS

Just the essentials that promote a vigorous healthy growth, giving the desired dark rich green appearance, can be used at the time the seed is planted and later as a top dressing. One hundred pounds is sufficient for an ordinary city lot, and is far more effective and less objectionable than stable manure. Remember, it contains no weed seeds. When used as a top dressing it is best to make several light applications about two weeks apart.

Price: 10 lbs., 50c; 25 lbs., \$1.00; 50-lb. sack, \$1.75; 100 lbs., \$3.00.

WIZARD FERTILIZER THE WONDERFUL LIFE GIVER

Plants, Flowers, Trees, Shrubs, Vines, Lawns, Etc.

In Wizard you have the latest scientific discovery in plant food, something which gives results, something that astonishes.

Close and painstaking study for years has enabled the manufacturer to give you a meritorious, odorless, immediate and lasting result in fertilizer; saving you time, labor, expense and trouble.

Guaranteed Analysis of WIZARD is Register No. 68: Nitrogen (from Nitrates), 6 per cent; Phosphoric Acid, 9 to 10 per cent; Potash (from Potash Actual), 5 per cent.

Derived from nitrates, phosphates, sulphate of potash, and other plant food elements, the combination of which makes it the wonder it is.

One 25-lb. bag is equal to 100 lbs. of the ordinary chemical fertilizer. Full directions with each order.

Price: 25-lb. bag, \$2.25; 2-lb. package, 35c.

FERTILIZE WITH THE AIR BY USING WESTROBAC ACCLIMATED SOIL BACTERIA

Best for the West—Bred in the West

By the use of WESTROBAC you supply your soil with its most essential constituent for successful plant growth—nitrogen.

The continued cropping of your fields is bound to decrease your supply of nitrogen—the most expensive of all plant foods to replace by the use of artificial fertilizers.

WESTROBAC affords you a practical, cheap and efficient means of replacing your soil nitrogen by nature's method.

Over each acre of land there are about 30,000 tons of nitrogen. Your soil and plants can be made to avail themselves of this vast amount of nitrogen by inoculating the seed with WESTROBAC before planting, at a cost of \$2.00 per acre.

The method of application is extremely simple and the time taken to apply it is negligible. It is a cheap crop insurance.

We breed a separate bacteria for each legume crop and we breed each shipment to order, thus insuring you fresh and virulent cultures.

WESTROBAC is bred for each of the following crops:

Alfalfa, the Vetches, Clovers, Cowpeas, Field and Garden Peas, Sweet Peas and Beans of all varieties.

In ordering care should be taken to specify which kind of seed you wish to inoculate.

Put up in one and five acre and garden sizes.

Prices: From 1 to 50 acres, \$2.00 per acre; from 50 acres and over, \$1.80 per acre; sample tubes, garden size, 25c.

THE NATIONAL CREAM SEPARATOR

CONCEDED TO BE THE SIMPLEST AND YET THE
MOST EFFICIENT MACHINE ON THE MARKET

National No. 24

Capacity
One
Gallon
Per
Minute
Six to
Fourteen
Cows
Nationals
Come in
Four
Sizes

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 kind 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 those first National Separators are in daily use after 20 years of service.

CLEANED IN THREE MINUTES

The superiority of the "National" Cream Separator is due to the marvelous one-piece skimming device, the famous Vortespoor. Just one cylinder-shaped piece of the finest German nickel steel, extremely light in weight and large enough for any woman to put her arm through.

A child can clean it in three minutes without risk of breaking or harming it. Just wipe off with a wet rag inside and out, and rinse in hot water and the job is done.

CAPACITY GOVERNS PRICE OF SEPARATORS

The National is not overrated, as is often the case with other separators (price being governed by capacity), but will make perfect separation of the amount of milk claimed under ordinary conditions and have ample reserve capacity. You can absolutely depend upon the National to handle perfectly the amounts listed for the various sizes. No separator that has to be crowded to handle its advertised capacity will skim perfectly.

Centrifugal force is the big factor in separating cream from milk, but centrifugal force alone is not sufficient and the aid of the wonderful Vortespoor is needed to give the proper amount of skimming surface—this combination gives ideal results. It should be specially noted that no mechanical contrivances are required between the Vortespoor and the feed tube, the globules of butter fat are, therefore, allowed to remain in a whole condition, the highest grade from which the finest butter is made, commanding the best prices. The National bowl, owing to the construction of the feed tube, flushes clean after using, not a particle of cream is lost, and is the simplest and easiest bowl to handle and clean.

Power Attachments can be furnished for all sizes of National Separators. They are easily and quickly adjusted to fit any engine or shaft.

THE NATIONAL CATALOG—40 pages illustrated, gives complete and interesting facts about National Separators. We will gladly mail you a copy on request.

Vortespoor

PRICES

National Separators are made in the following sizes, and all prices are f. o. b. Salt Lake. We have all sizes and can fill orders promptly on receipt.

	Hourly Capacity Pounds	Cows	Shipping Weight Pounds	Price		Hourly Capacity Pounds	Cows	Shipping Weight Pounds	Price
National No. 22.....	325	3 to 8	160	\$60.00	National No. 26.....	600	12 to 30	172	\$80.00
National No. 24.....	500	6 to 14	165	70.00	National No. 28.....	800	20 to 50	190	100.00

THE NATIONAL SEPARATORS are fully guaranteed to be as represented and as perfect as human skill can make them. All parts showing defective material or workmanship will be cheerfully replaced. Read the Guarantee on the special NATIONAL Catalog.

More than double your profits with

Blatchford's Calf Meal

The Complete Milk Equal

THIS is in reality a substitute for milk—and should not be considered as an ordinary "feed" or "meal."

Send for your copy of this booklet

It contains all the elements of milk and when properly prepared becomes a "baby food" for the calves. It is just the thing for weaning the calves as soon as they can be taken away from the cow. Then all the milk may be sold and you get the benefit of the high creamery prices.

It is absolutely the only milk-substitute that contains all the elements necessary for rapid and healthy growth, and the only calf meal that is thoroughly cooked and prepared for digestion.

- Will push calves forward better and quicker than any other food
- 25-lb bag \$2.00
50-lb bag \$3.50
100-lb. bag \$6.75

100 pounds makes 100 gallons of Complete Milk-Equal

Blatchford's Milk Mash

is a perfect milk-substitute for baby chicks from the shell up to three months old—usually raising a hundred per cent hatch—and have no bowel trouble. Indispensable for fattening broilers, roasters and capons, and putting show birds in the pink of condition for poultry shows.

Five pounds raises one chick from the shell up to three months old.

Prices: 25 lbs., \$2.00; 50 lbs., \$3.50; 100 lbs., \$6.75

WEAN your little pigs easily, quickly and safely on our complete milk-equal for pigs.

Blatchford's Pig Meal

contains just the right percentage of vegetable protein, fat, moisture, ash, etc., for this work. It keeps them growing sturdily, rapidly and profitably instead of taking on excess fat.

It grows bone and solid flesh, overents losses of growth and vitality during the critical weaning period and always makes the runts catch up.

50-lb. bag, \$3.50 100-lb. bag, \$6.75
25-lb. bag, \$2.00

ALL the ingredients of Blatchford's Pig Meal are contained in

Blatchford's Lamb Meal

and in addition an extra quantity of sweet honey locust bean, which is particularly attractive to young lambs, quickly prevents scours and setbacks and is a complete equal for the ewe's milk.

When about ten days or two weeks old, lambs will be found nibbling at the feed-trough. Encourage them with Blatchford's Lamb Meal and your profits will increase.

50-lb. bag, \$3.50 100-lb. bag, \$6.75
25-lb. bag, \$2.00

NOTE: Larger and quicker profits to the farmers, stock raisers and poultrymen, are the real reasons for the success of the Blatchford Milk-Substitutes. Satisfied customers have been the cause for the steady annual increase in the Blatchford business for over 35 years in the United States.

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USEFUL TABLES

QUANTITY OF SEED USUALLY SOWN PER ACRE

Clover, Alsike	10 lbs.	Flax for Seed	30 lbs.	Grass, Timothy	20 lbs.
" Alfalfa	20 lbs.	Flax for Fiber	50 lbs.	" Hemp	50 lbs.
" Crimson	15 lbs.	Grass, Bermuda	8 lbs.	Millet	50 lbs.
" Red	15 lbs.	" Brome	40 lbs.	Milo Maise, drills	10 lbs.
" White	15 lbs.	" Ky. blue pasture	50 lbs.	Oats	80 lbs.
Corn, Sweet	14 lbs.	" Ky. blue for lawns	150 lbs.	Peanuts	22 lbs.
" Field	10 lbs.	" Orchard	40 lbs.	Rye	100 lbs.
" For Fodder	150 lbs.	" Rye Perenpasture	40 lbs.	Sorghum, for fodder	150 lbs.
" Kaffir	10 lbs.	" Rye, Peren, lawns	75 lbs.	" For Syrup	10 lbs.
" Broom, drills	12 lbs.	" Rye, Italian	30 lbs.	Vetches, broadcast	50 lbs.
" Kaffir, broadcast	50 lbs.	" Red Top	30 lbs.	Wheat	100 lbs.

For Prices and Description of above see Pages 35-41

For Vegetable Seed Tables see Pages 8-9

WEIGHTS PER BUSHEL

	lbs.		lbs.		lbs.
Alfalfa	60	Corn Egyptian	50	Hemp	44
Artichokes, Jerusalem	60	" Jerusalem	50	Millet	50
Barley	60	" Kaffir	50	Milo Maise	50
Beans, bush and pole	60	" Shelled	56	Onions	57
" Castor	46	" Pop	70	" Sets	32
Broom Corn Seed	46	Flax Seed	56	Peanuts	22
Bran	20	Grass Seed, Blue	14	Peas, round seeded	60
Buckwheat	50	" Brome	14	" Wrinkled	56
Canary Seed	60	" Orchard	14	Potatoes	60
Charcoal	22	" Red Top	14	" Sweet	50
Clover, Red	60	" Rye Grass Perennial	20	Rye	56
" White	60	" Rye Grass Italian	20	Sorghum	50
" Alsike	60	" Timothy	45	Vetches	60
" Japanese	25			Wheat	60

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
3 by 4 inches	522,720	4¾ by 4½ feet	2,150	14 by 14 feet	222
4 by 4 inches	392,040	5 by 1 feet	8,712	15 by 15 feet	193
6 by 6 inches	174,240	5 by 2 feet	4,356	16 by 16 feet	170
1 by 1 foot	43,560	5 by 3 feet	2,904	16½ by 16½ feet	160
1½ by 1½ feet	19,360	5 by 4 feet	2,178	17 by 17 feet	150
2 by 1 feet	21,780	5 by 5 feet	1,742	18 by 18 feet	134
2 by 2 feet	10,890	5½ by 5½ feet	1,440	19 by 19 feet	120
2½ by 2½ feet	6,960	6 by 6 feet	1,200	20 by 20 feet	108
3 by 1 feet	14,520	6½ by 6½ feet	1,031	25 by 25 feet	69
3 by 2 feet	7,260	7 by 7 feet	888	30 by 30 feet	48
3 by 3 feet	4,840	8 by 8 feet	680	33 by 33 feet	40
3¾ by 3½ feet	3,555	9 by 9 feet	537	40 by 40 feet	27
4 by 1 foot	10,890	10 by 10 feet	435	50 by 50 feet	17
4 by 2 feet	5,445	11 by 11 feet	360	60 by 60 feet	12
4 by 3 feet	3,630	12 by 12 feet	302	66 by 66 feet	10
4 by 4 feet	2,722	13 by 13 feet	257		

TABLE OF DISTANCES FOR PLANTING TREES

Apples, Standard, 30 to 40 ft. each way.	Plums, 16 to 18 ft. each way.	Goosecherries, 3 to 4 ft. each way.
Apples, Dwarf, 15 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.
Pears, Dwarf, 15 ft. each way.	Quinces, 12 ft. each way.	Strawberries, 1½ ft. to 3 ft. each way.
Cherries, 18 to 20 ft. each way.	Currants, 3 to 4 ft. each way.	Grapes, 8 to 10 ft. each way.

FLOWER POTS

BOTH STANDARD AND BULB MOLDS

Size—	Each	Per Doz.	Per 100
2-inch	\$0.05	\$0.30	\$ 1.20
3-inch	.05	.40	2.00
4-inch	.05	.50	3.00
5-inch	.10	.70	4.50
6-inch	.10	.90	6.00
7-inch	.15	1.50	10.00
8-inch	.20	2.00	15.00
10-inch	.40	4.00	30.00
12-inch	.60	6.00	45.00

SAUCERS FOR STANDARDS

Size—	Each	Per Doz.	Per 100
For 2-inch Pot	\$0.05	\$0.30	\$ 1.20
For 3-inch Pot	.05	.40	2.00
For 4-inch Pot	.05	.50	3.00
For 5-inch Pot	.10	.60	4.00
For 6-inch Pot	.10	.75	5.00
For 7-inch Pot	.10	.90	6.00
For 8-inch Pot	.15	1.50	10.00
For 10-inch Pot	.30	2.75	20.00
For 12-inch Pot	.45	4.00	30.00

"DO YOUR BIT" MAKE A WAR GARDEN

P-W'S MOUNTAIN GROWN SEEDS AND TREES
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