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## SLIMEAND, 0idecon

The Standard of Seed Quality and Dependability in the Northwest tor Over a Third of a Century

# CHAMPTO Nanazere Cream Separators <br> THE CLIAMPION CREAM SEPARATOR has many patented features 

 not found in other separators, among them being the CHAMPION PERFORITED IASTRIBLTING ANI HQUALIZING SLEEVE, which is the most valuable compined with a disk skimming bowl, puts the Champion far in theTHE CHAMIPON "PNTLENTED" CENTRIFLGML CREIMI SEPARATOR represents a revolution in invention and improvements, which produces results that fill ambitions and requirements never before accomplished in separating cream from milk, with cream of any density and richness. This invention represents equal uniformity in the feeding of the whole milk from the supply to the disks or the thin spaces hetween the disks to the extent that each and every disk in the bowl does its equal and full proportion of skimming. The disks' uniformity for skimming is so complete that we guarantee the tests taken from the composite of skimmed milk practically equally clean to any test taken during the run; and at the same time will skim clean. with an reasonable range of temperatures, as all other separators feed the whole milk from the supply into the separator disks in a direct body flow, and, therefore. flood part of the disks and clog the balance

CIIMIPION BALL BEARING FEATURES. The vertical shaft in the larger sizes runs on ball hearings at the foot, and also intermediate ball learings which insure quiet running and absence of vibration. These ball brarings lessen the labr of ruming a great deal over other types and in-

CHMMPION PATENTEN STEEL CLLTCH. Provides for instantly starting the separator with very little effort. It is positive in action, in every respect unbreakahle and operates without a particle of noise. Simple, durable and impossible to miss a catch. It instantly stops the large driving and pinion gears when the crank is stopped, making the separator absolutely safe among children

CHLMPION PATENTEI RAIDLL CUSHION SIRPNG. This cushion spring around the upper neck of the upright spiral shaft assures quiet
 the minimum of attention and guarantees to lubricate the working parts of the separator very much better than other methods. Simply oil one place and every working part and all bearings are lubricated, once a week.

CHAMIPION SPLEAD INIDCATOR. Aids the operator without special attention to keep speed regular. which is essential for close separation.

GEMES MNI MHTOMATHC CLCTCII, all in one unit, is in an oit-tight, dust proof gear
sily firis commg in contart with milk are triple tin plated. Parts are -namel. of rich blue color, with gold lettering and strining giving it enamel. of rich blue color. with gold lettering and striping, giving it a
very handsome appearance.

# Floor Type Full Ball Bearing Four Sizes Reduced Prices 

## 375 1b. Capacity $\$, 000$

 ute Eall bearing. No. 30 E. Ship. wt. 170 lbs. Price f. o. b. Portland.$\mathbf{6 0 0 1 6 . \text { Capacity }} \$ \square 55$ Mis. Price f. o. b, lortland.
800 1b. Capacity $\$ 0.50$ 225 ilse irfice f. o. i, P. Portiand.

## 1000 lb. Capacity $\$ 0150$




TIIE CHAMPION CREAM SEPARATOR is made by manufacturers who have for 60 years been making machinery for special high speed purposes and who have developed the highest grade bearing metals and materials for high speed. The Champion Separator was invented and Engineers of the world and is guaranteed, when properly set up and run the number of revolutions shown on the crank, to skim milk at a wider range of temperatures, as clean or cleaner than any other separator manufactured. It has been on the market for several years and is widely known in most sections of the country. In introducing it to our trade we guarantee that each size separator will skim to its
full rated capacity and will produce a fine smooth quality cream of any density required.

## BENCH TYPE

PILIIN BEAIRINGS These separators have all the machines except that being smaller. plain bearings can be user. Iriced exceptionally low
so that everyme can afford a high grade separat
$\mathbf{1 5 0} \mathbf{1 b}$. Capt'y

$\mathbf{3 0 0} \mathbf{1 b}$. Cap'ty $\$ \$ \leq 50$
No. 3-For one
to five cows.
Pricen f. o. b. Portland
Special Type zamis 36.50 Iball Bearing floor machine floor machine


# Portland Seed Company's Complete Seed Annual and Planters Guide for 1928 



## A "Third of a Century" of Service <br> Established in 1893, for over 35 years we have been giving

 the best service we know how to give, and constantly use our utmost endeavors to merit the name of "The Premier Seed House of the Northwest".
## Use Our Service Department

Our experience for 35 years enables us to help you in many of your problems in growing, also in raising poultry, bee keeping, etc. Write us and we will gladly advise with youa service that is free to you.

## Our Mail Order Division

Orders by mail receive prompt attention in this special department of our business. Every order from smallest to largest has careful personal attention and is just as important to us as it is to you. We try not to make errors on orders but if we do, tell us at once; we want everything to be satisfactory and pleasing between ourselves and our friends.

## INDEX-Important Notice

For your convenience the flower seeds are listed ALPHABETICALLY in THEIR DEPARTMENT, which saves you the trouble of looking in the index for each flower item. We have also listed perennial plants, Alpine plants, shrubs, trees alphabetically in their departments. For other items see special index below. ALPINE PLANTS

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## Special Seed Cleaning

 Service The state law requires that seed must be cleaned before it is offered for sale. We are especially equipped to clean clover and grain and can give you quick service.Our charge for putting it through the Clipper Cleaner is $\$ 1$ per 100 lbs.

To process (takes buckhorn out of clover) our charge is $\$ 1.50$ per 100 lbs.

We will be pleased to have your patronage.Dahlias61-63

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## WHAT OUR DIAMOND TRADE MARK STANDS FOR

By reason of our business standing and the experience gained by a third of a century of success in serving the growers of the Northwest, we have established trade relations with the world's best producers and sources of supply. Only by such connections is it possible, in the seed trade, to obtain the select stocks-the best of the season's production; and when you see our DIAMOND Trade Mark on your packet of seeds or item of merchandise you can feei that it is a mark of reai quality-THE BEST OBTAINABLE. In common with all other responsible seed houses, however, we seli our goods subject to the disclaimer adopted by the American Seed Trade Association (see page 1).

## Our SEED GROWING Division

Diamond quality seeds are grown especially for us from selected strains, varieties that years of trial have proven to be most satisfactory for home and market gardens. Many of our seed crops are grown under our personal supervisionseveral thousand acres being under contract to us last year in the Northwest-others come from the world's greatest centers of seed production of Europe and America where conditions are most favorable for their perfect development.
If you live in Northwestern Oregon or Washington you will have better success with your garden by pianting eariy maturing varieties after the spring weather is settled and the ground warm, than if you planted very eariy, as many seeds will not give the best resuits in the cold damp of the early spring, and even if they live, the plants may be stunted and not grow. These suggestions are only general, as you will note that many special sorts can be planted very early.

## Our Bulb, Rose, Nursery Division

In addition to this complete book we print each fall our Book of Bulbs, Roses, Shrubs, Perennial Plants, etc., and for such bulbs as Hyacinths, Tuilips, Crocus and ail the Lilies, please write for this book. "Also special booklets on Roses, Shrubs, etc., are issued from time to time and we will be pleased to send any of these books on request.

## The Importance of Fertilizers

We cannot too strongly emphasize the importance of fertilizers (plant foods) in the production of the best quality whether it be vegetables, fiowers, lawns, shrubs or trees. Our fertilizer book gives you facts of great value and is free. Write for it.


## This is What You Have Wanted!



FOR ENCLOSURES OF AI,L KINDS, INCLUDING POUL. TRY HOUSES, HOT BEDS, COLD FRAMES, SCREENED PORCHES, LIVE STOCK SHEDS, ETC. Brings in the vital ultra violet rays so that poultry, live stock, piants and people are greatly benefited. Better than giass on this account, much cheaper, easy to cut with shears or scissors, apply with tacks; light in weight; no danger from broken glass. Promotes earier maturity in plants, keeps poultry in good health, makes hens better layers, and all your chickens will put on more weight with the same rations. Replace ali the glass in your chicken houses, laying houses and scratch sheds with SUNCLOTH and egg production will increase up to $50 \%$.

One yard wide.

## InSTRUCTIONS

## When to Order

Send in your combined order for seeds, plants and supplies, etc., at once, and if you do not want all sent now we will send part now and the balance later. The advantage of this is that your order is entered and filled or stock is reserved so you will be assured of receiving your complete requirements when you want them, without delay or omission. If you want part or all of your order held, state distinctly when shipment is to be made. All orders for potatoes, plants and other perishable goods are carefully booked on receipt and filled in rotation as soon as weather permits. If shipped early they are at purchaser's risk.

## When Ordering

Use our order blank if you have one. Be sure that your name, complete address and shipping instructions are filled in. Keep a copy of your order so you can check goods when recelved. We use the greatest care in filling orders and mistakes are rare, but may occur.

## Prices and Terms

Prices in this catalog are those prevaling when catalog goes to press and are subject to market changes. Your order will be figured at prices prevailing when it is received and Where lower you will be protected and reiund made. As prices usuaily advance on many items toward the planting season, it is to your advantage to order early. Terms are cash with order where arrangements for credit have not previously been made.

## Parcel Post Rates

Seeds and Plants weighing 8 oz , or less are mailable at 1 cent for each two oz. or fraction thereof, regardless of zone. Packages weighing over 8 oz are charged at ZONE rates.


The 8th zone rate applies to ALASKA, HAWAII and the PHILIP. PINES, with 20 lb . weight limit-To CANADA, MEXICO, CUBA and PANAMA, when over 4 oz . and not exceeding 4 lbs. 6 oz . Twenty lbs. can be sent to MEXICO and PANAMA as Foreign Parcel Post.

## Parcel Post Shipments

We send all vegetable and flower seeds in quantities of 10 pounds or less by mail, post paid, to and including the fourth zone, at the prices named in this catalog unless otherwise stated. For points beyond the 4th zone include additional postage. An additional remittance of $\overline{\mathrm{c}} \mathrm{c}$ will insure any mailed package. We do not guarantee replacement of the goods sent by mail unless insured.

## Express or Freight

Express or freight shipments are F. O. B. Portland, and purchaser pays transportation charges. On moderate sized orders we advise express shipments. Our responsibility ceases on delivery in good order to transportation company and every purchase should be carefully examined for loss or damage before accepting it. In case of loss or damage, purchaser must have notation of such loss placed on his freight or express receipt, and may then file claim with his station agent or send the necessary papers to us and we will gladly enter claim, remitting to the purchaser as soon as claim is paid.

## Pre-pay Stations

On orders to go by freight or express be sure to add money enough for transportation charges if your station is a pre-pay point, which is always the case when there is no regular agent.

## Complaints

Should there be any error in your order or if you are not pleased with some article, advise us promptly, giving order number, and we will make every effort to please you. Do not return any goods until you hear from us.

## Special Quotations on Large Orders

Any dealer, market gardener, institution or individual wishing seed in large quantities, is requested to mail us a list of what is wanted, and we will promptly return it with the very lowest market prices. A letter of inquiry may save you dollars if you want to buy in quantity. If in need of something pertaining to agriculture not herein listed, write us before ordering elsewhere.

## How to Remit

Send money by Postoffice or Express Money Order, Bank Draft or Registered Letter. Postage stamps accepted for small amounts, twocent stamps preferred. Money sent in mail is at sender's risk. Send plenty of money for purchase and transportation charges if to pre-pay point which will save delay, and we will promptly return all over-payments to you.

## Disclaimer Notice

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 we sell, and will not be in any way responsible for the crop.

PORTLAND SEED COMPANY.

## OUR OWN EXCLUSIVE SEED LABORATORY

To protect the interests of our customers and maintain our standard of excellence, we have installed and have for several years maintained a complete modern SEED LABORATORY equipped as recommended by the U. S. Department of Agriculture, with a certified seed analyst in charge.

## The Only Commercial Seed Laboratory in Oregon

maintained by a private company. This laboratory is installed in our warehouse and just as soon as a lot of seed is received samples are taken to the laboratory, examined under poweriul microscopes, the true seed separated from chaff and other seed and weighed on the most delicate scales for percentage of purity, etc., before the seed is accepted. After the seed is examined the samples are then placed in the germinators on trays like the one below and after germinating, is inspected and the germination test recorded.



## What It Means to You

When the seed has passed the tests for purity and germination and is found of high quality, the complete lot, from which the samples were taken is, if necessary, taken to our cleaning department where 18 large machines have been installed at a cost of over $\$ 60,000.00$ for the purpose of cleaning out the chaff and foreign seed. Some of this machinery has been developed for our exclusive use by our experts. Many seeds such as peas, beans, etc., are sent to our hand-picking and sorting rooms where the seed passes before our operatives on belts and is thoroughly recleaned. Few people realize the care we use in giving them seed that is, as far as humanly possible, true pure seed. However, our reward lies in the fact that our customers know the high quality of what they receive and are assured that when they use seed that is labeled DIAMOND QUALITY it's the best obtainable,

## Diamond Quality VEGETABLE SEEDS



Here are our special vegetable garden offers for 1928, made up to suit each purse and need and giving you very fine value. These collections are composed of our regular full size packets and complete descriptions of each variety are given on the vegetable seed pages.

## 

BEANS, Stringless Green Pod.......... 15 c

The handiest small garden we could select for you - every item something you will enjoy. To get new friends to use DIAMOND QUALITY and to favor old friends, we offer this splendid collection for $\$ 1.00$ postpaid. BEETS, Detroit Dark Red.....................10c CABBAGE, Early Jersey Wakefield 10c CARROT, Danvers Half Long............10c CORN, Golden Bantam............................. 15 c CUCUMBER, Long Green.................. 10c LETTUCE, New York Head............... 10 c PARSLEY, Double Curled....................-10c PEAS, Gradus
RADISH, White Icicle .15 c
10 c RADISH, White Icicle
RADISH, Scarlet Globe
--........... SPINACH, Thick Leaved
SWISS CHARD, Lucullus . .10 c TURNIP, Purple Top White Glo............ 10 c ALL FOR, POSTPAID........ $\$ 1.00$ VALUE............ $\$ 1.55$

## Offer $\mathbb{B} — \$ 3.20$ Y Yitar $\$ 2.00$

Seed enough in this big complete collection to plant a large home garden, all carefully selected to provide choice table vegetables throughout the season. All our reguseason. All our regular size packets, $\$ 3.20$
value for $\$ 2.00$ postvalue

BEANS, Stringless Green Pod......... 15 c Kentucky Wonder Pole BEET, Detroit Dark Red 10c CABRAGE, Copen. Early Market................... Danish Ball Head. 10 c CARROT, Chantenay

$\qquad$ Oxheart 10 c
CORN, Golden West Oregon Evergreen .................................. 15 c CUCUMBER, Boston Pickling.............10c Davis Perfect ......................................10c
 New York Head..................................10c
MUSKMELON, Burrell Gem............10c MUSKMELON, Burrell Gem.............. Cream
ONION, Oregon Yellow Danver -................................. 10 c White Bunching ..................................10c PARSLEY, Double Curled..........................-10c PARSLEY, Double Curied.............................................. Tall Telephone ..............................................15c RADISH, French Breakfast.......................................... White Icicle ........................................10c SALSIFY, Mam. Sandwich Isl................10c SPINACH, Imp. Thick Leaved..............10c SQUASH, Early White Bush...............10c Hubbard .............................................10c TURNIP, Go!den Ball............................. 10 c Purple Top White Globe..................... 10 c

## Offer C- $\$ 7.60 \underset{\substack{\text { vitar } \\ \text { pard }}}{\text { V. }}$

For the dweller in the suburbs who has more ground than the person on an ordinary city lot, this is an ideal collection. It will give a continuous supply of the best and most productive fresh vegetables throughout the season, and leave a goodly supply to store away in the cellar for winter use. This collection contains:

BEANS-
Stringless Greenpod...... 1 lb .35 c Golden Wax-podded....1/2 lb. 20 c Kent. Wonder Pole.......Pkt. 15 c Oregon Pole Lima.........Pkt. 15c BEET-
Crosby's Egyptian...........Oz. 20c Half Long Blood.-............-Oz. 20c Long Dark Blood.
... .0 Oz. 20c CARROT-

Early Scarlet Horn......Pkt. 10 c Danver's Half Long......Oz. 20c Oxheart
CABBAGE-
Eiy. Jersey Wakefield. Pkt. 10c
Copenhagen Market......Pkt. 10c
Danish Ballhead ...........Pkt. 10c
SWEET CORN-
Golden West.... $\qquad$ $1 / 2$ lb. 20 c
Couniry Gentleman..............Pkt. 15 c Oregon Evergreen....... $1 / 2 \mathrm{lb}$. 20c CAULIFLOWER-
Early Snowball $\qquad$ Pkt. 10c
CELERY-White Plume..Pkt. 10c CUCUMBERDavis Perfect $\qquad$ .Pkt. 10c Boston Pickling $\qquad$ ..Pkt. 10 LETTUCE-

Black-Seeded Simpson Oz. 20c New York Hcad..............Oz. 35c MUSKMELON-
Burrell Gem
WATERMELON-
King and Queen.
$\qquad$ Oz. 20
Oz. 20c

ONION-
Ore. Yellow Danver....Pkt. 10 c White Bunching ..........Oz. 25 c
PARSLEY-Dbl. Curled..Pkt. 10c PARSNIP-
Hollow Crown Oz.15c
PEAS-Laxtonian -..................... 35c
Telephone .................................. 1b. 35c
PEPPER-Large Bell......Pkt. 10 c PUMPKIN-Large Yel.....Oz. 15c Sweet or Sugar.............Oz. 15c RADISH-
Crimson Giant ..............Oz. 15c White Icicle.....................Oz. 15c French Breakfast - O2. 15 SALSIFY-
Mam. Sandwich Isl.....Pkt. 10 C SPINACH-
Imp. Thick Leaved.........Oz. 15c SQUASH-
White Bush-Summer..Pkt. 10 c Hubbard-Winter ...........Oz. 20c SWISS CHARD-
Lucullus
TOMATO-
Chalk's Early Jewel....Pkt. 10c TURNIP-
Purpletop Strapleaved..Oz. 15c Purpletop White Globe..Oz. 15e RUTABAGA-
American Purpletop......Oz. 15c
VALUE
57.60

ALL FOR
$\$ 5.00$

## Offer D.-Free seeds with $\$ 1$ order

## COUPON

This coupon when enclosed with an ordcr and payment amounting to $\$ 1.00$ or more for merchandise in this catalog (excepting our offers A, B or C) entitles you to TWO ten-cent packets of vegetable or flower seed free
This offer expires September 1, 1928.
PORTLAND SEED COMPANY.

NOTICE! These collections are put up in advance of the season ready to mail upon receipt of order and therefore the assortment cannot be changed.

These offers expire September 1, 1928.

## Planting Tables

Quantity of Seed to Produce a Given Number of Plants and Amount Required to Sow an Acre

Artichoke, 1 oz. to 500 plants
Per Acre Artichokes-White French

Asparagus, 1 oz . to 800 plants. 8 bu.
.7500 Asparagus, 1 oz. $\qquad$ Barley
.......................................... 2 to $21 / 2$ bu. Barley

Pole, 1 lb , to 100 hills ft . of drill... Pole, 1 lb . to 100 ft . drill. $\qquad$ bu. 7 lbs .
Broccoli, 1 oz. to 2000 plants
Brussels Sprouts, 1 oz. to 2000 plants.. 4 oz. Buckwheat

Cabbage, 1 oz. to 2000 plants $\qquad$ | 4 oz |
| :--- |
| 3 | Carrot, $1 / 2 \mathrm{oz}$. to 100 ft . drill $\qquad$ .3 lbs.

0
oz. Cauliflower, 1 oz. to 3000 plants.... 3 to 4 Celery, 1 oz. to 5000 plants..
Cheat
.
Cheat
 8 to 10 lbs Alfalfa
$\qquad$ 10 to 15 lb Crimson Trefoil or Red......
$\qquad$ . .8 to 10 lbs Collards, 1
Corn, Pop
(shelled)
$\qquad$ 12 to 15 lb
Sweet or Field, hill $\qquad$ ............. 3 b
For soiling drills
3 lbs.
Cress, $3 / 4$ oz. to 100 ft drill. $\qquad$ Cucumber, 1 oz. to
$\qquad$ 4 oz .
. Egg Plant, 1 oz, to 2000 plants 100 lbs. Eimmer
Endive, $1 / 10$ oz.
Flax broadcast
.4 lbs.
to 100 ft . drill. $\qquad$ ........ 1 to 2 bu Kentucky Blue, lawns..................... 100 lbs. Meadow Fescue or Wood Meadow....... 1 bu. Mixed Lawn
$\qquad$ to 6 bu .
to 2 bu.
Red Top, Chaff
Red Top, solid seed. $\qquad$
$\qquad$ 10 to 15 los.
Timothy Orchard, Perennial Rye................................. 1 to 2 bu. Horseradish Roots .-.....................15,000 to 25,000 Kaffir Corn, in drills... ............ 6 to 10 lbs. Kale, 1 oz. to 2000 plants. $\qquad$ Kohl Rabi, 1 oz. to 2000 plants $\qquad$ Leek, 1 oz . to 100 ft . of drill. $\qquad$ $4 \mathrm{l} \mathrm{oz}^{4}$. Lettuce, 1 oz . to 150 ft . of drill................ 3 lbs. Melon, Musk, 2 oz. to 100 hills.....- 2 to 3 lbs.
Water, 4 oz. to 100 hills............... 3 to 4 lbs. Millet-For Hay $\qquad$ .30 lbs.
For Seed
20 lbs.
Oats .-................................................................................. 8 bu los.
Oats
Okra, 1 oz............................................. 2 to 3 bu
100 ft . Onion Seed, for sets 60 to 85 lbs . 1 oz. to 150 ft . drill....................... 3 to 4 lbs. Onion Sets, 1 qt . to 40 ft . drill............ 8 bu .
Parsley, 1 oz. to 150 ft . drill....
Parsnips, 1 oz. to 150 ft . drill lbs.
3 lbs.
Parsnips, 1 Field
Garden, 1 Ib . to 100 ft . drill............................... 2 bu. Pepper, 1 oz. to 1000 plants.................... 2 lbs. Potatoes
Pumpkin, $1 / 2 \mathrm{lb}$. to 100 hills.................... 3 to 5 lbs. Radish, 1 oz. to 100 ft . drill. $\qquad$ -10 los Rape Rye lbs. Salsify, 1 oz. to 100 ft . drill 6 to 8 lbs Spinach, 1 oz to 100 ft drill 8 to 10 lbs Squash-Summer, 4 oz. to 100 hills.... 3 lbs. Winter, 8 oz . to 100 hills...................... 4 lbs. Sugar Cane, in drills $\qquad$ 10 lbs. Tomato, 1 oz . to 2000 plants to 3 lbs . Turnip, 1 oz. to 150 ft . drill $\qquad$ Vetches, $11 / 2$ to 2 bu ; with grain.............. 1 bu Wheat

Number of Plants Per Acre at Various Namber of Plants Per DISTANCE APART Square
Method
1 foot apart each wa 43,560 Triangular 2 feet apart each way.... 10,800 12,575
4 feet apart each way. 2,722 3,143
6 feet apart each way......... 1,210 537 , 397
620
9 feet apart each way...
435
193
170
108
16 feet apart each way
20 feet apart each way.........
25 feet apart each way.....
30 feet apart each way.........
40 feet apart each way.........

## 48

An easy rule for determining number of plants or trees, per acre or plot: Multiply the distance in feet between rows by the distance between plants, and divide the square feet in the plot by this result. Illustration: Rhubarb, 4 ft . $\mathrm{x} 2 \mathrm{ft},-8 \mathrm{ft}$; 8 into 43560 (acre) - 5445 plants.


## ASPARAGUS

One of the earliest Spring vegetables. It can be produced very easily and cheaply and is a profitable mar ket crop. A bed $15 \times 50$ feet, requiring about 100 plants should give an abundant supply for the average family CULTURE-Soak seeds 24 hours in warm water, sow early in drills one foot apart. An ounce of seed will sow about 300 feet of drill. Keep soil mellow and free from weeds. After one year's growth transplant into permanent beds, carefully prepared by working to a depth of 24 inches, manuring deeply, using old manure and bone meal; 5 feet is a convenient width for a bed that will carry three rows, and can be reached without treading upon it. Set plants 18 inches apart in the rows and spread roots out, firm ing the soil down on them. At no time of ite growth should the aspar agus crop be allowed to lack for manuring. From one to two years' time can be saved by buying roots of us. See plant department, 7260 roots will plant an acre
(For Asparagus Plants see page 79)

GIANT WASHINGTON - THE NEW RUST-RESISTING ASPARAGUS - Ous grower of Giant Washington Asparagus seed under the supervision of the U. S. government has produced the superior asparagus we are listing under the name "Giant Washington." This was produced by breeding the female plants Martha and Mary to the male plant Washington, combining the best characteristics of the three. This seed is grown especially for us, and our plants are all grown from this seed by one of our best growers. Be sure to get the genuine Pkt. $15 \mathrm{c} ;$ oz. $25 \mathrm{c} ; 1 / 4 \mathrm{lb} .75 \mathrm{c} ; \mathrm{lb} . \$ 1.75$; postpaid.
MARY WASHINGTON-PEDIGREED STOCK-There is no asparagus as good as the Washington and of the Washington strains the Mary is the best. It is earlier, produces more, has larger stalks, highest in rust resistance, nets more money per acre. Pkt. 15 c ; oz. 50 c ; $1 / 4 \mathrm{lb} . \$ 1.50$; lb. $\$ 4.50$; postpaid.
ARGENTEUIL-A popular French asparagus of great merit; larger and lighter in color and said to be superior to Palmetto; of vigorous, even growth; very early and free from disease. Plit. 10c; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .35 \mathrm{c} ; \mathrm{lb} . \$ 1.00$; postpaid. PALMETHO-Extra early and uniformly large stalks remain tender, being in prime condition for some days after coming above the ground. A heavy, sure cropper. Plat. 10c; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{H} .35 \mathrm{c} ; \mathrm{lb} . \$ 1.00$; postpaid.

## ARTICHOKES



LARGE GREEN GLOBE-The variety used as a table vegetable. The edible portion is the thick end of leaf of the flower head. Sow early in drills and when about ten inches high trans plant into rows four feet apart each way. It will produce only a small crop the first year, but will continue in good bearing five years Cut before the bud opens. The seedlings are variable and for market gardening they are generally propagated from cuttings. The buds when in blossom resemble huge thistles and the foliage being highly ornamental, this va riety is much used for hedges and display in parkings. Plit. 10 c ; oz. $\$ 1.00$; postpaid.
Artichoke Tubers
NEW FRENCH - Tubers planted and cultivated the same as potatoes. A superior quality and much higher yielding than the common varieties. Of great value for feeding stock, the best hog feed known; remarkable for fattening properties, great productiveness (over one thousand bushels having been raised on one acre) and ease with which they can be grown. They need not be dug.
 the hogs will help themselves by rooting. One acre will keep from twenty to thirty hogs in condition from October until April; highly recommended for milch cows, increasing yield of milk and at the same time improving their condition Plant ten bu. per acre. $10 \mathrm{lbs} . \$ 1.00$, postpaid; $100 \mathrm{lbs} . \$ 3.00$, f. o. b. Portland. JEIRUSALEM WHITE-Produces tubers like potatoes, grown in the same way A fine vegetable for the table as well as a valuable hog feed. 10 lbs. $\$ 1.00$, postpaid; 100 lbs. $\$ 2.50$, f. o. b. Portland
Note-Tubers on hand from February. Write for prices.



OREGON GIANT GREEN POD
Every Garden Needs "Nitragin"


Garden size is for Peas, Sweet Peas and Beans only, including Lima ( 3 in one). Price 20c.

NITRAGIN is an old reliable inoculator. Sold in tins-not glass-packed in a rich soil-like medíum. Contents always fresh and the bacteria active and vigorous. NITRAGIN is easy to use. See index for all sizes.

## CLIMBING OR POLE BEANS

CULTURE-Do not plant until the soil has become warm and the weather settled-and always remember beans should have rich, well drained soil. It is best to set the poles before planting; these should be six to eight feet high, rows about four feet each way. Plant four to six beans to the hill and thin to two or three, depending on the variety. A pound should plant 75 to 100 hills. A top dressing of commercial fertilizer or old manure should be worked in when cultivating.

## Postpaid, Pkt. 10c; 1/2 lb. 20c; 1 lb .35 c ; $10 \mathrm{lbs} . \$ 3.00$

 EXCEPT AS NOTED BELOW
#### Abstract

ASPARAGUS BEAN-The True Asparagus Bean is superior to Kentucky Wonder in quality and fully equal in productiveness. The long, slender pods are very fleshy, almost round, crisp, tender and delicious, of a beautiful pale green color, attractive form and absolutely stringless. They grow vigorously and bear heavily. (Stock limited.) Plkt. $16 \mathrm{G} ; 1 / \mathrm{lb} .30 \mathrm{c}$; lb .50 c ; postpaid. SCARLET RUNNER-A favorite as a shell bean and for its flowers, which are bright scarlet; seeds broad and kidney shaped. OREGON IOLE LIMA-The only Bean of its kind that will thrive in our cool climate-It grows a strong thrirty vine and is very prolific, bearing continuously until frost, the blossoms bursting from the top shoots in long panicles, while the pods can be seen in every stage of development, to the matured beans at the bottom of the vine. Pods are well filled, having three to five large beans of the finest quality. It can be planted in any garden soil as early as April or late as July. Give the same care and culture as other beans, and they are ready to use when the pods are filled and first begin to ripen. They are at their best when the full green pods begin to turn yellow. KENTUCKY WONDER-A vigorous climber; very prolific, bearing in clusters extremely long and very fleshy, succulent pods, flat, thick and remarkably tender. A first-class pole variety. LAZY WIFE-Pods are from four to five inches in length, produced in large clusters in great abundance. Dark green, thick, fleshy and stringless of unusually rich flavor. Dry beans, pure white, excellent for winter use. KENTUCKY WONDER WAX-The pride of the garden. It commences to bear when scarcely higher than the average bush variety, and keeps on producing until killed by frost. It is a rampant grower, one plant filling a pole with a mass of vines densely loaded with luscious beans. They are firm, entirely stringless, and when cooked, deliciously rich and buttery.


## P. S. Co's. Oregon Giant Greenpod Bean

 Strong growing, heavy yielding, rich flavorThe large fleshy pods 10 to 12 inches in length are free from all stringiness and are tender, crisp and delicious. The size, splendid quality and rich flavor make this one of the most desirable beans for home gardens and for canning. "Oregon Giant" is a strong grower and yields heavily, bearing its enormous pods in great clusters. The color is a light greenish yellow, splashed red. Pkt. 20c; $1 / 2 \mathrm{lb} . \mathbf{3 5 c}$; lb. 60c; postpaid.

For BEANS use 350 pounds per acre of our Diamond VEGETABLE FERTILIZER. Ask for our Free Booklet, "Fertilizers"

## NEW GUINEA BUTTER BEAN

## AN EDIBLE GOURD

## Fruit grows 3 to 4 ft .long

## THICK HEAVY VINE

Although of recent introduction into this country, it has been a common table vegetable in China from time immemorial. Can be used as an ideal arbor covering and as a table vegetable as well. Fruits grow to be several feet in length but should be used while young, for the table, when they are even better than the most delicious marrow.
Pkt. 10c; oz. 30c; postpaid.
RECIPE-Take fresh from the vine a young gourd about sixteen inches long and three inenes in diameter or smaller, while the fuzzy growth is yet on. Cut into cubes about $9 / 4$ inch, bring to a boil, pour ofî the water once or twice: season well with pepper and salt; add butter. You will be surprised how good it is. Or use the ones from 8 to 14 inches long. Wash them. Wipe dry. Cut the round way. Dip in batter, then in flour and in batter again. Fry until tender. They are delicious. To make the batter use one egg, one tablespoon flour, and one cup milk with salt and pepper.


CULTURE - The beet is hardy and may be planted as soon as ground can be well prepared, doing best in rich, sandy soil, sown in rows sixteen inches apart, covered one and one-half inches deep. Seed will sprout better if soaked 24 hours in warm water before planting. Thin out by using the largest ones when they are of sufficient si\%e, continuing until they are six or eight inches apart in the rows. For field crop, rows should be far enough apart to permit the use of a horse cultivator.
P. S. CO'S MAREET GARDENWR—This extra early Beet is remarkable for its fine quality and rapid growth; deep red color, and handsome shape; as an early market sort it is unrivaled. It is superseding Egyptian, being more attractive and of superior quality for the table, hold ing its color and cooking quickly. Market gardeners prefer it as it matures evenly, stands a long time and does not split. Phit. 10c; oz. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c}$; lb. $\$ 1.25$; postpaid.
DETROIT DARK RED TURNIP-A fine beet for bunching for market; tops exceptionally small and uniformly upright. Roots are perfect turnip shape with small tap roots. One of the deepest red beets. Plk. 10 Cc ; oz. 20 c ; $1 / 4 \mathrm{lb} .40 \mathrm{c} ; \mathrm{lb} . \$ 1.00$; postpaid.
EARLY ECLIPSE - One of the best early sorts; possesses all the qualities requisite in a first class beet, and is of a uniform, globular shape. The roots are a bright, glossy red, fine-grained, and delicious. Plat. 10 c ; oz. 20c; $1 / 1 \mathrm{lb} .40 \mathrm{c} ; \mathrm{lb} .51 .00$; postpaid.
EXTRA EARLY EGYPTIAN-The best variety for forcing, and for market gardeners, being very early with small tops. Roots very dark red, rounded on top, but flat beneath, with very small tap roots. Plit. 10c; oz. 20c; 1/4 lb. $40 \mathrm{c} ; \mathrm{lb} . \$ 1.00$; postpaid.
LONG SMOOTH DARK BLOOD-The leading late variety, keeping well all Winter. Should be planted in rich, warm soil to secure rapid growth, which makes them tender. Top small, root long and smooth. Flesh deep purple, fine and sweet. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .40 \mathrm{c} ; \mathrm{lb}$. S1.00; postpaid. EARLY BLOOD TURNIP-IMPROVED-An extra selected stock of Blood turnip having larger, coarser tops and roots than the Detroit Dark Red, and requiring a longer time to mature. Excellent for Summer and Autumn use. Plit. 10c; oz. 20c; 1/4 lib. 40c; lb. \$1.00; postpaid.



ECKENDORF
P. S. CO'S IIEAVIEST CISPPEIR-A wonderful improvement on existing stocks of Yellow Mangels, one of the heaviest croppers and easiest pulled, of very fine quality. The small foliage permits it to be left comparatively thick in the rows and weight per acre is therefore enormous. It is considered distinct over all other kinds and one of the largest and best Fellow Mangels. Pkt. $10 \mathrm{c} ; 1 / 4 \mathrm{lb}$. $25 \mathrm{~s} ; 1 \mathrm{lb}$. 60 c ; post paid.
YELLOW GIANT, INTERMEDIATE OI GATE POSTRoots very large, growing over half out of the ground; flesh white, sweet and tender; tops bright green, comparatively small; neck small, short, never becomes woody, easily harvested. Plit. 10c; 1/t ll. 25c; lh. GDc; postpaid.
GIMNT RED ECKENDORF - Straight, cylindrical form, very blunt, grows mostly above surface. A very heavy cropper. Pkt. $10 \mathrm{C} ; 1 / 4 \mathrm{lb} .25 \mathrm{c} ; \mathrm{lb}$. $60 \mathrm{c} ;$ postpaid.
GOLDEN TANKARI-Dairy farmers state they are able to obtain a higher price for milk when feeding cows on "Golden Tankard". Sheep thrive on it. A rich, deep yellow throughout. Early, hardy and a heavy cropper. Pkt. $10 \mathrm{c} ; 1 / 4 \mathrm{hb} .25 \mathrm{c}$; 1b. 60 c ; postpaid.

MAMMOTEI LONG RED-An improvement on the Long Red, with ordinary cultivation. Very uniform, smooth, of good shape. Grow in deep loose soil. Flit. 10c; 1/4 lb. 25c; 1h. 60 c ; postpaid.
NEW MANGEL MALF SUG.MR-Valuable for feeding purposes, fields as much per acre as the best Mangels, and twice as much per acre (bulk of roots) as the rich sugar beets. Roots large, very smooth, with few rootlets, creamy white, with medium sized tops. Plat. $10 \mathrm{c} ; 1 / 4 \mathrm{lb} .25 \mathrm{c} ; \mathbf{l b}$. 60c: postpaid.
DANISHI SHCDSTRUP—Long, reddish-yellow, grows well above the ground, and is easy to pull. Has repeatedly been awarded a first class certificate by Danish Govt. Pkt. 10c; 1/1 13. 25 c ; Ih. 60c; postpaid.

## SUGAR BEET

IKLEIN WINZLEBEN-This is the standard variety grown commercially for the production of sugar. Pkt. 10c; $1 / 4$ lb. 35 c ; 1b. 75 c ; postpaid.
WHITE FRENCH OF VILMORIN'S IMPROVED SUGARThe best variety for growing for sugar-making. Pkt. 10c; 1/4 lb. 35 c ; ib. 65 c ; pustpaid.

## Cabbage

CULTURE-The requisites for complete success are: First-Good seed. There is no other vegetable where the seed has so much influence on the quality of the product, and gardeners should always use the best procurable. Second-Rich, well prepared ground. ThirdFrequent and thorough cultivation. A heavy, moist and rich loam is most suitable, which should be highly manured and worked deeply. In general, the early sorts should be sown very early in hot beds, hardened off by gradually exposing to outside air, and as early as the ground is in good condition, transplanted, setting 18 to 36 inches apart, according to setting of variety. The late Autumn and Winter size of variety. The late Autum and Winter
varieties may be sown from the middle to the varieties may be sown from the middle to the
last of Spring and transplanted when 4 to 6 last of Spring and transplanted when 4 to 6
inches high. Shade and water the late sowings in dry weather to get them up.
 Market in type, but is 8 to Market in type, but is 8 to
10 days earlier and on account of being smaller can be planted closer. Head is medium size, quite round and has few outer leaves. Very firm and fully equal to any of the late sorts in this respect. Very hardy, will stand in the field a long time without bursting and can be shipped long distances. Because of its earliness and fine quality it commands a higher price than any round head cabbage. Plat. 15c; oz. 70c; $1 / 4$ lb. \$2.25; lb. \$7.00; postpaid.



EARLY WERSEY WAKEFIELD-The favorite early Cabbage with our mar ket gardeners. A sure header. The thick, stout leaves and compact habit make it the best for Wintering over and very early setting. Grown more extensively for market than any other early cabbage. Is always of good size, very solid, and has but few outside leaves; a reliable header and always gives good satisfaction. Plit. © © ; on. $35 \approx$; $1 / 4 \mathrm{lb}$. $\$ 1.25$; 1 lb . $\$ 3,75$; pstpd. RED CABBAGE-Odense Marltet-Used for pickling. The heads are very fine and remarkably sure of heading. The best red cabbage. Plit. 10c; oz. 35 c ; $1 / 2 \mathrm{lb} . \$ 1.25$; 11. $\$ 3.75$; postpaid.
SAVOY CABBAGE-Vertus-Late Savoy-Large, compact heads, crisp and tender with a rich flavor. Desirable for cooking or salads. Pht. 10c; oz. 35 c ; $1 / 4 \mathrm{lb} . \$ 1.25$; lb. $\$ 3.75$; postpaid.
STEIN'S EARLY DWARE FLAT DUTCH-Grows low on the stem; a sure header; firm, fine grained, tender. Plit. 10 c ; oz. 35 c ; $1 / 4 \mathrm{lb} . \$ 1.25$; 1b. $\$ 3.75$; postpaid.
SUCCESSION-Heads large, slightly flattened; grows low on the stem. Pkt. 10 c ; oz. 35c; $1 / 4 \mathrm{lb} . \$ 1.25 ; 1 \mathrm{lb} . \$ 3.75 ;$ pstpd.

## PREMIUM LATE FLAT DUTCK-This

 improved strain possesses the good qualities of the old favorite, "Late Flat Dutch" one of the largest of the late varieties; a sure header. Plit. 10c; oz. 35c; 1/1 lb. \$4.25; lb. \$3.75; postpaid.CHINESE IMPROVED OR PE-TSAI-Resembles Cos Lettuce rather than Cabbage. It is often called Celery Cabbage on the market. Leaves when young are crimped, light green, appear like smooth leaved mustard, with broader and heavier midribs. As it matures it forms heads much like Cos Lettuce. The inner leaves blanch light yellow or creamy white with white midribs. Very mild and pleasant flavor. Served as a salad or cooked. Sow in this latitude after July 1st at the same time as turnips. Pkê. 10c; oz. 35 c ; $1 / 2 \mathrm{lb}$. \$1.25; 1b. $\$ 3.75$; postipaid.


PE-ISAI

DANESH BALEHEEAD-Our strain of short-stem is imported direct from Denmark, originating on the famous island of Amager, the vegetable garden of Copenhagen. The fine ribbed leaves are so densely packed together that no space is left for water or air to start decay and the firm solid heads are famed for their superior excellence and keeping qualities. Matures late and when cut shows a fine, hard, snowy white, solid head. The best in its class. Pkt. 10c; oz. 35 c; 1/4 llb. \$1.25; lb. \$3.75; postpaid. DANESH ROUND IIEAD (Select Short-Stem)-A round ball shaped cabbage of great solidity. Color, rich dark green, has few outer leaves, is very hardy and a profitable late market variety. Our stock of Round Head is Danish grown and of the same superior quality as the shortstem Ballhead, being one of the latest keepers and best varieties for early Spring market. 耳lik. 10c; oz. $35 \mathrm{c} ; 1 / 4 \mathrm{lb} . \$ 1.25$; lb. $\$ 3.75$; postpaid. COPENHIGEN MARKET-A Splendid Cablage for Home Gardens-A splendid early globe-shaped cabbage slightly flattened. The large solid heads are very uniform, with few outcr leaves, keeps well and stands handling. Copenhagen Market is the favorite market variety, and we recommend it to our customers as the best early round head. Plit. 10c; oz. $30 \mathrm{c} ; 1 / 4 \mathrm{lb}$. $\$ 1.00$; lb. $\$ 2.85$; pstpd.

Early
Jersey
Wakefield
The Favorite with Market Gardeners

## CARROTS

CULTURE-A sandy loam is the best soil for the carrot, but any good land, if thoroughly and deeply worked, will produce satisfactory crops. Sow as early in the Spring as the ground is fit to work, though good crops may be grown from sowing as late as June 15. For table use, sow the smailer kinds in rows 16 to 18 inches apart, and for field culture prepare the grourd thoroughly and sow in drills 18 to 24 inches apart. Cover one-hall to one inch deep and see to it that the soil is well firmed above the seed.

P. S. CO'S NEW CORELESS
P. S. CO.'S NEW CORELESS - A splendid new carrot. Larger than other early varieties. Crisp, solid, of fine flavor and almost coreless, grows smooth and uniform, a true stump rooted type. The very best for canning or drying as it is nearly coreless and has no tap root to trim off and waste. Holds its color and cooks quickly. The idcal carrot for home gardens. Plt. 10c; oz. 25c; $1 / 4 \mathrm{lb} .45 \mathrm{c} ; \mathrm{lb}$. \$1.25; postpaid.

## HMPROVED LONG ORANGE-Popular

 for farm use on deep, mellow soil. Our stock is an improvement obtained by years of careful selections of the best formed and deepest colored roots, which grow to a large size, some specimens averaging 12 inches in length. Enormous crops can be grown under fair culture; one of the best varieties for feeding stock. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .40 \mathrm{c} ; 1 \mathrm{~b} . \$ 1.00$; postpaid.
## CHANTENAY

OHANTENAY-The Market Gardener's $\mathbb{F}$ avorite. 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, lt 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. Plt. 10c; oz. 20c; $1 / 4 \mathrm{lb}$. 40c; lb. \$1.©0; postpaid.
OXHEART-A thick carrot, flve or six inches long and very blunt at the lower extremity. It grows very rapidly and the root attains a weight of more than a pound. It is tender and of good flavor. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .40 \mathrm{c}$; lb. $\$ 1.00$; postpaid.

## DANVER'S HALF LONG

DANVER'S HALF LONG - Grown largely on account of its productive. ness and adaptability to all classes of soil. Tops, medium sized, coarsely divided. The smooth, handsome roots are of medium length, tapering uniformly to a blunt point; flesh, sweet, crisp, tender; deep orange in color. Although the roots of this variety are short, they produce as large bulk as the longer field sorts, and are more easily harvested. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .40 \mathrm{e}$; ib. $\$ 1.00$; postpaid.

## EARLY SCARLET HORN - The best

 early kind for general use. It is larger than the forcing variety, but fully as good in quality, and produces a much larger crop. Plt. 10c; oz. $20 \mathrm{c} ; 1 / 4 \mathrm{lb} .40 \mathrm{c}$; lb. $\$ 1.00$; postpaid.
## STOCK CARROTS

CARROTS, aside from being one of the most useful and easlly grown garden vegetables, are invaluable for stock feeding. They are greatly relished, promote health and put a sluek coat on cattle and horses, giving a well-kept appearance. Dairy and stockmen should grow them extensively. For their special use we recommend our "Yellow Giant."
P. S. CO.'S YELLOW GIANT, Specially Adapted to Moist, Heavy Solls-This new Carrot was originated at the Sydney, Australia, Experimental Station, and has proved itselif to be the earliest and most productive stock carrot offered to date. It is a half long variety, with an Immense broad shoulder. The Carrot penetrates less than one-half the depth into the ground, which saves about one-half the expense of harvesting the crop. The color is of bright yellow, and is perfection itself for giving the proper color to butter. Every dairyman who wants a big crop of carrots of the right quality and easy of culture should plant our Yellow Giant. (Crop failure this year, but we hope to have it again next season.)

LARGE WHITE BELGIAN-Extensively grown for stock feeding; very productive. Grows so much above the ground that the entire crop can be pulled by hand. Pkt. 10c; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .25 \mathrm{c}$; lb. 75 c ; postpaid.
IMPROVED SHORT WHHTE-"MASTODON." Ranks as a field carrot, owing to its enormous productiveness and the ease with which it can be harvested. Roots half long, smooth, very heavy at the shouldcr, but tapering regularly at the point; color, light green at the crown, white below; flesh, rich, white, solid, crisp and of excellent flavor. Plit. 10c; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .25 \mathrm{c} ; 1 \mathrm{lb} .75 \mathrm{c}$; postpaid.

## CAULIFLOWER

Don't buy cheap strains of Cauliflower seed. Only the best select strains can be depended upon to produce a big percentage of large, white, solid heads.
CULTURE-The Cauliflower succeeds well in any soil where cabbage will grow, but best results are obtained in rich loam with an abundance of water. By sowing early varieties in a hot bed in February or March, or later in a cold frame, fine heads can be obtained quite early. For a later supply, sow seed in a prepared bed in May, choosing a cool, moist place. When large enough transplant, making the rows about $21 / 2$ feet apart and 18 inches between plants. In dry seasons the crop must be watered.

P. S. CO'S "MT. HOOD" SNOWBALL-The seed that produces those handsome large white solid heads that bring big profits to the gardener. We offer our "Mt. Hood" Cauliflower seed under our own label, it having been carefully selected and grown for us by one of the expert Cauliflower growers, and is the best strain of "Early Snowball" obtainable. We recommend "Mt. Hood" Snowball for either early or late planting. Pkt. 25c; $1 / 4$ oz. $95 c$; oz. \$2.75; $1 / 4 \mathrm{lb}$. \$8.50; postpaid.
AUTUMN GIANT-Heads white, large, compact and protected by foliage. Pkt. 10c; $1 / 4 \mathrm{oz} .35 \mathrm{c}$; oz. $\$ 1.00 ; 1 / 4 \mathrm{lb}$. \$3.50; postpaid.


ST. VALENTINE BROCCOLI

DANISH GIANT-DRY WEATHER CAULIFLOWER Early, large, solid white Cauliflower that can successfully withstand a drouth that would prove fatal to other varieties, but like all Cauliflower must have rich soil and cultivation to give best results. Also does well under moist conditions. Plit. 20c; 1/4 oz. 75 c ; oz. $\$ 2.50$; $1 / 4 \mathrm{lb} . \$ 7.50$; postpaid.
EARLY SNOWBALL-This is the regular grade of "Early Snowball" that is generally offered, and while it will not give as good results as "Mt. Hood", it can be depended upon to produce a good crop. Pkt. $10 \mathrm{c} ; 1 / 4 \mathrm{oz}$. 60c; oz. \$2.00; 1/4 1b. \$5.00; postpaid.
LARGE ALGIERS-A valuable late sort, sure to head, of the best quality and very popular with market gardeners. Plants large, upright growth, the leaves protecting heads so that they will endure, uninjured, a frost that would ruin other sorts. One of the very best of the late varieties. Plit. 10c; $1 / 4 \mathrm{oz} .35 \mathrm{c}$; oz. $\$ 1.25$; $1 / 4 \mathrm{lb}$. $\$ 4.00$; postpaid.

## BROCCOLI or Winter Cauliflower

Broccoli is so nearly related to late Cauliflower that the varieties are often listed under both heads-the principal difference being in the hardiness and time of maturity, Broccoli not heading until late Winter or early Spring. Culture is same as for late Cauliflower, and good, rich, well-drained bottom land is best, or well-tilled, well-fertilized upland.
ST. VALENTINE—The finest of all Broccoli-This grand new strain introduced by us is a sure header of immense size, finest quality, and is ready for market in February. The large, solid, handsome, white heads remain in good condition longer than other varieties. Plit. 15 e; oz. $\$ 1.50$; $1 / 4 \mathrm{lb}$. $\$ 5.00$; postpaid.
EARLY IARGE WHITRE FRENCH-A valuable variety with large, white heads, firm and of good flavor. Pkt. 10c; ox. $59 \mathrm{c} ; 1 / 4 \mathrm{Ib} . \$ 3.00 ; \mathrm{ppd}$.

## Practical Books for Poultrymen (Postpaid)

ALL ABOUT INDIAN RUNNER DUCKS. 92 pages. 75 c .
AMERICAN STANDARD OF PERFECTION. Official guide for judges and breeders. $\$ 2.60$. CALL OF THE HEN. By Walter Hogan. Explains the Hogan System of Breeding and Selection. 138 pages. Cloth. $\$ 2.10$.
EGG RECORD AND ACCOUNT BOOK. By G. A. Kuhns. 40 c .

GIGH EGG PRODUCTION BY BENS, PENS AND FLOCKS. \$2.00.
LEGHORNS, THE. New Edition. Color Plates. Illustrated. \$1.10.

## Agricultural Books

ASPARAGUS. Hexamer. 166 pages, $5 \times 71 / 2$ inches cloth. $\$ 1.00$.
CELERY CULTURE. Beattie. 150 pages, $5 \times 7 \frac{1}{2}$ inches, cloth. \$1.10.
GREENHOUSE CONSTRUCTION. Taft. 210 pages, $5 \times 71 / 2$ inches, cloth. $\$ 2.35$
ONION CULTURE, NEW. Greiner. 115 pages, $5 \times 71 / 2$ inches, cloth. \$1.00.
PRUNING MANUAL, THE. Bailey. 407 pages, $51 / 4 \times 73 / 4$ inches, cloth. \$3.35.
STRAWBERRY IN NORTH AMERICA. Fletcher. 234 pages, $51 / 2 \times 73 / 4$ in., cloth. $\$ 2.25$. SMALL FRUIT CULTURIST. Fuller. 298 pages, $5 \times 71 / 2$ inches, cloth. $\$ 1.70$.
TOMATO CULTURE. Day, Cummings and Root. 150 pages, $5 \times 71 / 2$ inches. cloth. 40 c .

## CELERY

GOLDEN PLUME-A most popular
variety of quite recent origin. A variety of quite recent origin. A den Self-Blanching, to which it is preferred in many sections. It is self-blanching with the ycllow color decided while the large heart blanches to a beautiful pearly white color. The individual stalks are always of finest flavor, brittle and without stringiness. The growth of the plant is stout and stocky, and is more resistant to disease than the other selfblanching types. Pkt. 25c; oz. \$1.75; postpaid.
GOLDEN YELLOW SELF-BLANCHING-This is no doubt the best celery for early Spring market use. Plants are of a yellowish green color when young, but as they mature the inner stems and leaves turn a beautiful golden yellow, which adds much to their attractiveness and makes the work of blanching much easier. Pki. 106; oz. \$1.10; $1 / 4 \mathrm{lb}$. $\$ 3.75$; 1b. \$12.00; postpaid.
WHHITE PLUME—The Leading White Celery. A handsome crisp sort, of very easy cultivation. Naturally its stalks and portions of its inner leaves and heart are white. It is the earliest celery known. Pkt. 10c; oz. 30c; $1 / 4 \mathrm{lb}$. $\$ 1.00 ; \mathrm{lb}$. \$3.00; postpaid.
WINTER QUEEN-This is without doubt the mos: valuable variety of celery for Winter and Spring use ever introduced. Has double the amount of heart of any known celery. The plant has a fine appearance, of compact growth, and blanches to at beautiful cream-white. Ribs perfectly solid, crisp and a delicious nutty flavor. Stored for Winter or Spring use, it is an excellent keeper and when taken out the blanched stalks will be firm and crisp; entirely free from strings; brittle and of sweet flavor. Plat. 106; oz. 3 © llb. \$3.00; postpaid.
GIANT PASCAL-Largest variety grown; of fine, nutty flavor; very easily blanched. Pkt. 10c; oz. $30 \mathrm{c} ; 1 / 4 \mathrm{lb} . \$ 1.00 ; \mathrm{lb} . \$ 3.00$; postpaid.

## CORN SALAD

FHTRTICUS or LAMB'S LETTUCE-A re. freshing salad, used extensively in Winter and Spring as a substitute for lettuce. It is often cooked like spinach. Sown in drills 1 foot apart, in the Spring or Fall. On the approach of cold weather cover over with straw or coarse litter. Pkt. 10c; oz. 30e; $1 / 1 \mathrm{lb} . \$ 1.00$; postpaid.

## CRESS

CURLED or PEPPER GRASS-This salad is much used with lettuce, to which its warm, pungent taste makes an agreeable addition. The seed should be sown in drills about 16 inches apart, on very rich ground, and the plants well cultivated. It may be planted very early. Pkt. $10 \mathrm{c} ;$ oz. $20 \mathrm{c} ; 1 / 1 \mathrm{ll}$. 50c; 1b. \$1.54; post paid.

## CHIVES

Chives belong to the onion family and the tops are used green for flavoring and garnishing. They grow in little clumps and can be supplied as plants any time in the early Spring. See Plant Department.

## CELERY CULTURE

Sow the seeds early, about Feb. ruary, in a hot-bed or cold frame. When 3 inches high transplant, setting them 4 inches apart. When grown 6 inches, and fine, stocky plants, set in richly ma nured, deep soil, in rows $31 / 4$ feet apart and about 9 inches from plant to plant. Water if dry weather follows transplanting. During the next two months all the attention that is required is to keep down the weeds. Blanch by placing boards along the rows, or earth up a little, and continue do ing so at intervals until only the tops of the leaves are visible late in Autumn. Never hoe up the earth when plants are wet. One ounce of seed produces about 6000 plants.
To Succeed with Celery you must keep your plants growing constantly while young, if you allow them to "stand still" they will run up to seed later. Always cultivate as soon after water. ing as the ground is dry enough to work well. Fertilize heavily in the Spring-and use nitrate later if needed.

WHITE PLUME CELERY

## CELERY PLANTS

We have the large heal. thy transplanted celery plants in the standard varieties for delivery in season. Any quantities. Write us for prices, or see Plant Department.

## CELERIAC

TURNIP ROOTED CEL. ERY-Large S mooth Prague. Improved form with very few side roots. The largest and best va. riety. Plit. 10c; oz. 25c; $1 / 4$ ib. 75 c ; postpaid.

## CHICORTM

The roots, dug in the Fall. dried, cut in thin slices, and ground are used largely as a
substitute for coffee. Sow quite thinly in shallow drills early in the Spring. When well started, thin out to stand 2 or 3 inches apart in the row. Pki. 10c; oz. $25 \mathrm{c}: 1 / 1 \mathrm{lb}$. 75 c ; lb. $\$ 2.50$; postpaid.


## SWISS CHARD

## NEW SAVOYED LEAF" "LUCULLUS"

-An improved variety of "Swiss Chard," growing about two and a hali feet high. The heavy stalks are over an inch thick and bare for more than a foot of their length. The leaves make the finest of "greens." By cutting back the leaves close to the ground tender shoots spring up quickly; these or the mid-rib are very delicious cooked as asparagus. Swiss Chard is hardy, easily grown and should be in every garden. It is ons of the most delicious of all vegetables Pkt. 10c; oz. 20c; 1/4 lb. 40c; lb. \$1.00; postpaid.

## Diamond Quality CUCUMBERS



CULTURE-Cucumbers need a warm, rich soil, and should not be planted in open ground until the weather is settled, as otherwise they will not thrive. Plant in hills 4 feet apart each way, thinning to three or four of the strongest plants, after danger from insects is passed. As fast as the cucumbers attain suitable size they should be taken from the vine, as their ripening soon destroys the vines' usefulness.

EARLY FORTUNE-Probably the best long distance shipping cucumber. Will hold its intense dark green color better and remain edible longer than most any other White Spine. Skin is smooth and fruit is uniform and symmetri cal. It is earlier and more prolific than Davis Perfect and fruits are equally attractive. It will probably displace that variety to a great extent in the future as it has every advantage of the Davis Perfect and none of its disadvantages. Plet. 10c; oz. 25c; $1 / 4 \mathrm{lb} .75 \mathrm{c}$; postpaid.
"DIAMOND" LONG GREEN-The leading large variety Fruit from 10 to 12 inches long, dark green, crisp and ten der. A good variety for slicing, and when matured they are best for sweet pickles. We offer our "Diamond Strain" -they will grow long and uniform in shape. Pkt. 10c; oz. 20c; 1/4 lb. 50c; lb. \$1.50; postpaid.

SHORT GREEN, OR EARLY FRAME-An excellent sort for both table use and pickling. Fruit straight, small at each end, bright green, with crisp, tender flesh. Comes into use a little later than the Early Cluster and keeps green a long time. Pkt. 10ヶ, nz. 20c; $1 / 4 \mathrm{lb} .50 \mathrm{c}$; 1b. \$1.50; postpaid.

IMPROVED WIIITE SPINE—One of the best sorts for table use, fruiting early and abundantly. Fruit uniformly straight and handsome; light green, with a few white spines. Plit. 10c; oz. 20c; $1 / 41 \mathrm{lb} .40 \mathrm{c} ; 1 \mathrm{lb}$. \$1.35; postpaid.
TELEGRAPH-FORCING-A standard forcing variety, very popular with gardeners. Fruit 14 to 16 inches long, of very fine quality. A sure and heavy cropper. Plat. 25c, pstpd

"THE DAVIS PERFECT" CUCUMRER-The "Davis Perfect" is of perfect form, large size and of the finest color; is crisp, delicious and almost seedless. This fine variety comes from the originator of the Davis Wax Bean and is one of the most valuable varieties for home or market. The "Davis Perfect" is as handsome, grown outside, as any hothouse cucumber. Pkt. 10c; oz. 20c; 1/4 lb. 45c; lb. \$1.35; postpaid.
JAPANESE CLIMBING-A useful variety for growing on a trellis or wire. The cucumbers are long, of a dark green color, white flesh, crisp, and of a good flavor. Plit. 10 c ; oz. 20 c ; $1 / 4 \mathrm{lb} .50 \mathrm{c}$; post paid.


LEMON CUCUMBER

LEMON CUCUM-BER-This dainty little cucumber resembles a lemon both in form and color, having a dis. tinctive flavor superior to and not found in any other cucumber. The Lemon Cucumber is so prolific that a single vine will be ample for the needs of the average family. It is also said that the Lemon Cucumber can be eaten without fear of the harmful results that some experience from eating cucumbers. Pkt. 10c; oz. $25 \mathrm{c} ; 1 / 4 \mathrm{lb} .60 \mathrm{c}$; postpaid.

## PICKLING CUCUMBERS



CHHCAGO PICKLING CUCUMBER-One of the most popu lar of the small early pickle varieties. It has square ends, smooth skin, is enormously productive and very disease resistant. The ideal type for very early uniform pickles. The iruits average $6 \times 21 / 4$ inches when fully developed. Pkt. $10 \mathrm{c} ; \mathrm{oz} .20 \mathrm{c} ; 1 / 4 \mathrm{lb} .35 \mathrm{c} ; \mathrm{lb} . \$ 1.00$; postpaid.
SNOW'S PERFECIION CUCUMBER-This variety is rather like the Chicago Pickle except that it is smaller. It is one of the most smooth, symmetrical pickle kinds grown and is highly recommended for its uniform early pickles. The fruits average $5 \times 21 / 2$ inches in size. It is enormously productive and the square ended pickles are very attractive. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb}$. 35 c ; 1b. $\$ 1.00$; posipaid.
BOSTON PICKLING OR GREEN PROLIFIC-Color, bright green, and a great producer. The fruits average 4 to 5 inches in length when large enough for slicing, and are of excellent quality, but it is for producing medium sized pickles that this variety is so highly esteemed. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb}$. 35 c ; lb. $\$ 1.00$; postpaid.

Sweet or Sugar varieties are used both for table and stock feeding, some of the large later sorts being preferred for silos and fodder.

## YELLOW VARIETIES

GOLDEN EVERGREEN SWEET CORN - A splendid yellow sweet corn noted for its excellent qualities. It is a cross between the Golden Bantam and Stowells Evergreen but is much larger than the Golden Bantam and more productive, yet retains the tender skln of the Evergreen. Comes in just right in season to follow the first early sorts. The color is a rich golden yellow with ears 8 to 9 inches long, well filled from butt to tlp with good juicy kernels of most delicious flavor. The stock we have is western grown and we feel confident will prove a most popular variety for this section.
GOLDEN GHAN'T SWEET CORN-A large yellow sweet corn, much larger than the Golden Bantam which it resembles somewhat. It has real merit and has proven an excellent sort for successive planting. Thls varlety grows to the height of about 5 feet and usually bears two good eating ears. They are from 9 to 10 inches in length and well filled from tip to butt.
GOLDEN WHST - A selection from the original strain of Golden Bantam. Produces a larger ear, has a more vigorous growth, and by continued careful selection, lmproves yearly. "Golden West" is extremely hardy, can be planted oarlier than other varieties, and, being of dwarf habit, can be planted closer than other sorts. It is the very best corn for market or home gardens, where earliness and quality are considered. The color is a rich, creamy yellow, deepening to golden as it matures.
GOLDEN BANFAM-The original yellow sweet corn. Does not grow quite as large an ear as our "Golden West," but has most of lts good qualitles; early, productlve, sweet and rich.
PRICES SWEET CORN ON THIS PAGE Postpaid, Pkt. 15c, 1/2 lb. 20c; 1 lb .35 c ; 10 lbs . $\$ 3.00$

## WHITE VARIETIES

EARLY PORTLAND MARKET-One of the earliest large eared varieties. Large, sweet, plump grains of purest white on well filled ears; a good market varlety. Ears large but stalk not considered a rank grower.
OREGON EVERGREEN -. We offer "Oregon Evergreen" as the finest main crop Sweet Corn. The flavor and sweetness have not been excelled and the oxtreme whlteness of the large ears makes it very beautiful and valuable for canning. It ls large and the stalks produce more ears than any other varlety and have a very heavy husk over the gralns, protecting them from lnsects and keeping the ear fresh a long time after cutting. "Oregon Evergreen" is a hardy, vigorous grower and is the ideal Corn for market gardeners.
STOWELL'S EVERGREWN-Remarkable for remaining a long time in a fresh condition sultable for the table. Hardy and productive and the best late variety for general use.
EARLY MINNESOTA-This old and deservedly popular variety is one of the best early sorts for the market and the private garden.
COUNTRY GENTLEMAN-The sugary sweetness and delicious flavor make this old-time favorlte one of the most desirable varietles. The slender white frregular kernels are very long, the cob smal" maklng much more to the car than other varleties.
BLACK MEXICAN-An old favorite still in good demand on account of its quality and sweetness. A grood varlety for home gardens.

## Have Green Corn the Whole Season Through

Here is a splendid combination for succession of crop that will assure green corn all during the season. Plant in the following order:

1. EARLY PORTLAND MARKET
2. GOLDEN EVERGREEN
3. GOLDEN BANTAM
4. STOWELI'S EVERGREEN


Golden Evergreen



Oregon Grown Kellow Dent in the Field

SIXTY.THREE PER CENT of the feeding value of a matured corn plant is in the ear. Corn to mature properly must be adapted to the section where grown, requiring several seasons of intelligent care and selection.

Our Western Grown Corn being thoroughly acclimated will give splendid satisfaction under the conditions and for the purposes recommended-we have large stocks and can supply any amount at very reasonable prices.

CULTURE-Thorough preparation of the soil is necessary for best results, methods of culture being determined by the different conditions of soil, climate, moisture and previous crops. The ideal soil is a deep warm one with a little sand, well drained and with sufficient humus to hold the moisture.

Deep plowing is always necessary for best results, and the heavy soils on the West side of the Cascades will give best results from Fall plowing, repeating in the Spring before seeding time. A liberal amount of stable manure and thorough tillage will help offset the cold nights. For best results when planted for grain, plant in hills 43 inches apart, allowing two stalks to the hill. For fodder or silo, three stalks, if the ground is rich.


Oregon Grown Yellow Dent-the Prize Winner

## Prices Field Corn, Postpaid, Pkt. 10c; 1 lb. 20c; 10 lbs. $\$ 1.50$

## Special Prices per 100 pounds F. O. B. Portland on request.

OREGON GROWN YELLOW DENT - Makes a quick growth with abundant foliage, maturing early, gives a good grain yield and will make silage of the highest food content. Especially adapted to the Willamette Valley and irrigated valleys of the Pacific Northwest.
MINNESOTA No. 13 YELHOW DENT-The earliest of the early Yellow Dent corns and reported to be the heaviest yielding, producing splendid large ears, closely filled from end to end with bright yellow kernels. Has rather a thick cob and the shelled grains have a tendency to irregularity. Will average 7 feet high and being a rapid, vigorous grower, with heavy foliage, makes a fine fodder corn, especially recommended for ensilage west of the Mountains. Will mature in ninety days under favorable conditions.
PRIDE OF THE NORTH YELLOW DENTHas long been the standard Corn recommended by the Agricultural Stations as the best Yellow Dent for Eastern Oregon, Washington and Idaho, and our seed has given splendid results whenever conditions have been at all favorable, maturing early and yielding heavily, the foliage being luxuriant and of medium height. Especially recommended for silo.

NORTHWESTERN DENT-A red corn with yellow dent or cap, and in high altitudes and the Northern sections where seasons are short will often mature a crop when other varieties fail. Owing to its frost and drought resistance, its extreme earliness and rapid growth make it valuable for late planting and for replanting. Ears are 7 to 10 inches, closely filled; grows 7 to 8 feet high. Splendid for silage.
WHITE FLINT-This valuable variety is specially adapted to Northwestern conditions. It is earlier than the well-known "Eight-Row Canada," and is to be preferred on account of its color, productiveness and very early ripening.
WISCONSIN WHITE DENT-Is a large handsome White Dent, extremely early and matures perfectly.
CHAMPION WHITE PEARL - A large, White Dent variety; very popular with our dairymen on account of the great amount of green feed it makes.
KING PHILIP - An early Red Flint Corn; well acclimated and well known.
 As an economic feed crop, Corn is without a peer. Twenty to thirty tons of silage per acre are within the reach of every corn grower who will plant good seed, fertilize wisely and cultivate diligently. Land that is producing three to four tons of hay will produce double this amount of feed planted to corn. Progressive farmers are realizing these facts and the corn acreage is increasing rapidly from year to year.


Western Grovm Minnesota No. 18

[^0]EGG PLANT


Should be started in a hotbed and transplanted when the weather is settled and the ground thoroughly warm. They will thrive with the same treatment as that given the tomato. BLACK BEAUTY - An extra early, quick-growing, vigorous variety; handsome and very uniform. Color, deep blackish purple. Splendid market sort. Pkt. 10c; oz. 70 c ; $1 / 4 \mathrm{lb}$. $\$ 2.00$; post. paid.
NEW YORK IMPROVED, LARGE PURPLE - The leading market variety. Large, round, dark, most productive. Plit. 10c; oz. 70c; $1 / 4 \mathrm{lb}$. \$2.00; postpaid.

## HORSERADISH ROOTS

For prices and descriptions, refer to Plant Department. (See Index.)

## ENDIVE



This is a hardy vegetable, cultivated principally for a Winter salad. Sow from May until August for a succession of crops; tie the leaves closely together to blanch them.
BROND LEAVED BATAVIAN (Esca-rolle)-Has broad, thick leaves, which form a large loose head. Pki. 10c; oz. 15 c ; $1 / 1 \mathrm{lb} .40 \mathrm{c}$.
WHITE CURLED - A beautiful variety, with curled leaves for early use. Pkt. 10 c ; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .40 \mathrm{c}$.
GREEN CURLED-For Fall and Winter. Pht. 10 c ; oz. 15 c ; $1 / 4 \mathrm{lb} .40 \mathrm{c}$; all postpaid.

## GARLIC

A profitable crop if your soil is right. October is planting month in Western Oregon. Write for prices and cultural directions.

All Prices On This Page Postpaid

## HERB SEEDS FOR FLAVORING

ANISE-For flavoring. $1 / 4 \mathrm{lb} .15 \mathrm{c}$; lb . 40 c .
CELIERY-For flavoring. Oz. 10c; 1/4 lb. 15 c ; 1 b . 50 c .
CARAWAY-Well preserved seed for the use of druggists and confectioners. Oz. $10 \mathrm{c} ; 1 / 4 \mathrm{lb} .20 \mathrm{c} ; \mathrm{lb} .55 \mathrm{c}$.
DILL-Seed and leaves used to flavor soup, stews and pickles. Leaves possess similar qualities to the seed, and can be used in the same manner. Oz. $15 \mathrm{c} ; 1 / 1 \mathrm{lb} .50 \mathrm{c} ; \mathrm{lb} . \$ 1.50$.
MUSTARD-For flavoring and pickling. Lb. 10 c ; postpaid 20c; 100 lbs . market price.
POPPY-For flavoring. $1 / 4 \mathrm{lb}$. 10c; lb. $35 c$.
PARSLEY-For flavoring. $1 / 4 \mathrm{lb}$. 10 c ; lb. 35 c ; postpaid.

## Lee'sSmokeFlavor

Hickory Smoke Extract applied to meat preserves it indefinitely, imparting the delicious flavor that is only other. wise obtained by smoking with green hickory.

12 oz . bottle 32 oz . bottle
50c
\$1.00

## GARDEN KALE

EMERALD ISLE-Finest in the World-This is really the handsomest Kale that has ever come under our notice; and is entirely distinct from other strains, very hardy, of medium height, very vigorous, throwing out new shoots as fast as the leaves are used, and will furnish excellent greens all winter. The closely curled, handsome leaves are the most attractive and of fine flavor. Fine exhibition plant. Plat. 10c; oz. 20c; $1 / 4 \mathrm{lb} .50 \mathrm{c} ; \mathrm{lb} . \$ 1.50$; postpaid. TALL GREEN CURLED SCOTCH-Grows about two feet high; leaves dark green, curled and wrinkled; very hardy and is improved by a slight frost. Plit. 10c; oz. 20c; 1/4 lb. 50c; lb. $\$ 1.50$; postpaid. DWARF GREEN CURLED-Leaves beautifully curled and bright green. Pkt. 10 c ; oz. 20c; $1 / 4 \mathrm{lb}$. 50c; lb. $\$ 1.50$; postpaid.

## COW or THOUSAND HEADED KALE

The great demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific Coast dairy and stockmen; endorsed by agriculture colleges and government stations. Cow Kale should be grown in the same be set as late as July. Write for full information on planting and feeding. A quarter pound of seed will produce enough Kale plants for one acre. Postpaid, oz. $10 \mathrm{c} ; 1 / 4 \mathrm{lb} .25 \mathrm{c}$; lb. 75 c .

## KALE PLANTS

For Kale plants in season, refer to Plant Department. (See Index.)

## KOHL RABI

Hardy and of easy culture. Grown from plants the same as cabbage. The Kohl Rabi is a vegetable intermediate between the cabbage and turnip and combines the flavor of both. The edible part is a turnip-shaped bulb formed by the swelling of the stem. Kohl Rabi is far superior to cabbage or turnips in the delicacy of its flavor and is a splendid addition to every garden. It should be eaten before growth ceases.

EARLY WIITE VIENNA-Very early; bulb white; best table variety. Pkt. 10c; oz. 25c; $1 / 4 \mathrm{lb}$. 85c.
EARLY PURPLE VIENNA - Same as above except in color, which is purple. Plit. 10c; oz. 25c; $1 / 4$ lb. $85 c$.


P. S. CO'S "CRISPETTE"

A Splendid Lettuce for Home Gardens

## HEADING VARIETIES

P. S. CO'S CRISPETTE-A beautiful Lettuce, perfect in quality. The large, curly leaves, which cover the outside of the solid heads, are of a bright, light green. The unusual solidity of the heads is insured by the large, white main ribs of the leaves, each of which curving strongly toward the center, makes it impossible for the leaves to open outward and expose the center, which will always be found crisp, tender, sweet and melting. It matters not whether grown to head in the early Spring or the hottest days of Summer, the leaves are always crisp and tender. Pkt. $10 \mathrm{c} ; \mathrm{oz} .35 \mathrm{c} ; 1 / 4 \mathrm{lb}$. $\$ 1.00$; lb. $\$ 3.00 ; \mathrm{ppd}$.
NLW YORI OR WONDERFYL—The Best Head Hettuce for Maiket Growers-The mammoth head lettuce so largely grown for shipment to distant markets, arriving in splendid condition. Immense heads, solid, heavy, beautifully blanched to a creamy white with bright green outer leaves. The quality is unsurpassed, being tender, crisp and sweet. "New York" is a hardy, rapid grower, deep rooted and resistant to drought; a slow seeder and sure to head. Thin to 12 to 14 inches. Plit. $10 \mathrm{~g} ; \mathrm{oz} .35 \mathrm{c} ; 1 / 1 \mathrm{ib} .85 \mathrm{c} ; \mathrm{lb}$. $\$ 2.50$; postpaid.
HANSON-Improved Hard Heading Stock - One of the very best. Heads green outside and cream inside, grows and tender. It withstands the hot sun well. Plit. 10c; oz. $20 \mathrm{c} ; 1 / 4 \mathrm{lb}$. GOc; lb. \$1.50; postpaid.
BROWN DUTCH-Forms a large, solid head; sweet, tender and of good flavor. Outer leaves are tinged with brown. It is very hardy. Plet. $10 \mathrm{c} ; \mathrm{oz} .20 \mathrm{c} ; 1 / 4 \mathrm{lb} .50 \mathrm{c}$; lb. $\$ 1.50$; postpaid.
BIG BOSTON - Very large, smooth-leaved, solid-heading variety, grown more extensively throughout the East and South than any other. It is congenial to all climates, a good shipper. In flavor it probably excels other smooth-leaved varieties. An excellent all-year Lettuce. Pkt. 10 Cc ; oz. 20c; $1 / 4 \mathrm{lb}$. $\mathbf{6 0 c}$; lb. $\$ 1.85$; postpaid.
MAY KING-Large growing, smooth leaved, richly flavored. Plant, light green, with round leaves, which form into a very solid, compact, round head; stands a long time without running to seed. Inner leaves blanch to a rich golden yellow. Exceedingly rich, tender and buttery. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb}$. 60c; lb. $\$ 1.75$; postpaid.
PARIS WHITE COS-Grows to a very large size. A solid Lettuce of the highest quality. Light green long, narrow, spoon-shaped leaves. Plst. 10c; oz. 20c; $1 / 4 \mathrm{ib} .60 \mathrm{c}$; lb. \$1.75; postpaid.

## Chicken Lettuce

Just the Thing for Poultry Men-This Lettuce yields an immense amount of chicken or rabbit feed. It does not form a head but sends up stalks three to four feet high and when cut it immediately starts to grow again. Loaded with leaves which can be pulled off the stem like kale. Pkt. 10c; oz.

CULTURE-Lettuce is so extensively grown that cultural directions seem unnecessary, but we offer a few simple suggestions that may save a later disappointment, as any failure is generally blamed to the seed. This should not be, as Lettuce, like many other vegetables, requires very rich soil, plenty of water a cool growing season and intense culture to produce the best results. If the earliest varieties are planted out in the Spring, and the weather turns dry or hot, they will run up to seed without heading. The same seed sown in the Fall or with cooler growing weather would develop perfectly. At a temperature of 40 degrees or lower Lettuce will not thrive. At 65 degrees and upward it has a tendency to run up and not head properly. For outside planting sow the seed in shallow drills from one to two ounces to the 100 yards. An ounce will produce 3000 plants. Four pounds should plant an acre. Lettuce matures in forty to sixty days from time of planting.


## LOOSE LEAF VARIETIES

GRAND RAPDDS-For Early Forcing-As a Lettuce, for greenhouse forcing, this varicty undoubtedly stands at the head of the list. Of quick growth, and stands for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large, light yellowish green leaves, slightly crimped and blistered, rather thin, good flavor, crisp and tender. It will stand shipping better than most curled sorts. Pkt. 10 ; oz. 20c; $1 / 4 \mathrm{lb} .60 \mathrm{c} ; \mathrm{lb}$. $\$ 1.75$; postpaid.
SMMPSON'S EARLY CURLED-A leading market variety used for very early planting and forcing. Forms a dense mass of finely curled and wrinkled leaves that are excellent and tender, and do not wilt readily. Plit. 10c; oz. 20c; $1 / 1 \mathrm{lb}$. $60 \mathrm{c} ; \mathrm{lb}$. $\$ 1.75$; postpaid.
BLACK SEEDED SIMPSON-Forms a close, compact mass, curly leaves of a yellowish green. Plat. 10c; oz. 20c; $1 / 4$ Il. 50 c ; Ib. $\$ 1.50$; postpaid.



KLONDIKE

## WATERMELONS

CULTURE-Watermelons thrive best on light, well-drained soils, but give good results on any good rich garden soil properly drained and cultivated. Plant after weather is settled and ground warm. Hills 8 feet apart each way, well rotted manure worked into each hill. 1 oz. of seed will plant 30 hills 2 to 3 lbs . per acre.
KLONDIKF-For genuine merit the Klondike is surpassed by no other melon. It was first introduced in 1909 and has steadily gained in popularity each year. The seeds are quite small, the color brown mottled black, while the flesh is a distinctive shade of red. The rind is dark green and although thin, it is still a good shipper because it does not wilt. The shape is long and the average weight 20 pounds. The seed being so small one pound contains as many as two pounds of most other varieties. Our stock is procured from the introducer who has kept it pure to the original type. Pkt. 15 c ; oz. $25 \mathrm{c} ; 1 / 4 \mathrm{lb} .75 \mathrm{c}$; lb. \$2.50; postpaid.
GOLDEN HONEY-The best of the yellow fleshed melons. It is oblong in shape with an average weight of 20 lbs . The rind is dark green with irregular stripes of darker green. It is a standard variety and is one of the best melons grown for eating. Pkt. 10c; oz. 20c; 1/4 lb. $45 \mathrm{c} ; \mathrm{lb}$. \$1.25; ppd.
"KING AND QUEEN" - Winter Watermelon - Average weight 25 pounds. Spherical shape, ivory shell, pink center, seeds black. A luscious, valuable winter melon, hardy, a good drought-resister. Ripens every melon in less than 120 days. Keeps for ninety days if not bruised. Shell very hard and melon ripens to within $1 / 8$ inch of it. Pht. 10c; oz. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c} ; \mathrm{lb} . \$ 1.25 ;$ postpaid.
KLECKEEX'S SWEET, or MONTE CRISTO-Splendid for home use or near markets. Vine vigorous and productive; fruit medium size; oblong; dark green in two shades, indis tinct stripes. Flesh a rich red; sweet and tender. Pkt. $10 \mathrm{c} ; \mathrm{oz} .20 \mathrm{c} ; 1 / \mathrm{ib} .45 \mathrm{c} ; \mathrm{lb} . \$ 1.25$; postpaid.
SWEET-HEART-Good shipper. Vine vigorous and productive, ripening its fruit early. Fruit large, oval, very heavy, uniformly mottled dark and light green; rind thin but firm; flesh bright red, firm, solid, but very tender and sweet. Fruit retains its good quality for a long time after ripening. Pkt. 10 c ; oz. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c}$; lb. $\$ 1.25$; postpaid.
TOM WATSON-18 to 24 in . long, 10 to 12 in . diameter, thin, dark green rind, deep red flesh, crisp and sugary, with a lusciousness and distinctive flavor that makes it one of the finest melons ever produced; hardy, early, stands handling and long shipment. Plit. 10c; oz. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c}$ lb. $\$ 1.25$; postpaid.
BLACK-SEEDED ICE CREAN WATERMELON-Grown ex tensively in Wenatchee and Yakima sections of Washing ton. A splendid shipping melon, does exceptionally well in any soil which grows melons. Almost round, pink meated, black seeded, a fine keeper. Drought-resistant, ripens early. Pkt. $10 \mathrm{c} ;$ oz. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c}$; lb. $\$ 1.25$; postpaid.


## HEARTS OF GOLD

## Hearts of Gold-A New Variety

This melon runs very uniform in size. It is a splendid shipping variety. The melons are oval to oblong in shape and are a little larger than the Pocky Ford variety. While it is a ribbed melon the ribs are not prominent and the melon is very heavily netted. The flesh is a rich orange color, fine grained and of excellent flavor. The seed cavity is small. It does not turn yellow when ripe but retains its natural green color and remains solid and firm for days after it is picked from the vine. Plit. 15c; oz. 25c; $1 / 4 \mathrm{lb} .75 \mathrm{c}$; lb. $\$ 2.50 ;$ postpaid.

## MUSKMELONS

CULTURE-Plant in hills 4 to 6 feet apart, after frost is past and ground is warm; enrich with well-rotted manure; plant seeds just under the surface, not too deep. One ounce to 50 hills, 2 or 3 lbs. per acre. Melons thrive best on warm, light soils, but good crops are obtained on heavy ground if rich and well drained.
BURRELL GEM—The Perfect Melon for Market or Home Gaidens-Has a tough, thin rind, well arched ribs, covered with closely interlaced gray netting; about $41 / 2$ in. diameter by 6 in. long, flesh of reddish orange, very thick, fine grained and spicy, seed held firmly in triangular cavity. This is the secret of a good shipping melon. If the seeds shake loose easily a melon quickly decays. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .50 \mathrm{c}$; lb. \$1.50; postpaid.
ROCKY FORD-POLLOCK 10-25-The latest improved popular Rocky Ford. It eliminates every defect of all other strains. Perfect in size, shape, netting, flavor, long keeping and good shipping qualities. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb}$. 50 c ; lb. $\$ 1.50$; postpaid.
ROCKY FORD-Oval, slightly ribbed, densely covered with coarse netting. Flesh thick, green, very sweet, highly flavored, wonderfully uniform in shape and quality. A favorite with market gardeners. Plit. 10c; oz. 20c; $1 / 4 \mathrm{lb}$. 50c; lb. $\$ 1.50$; postpaid.
HOODOO-Grows to a convenient size. Flesh thick and firm; deep salmon or orange color. Pkt. 10 c ; oz. 20c; $1 / 1 \mathrm{lb}$. 50 c ; lb. $\$ 1.50$; postpaid.
OSAGE OR MILLER'S CREAM-One of the finest flavored melons in cultivation, and highly recommended. Flesh rich salmon color, very sweet and melting in quality. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb}$. 50c; lb. $\$ 1.50$; postpaid.
LARGE YELLOW CANTALOUPE-Early and productive; flesh salmon color, rich, sweet. Pkt. 10c; oz. 20c; 1/4 lb. 50 c ; lb. \$1.50; postpaid.
SMALI GREEN NUTMEG-Ripens early, flesh green, fine and sweet. Superior for early market, or family garden; a favorite for hotels and restaurants. Plit. 10c; oz. 20c; $1 / 4 \mathrm{lb}$. 50 c ; lb. \$1.50; postpaid.

## MUSTARD

Sow any time in the Spring, in rows, thin out as necessary. SOUTHERN GIANT CURLED-Pkt. $10 \mathrm{c} ; \mathrm{oz} .15 \mathrm{c} ; 1 / 41 \mathrm{~b} .35 \mathrm{c} ; 1 \mathrm{lb} .90 \mathrm{c}$. CHINESE MUSTARD-Less pungent than other varieties. Is most delicious, thriving at the same season and under conditions that are favorable to spinach. Pkt. 10 c ; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .35 \mathrm{c} ; 1 \mathrm{~b} .90 \mathrm{c}$.
FORDEOOK CURLED-Dark green, finely curled, leaves of distinctive flavor: fine for salads. Pkt. 10c: oz. 15c: 1/4 lb. 40c; lb. \$1.00. PRICES ABOVE ARE POSTPAID

## Mushroom Spawn

Our free pamphlet gives general instructions. NEW AMERICAN SPORE CULTURES-Produced from original spores by new French process-the only method by which select varieties can be perpetuated and improved. Bricks weigh about 20 ounces and will plast 10 equere feet. Price per brick, postpaid, 40 c ; 5 bricks for $\$ 1.75$.

## This is the Riverside Sweet Spanish Onion

AUSTRALIAN BROWN - Resembles the Oregon "Yellow Danvers" in general appearance, but has a clear amber-brown skin that attracts buyers. Early, ripens uniformly, will keep in good condition longer than any other onion. For late sowing Australian Brown heads the list. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb}$. 60c; lb. \$2.00; postpaid.
YELLOW GLOBE DANVERS - The type most widely known and used as a main crop variety. A handsome, round or globe-shaped variety of large size, with thin, yellowish skin, white flesh, fine grained, mild, firm, and the best of keepers. Ripens early. Plst. 10 c ; oz. 25 c ; $1 / 4 \mathrm{lb} .75 \mathrm{c}$; lb. \$2.25; postpaid.
PRIZETAKER-The Genuine, the Handsoniest Yellow Globe Onion-Fine flavor, enormous size, perfect globe shape, bright straw-colored skin, neck very small and always ripens up hard. Pkt. 10c; oz. $25 \mathrm{c} ; 1 / 4 \mathrm{lb} .75 \mathrm{c} ; \mathrm{lb} . \$ 2.50$; postpaid.
LARGE RED WETHERSFIELD-A standard variety; one of the most productive kinds, even in poor soil. Its good keeping qualities render it one of the best for shipping. Plit. $10 \mathrm{c} ;$ oz. 25 c ; $1 / 4 \mathrm{lb} .65 \mathrm{c} ; \mathrm{lb} . \$ 2.25$; postpaid.
WHITE PORTUGAL-One of the standard American onions. The true type is of medium size, flat, pure white and the flesh fine-grained, firm and hard. It is late ripening and a good keeper. Used exclusively by large set growers in certain Eastern sections and by most pickle growers, for pickling onions. Used almost exclusively for White Silverskin as well. Pkt. 10c; oz. 25c; 1/4 lb. 75 c ; Ib. \$2.50; postpaid.

## BOTTOM ONION SETS

Small onions grown from seed that has been sown too thickly to attain a large size. The small onions (about $1 / 2$ inch in diameter) planted out are ready in a short time to pull as green onions for the table or bunched for market. If left to stand they make ripe onions of the best quality, and come to maturity some six weeks earlier than a crop grown directly from the seed. Per lb. 20c, postpaid. Write for quantity prices.

## OKRA (or GUMBO)

IMPROVED DWARF GREEN-Very early, with long, green slender pods. Pkt. 10c; oz. 15c; 1/4 lb. 35c; postpaid.
WHITE VELVET-Large pods, smooth or very slightly ribbed, remain tender a long time. Pkt. 10c; oz. 15c; 1/4 lb. 35c; postpaid.

## PARSNIPS

CULTURE-As the seed germinates very slowly, sow as early in Spring as possible, in drills 15 inches apart on deeply cultivated rich, loamy soil. Keep clear of weeds and thin to 3 or 4 inches apart. The roots of the parsnip are improved by freezing. HOLLOW CROWN OR LONG WHITE-Very long, white smooth, tender, sugary, of most excellent flavor. Very hardy; will keep through the Winter without protection. Pkt. $10 \mathrm{c} ; \mathbf{0 z}$. $15 \mathrm{c} ; 1 / 4 \mathrm{lb}$. 35c; lb. $\$ 1.00$; post paid.

We are growers of onion seeds and Sets, and for years have been specializing on varieties that attain their greatest perfection in the Northwest and believe in our "OREGON YELLOW DAN. VERS'" we have the finest type of Danver Onion ever offered, and recommend it to all commercial growers.


WHITE BUNCHING
WHITE "BUNCHING" ON. ION-Especially useful to market gardeners for producing an attractive "green onion." The young stalks are crisp and mild, attaining a good size before the bulb forms. Pkt. $10 \mathrm{c} ; \mathrm{oz} .25 \mathrm{c} ; 1 / 4 \mathrm{lb} .70 \mathrm{c}$; lb. \$2.00; postpaid.
> +an - Write for our book,
in -How to FertilizeIt's free
P. S. CO'S OREGON FELLOW DAN. VERS, developed in Oregon and the standard market variety in this section. The bulbs are uniformly large, half globe form, small neck, the thin, brownish-yellow skin, firm, fine grained flesh very white and mild. Produce the largest crops, ripen up hard and early, the best keepers and bring the highest price In the Coast markets. As a table or market onion has no rival. The seed We offer is produced under the most approved methods of culture and no grower can afford to plant inferior seed when we can supply Oregon Yellow Danvers. Pkt. 10c; oz. 25 c ; $1 / 4 \mathrm{Ib}$. 75 c ; lb. $\$ 2.50$; ppd.

P. S. CO'S OREGON YELLOW DANVERS

## PARSLEY

PLAIN-For flavoring and garnishing. The green leaves are used or they may be dried crisp, rubbed to a powder and kept in bottles until needed. Pkt. 10 c ; oz. 15 c ; $1 / 4 \mathrm{lb}$. 40 c ; pestpaid.
EXTRA DOUBLE CURLED-The plants bear a great number of leaves, so abundant and so finely curled they resemble a bunch of moss. Pkt. 10 c ; oz. 15c; $1 / 4 \mathrm{lb}$. 40 c ; ppd. TURNIP-ROOTED OR HAMBURG-The root, resembling a small turnip, is the edible porresembling a smal turnip, is the edible por-
tion. Used for flavoring soups, etc. Pkt. 10c: oz. 15 c ; $1 / 4 \mathrm{lb} .40 \mathrm{c}$; postpaid.


> TESTED FOR GERMINATION IN OUR OWN LABORA. TORY

# Garden Peas 

## Hand Picked At Our Warehouse

## Prices on Peas on this page postpaid except as noted

## Pkt. 15c; 1/2 lb. 20c; 1 lb. 35c; 10 lbs. $\$ 3.00$ MAIN CROP VARIETIES

## Great Favorites with our Market Gardeners

## GRADUS or PROSPERITY -

 This early wrinkled pea bears pods of large size and combines quality with earliness. Very hardy and prolific ; can be planted fully as early as the smooth peas; growth vigorous and healthy; vines $21 / 2$ feet in height; quality and flavor are delicious and they remain tender and sweet for a long time.TELEPHONE - TALL - Our Western grown selection and a standard market variety; immensely productive, extra large pods being filled with peas of the finest quality, the luscious sugary flavor not being excelled luscious sugary flavor not being excelled grower, averaging 4 to 5 feet.

THOMAS LAXTON-A very ear ly variety of great merit. Vines are vigorous, of medium height-about three feet-similar to Gradus, but darker in color, hardier and more productive. Pods are large, about four inches, with square ends, uniformly well filled and of unexcelled quality. One of the very best sorts for market and home garden.

IMPROVED STRATAGEM-One of the best of the large podded peas; the pods are of immense size filled with large, dark green, wrinkled peas of the finest quality; vine of mediam height, but very stocky, with very abundance of large handsome pods.

## LAXTON'S SUPERB

Produes more pods and larger pods than any other early dwarf pea. The flavor is exceptional; pods are slightly curved and contain an average of 8 to 9 peas of finest marrow flavor. Vines are stout, 18 to 24 in . high. A fine variety for home or market garden. Pkt. $10 \mathrm{c} ; 1 / 2 \mathrm{lb} .15 \mathrm{c} ; \mathbf{l b} .25 \mathrm{c} ; 10 \mathrm{lbs} . \$ 2.25 ;$ postpaid.

## gradus

PILOT-A large podded extra early smooth pea. Pods and peas nearly as large as those of the "Gradus" and are produced three days earlier. Vines grow 3 feet tall, bearing pods $33 / 4 \mathrm{in}$. long, 6 to 7 peas to the pod. Foliage medium green, pods dark er. Excellent for home garden and market. Pkt. 10c; $1 / 2 \mathrm{lb}$. 15 c ; Ib. 25c; $10 \mathrm{lbs} . \$ 2.25$; postpaid.

## EARLY AND DWARF VARIETIES

EARLY DWARF GRADUS - Slightly earlier and more dwarf than the regular Gradus. Vines moderately stout, pods medium green, rather large and well filled with dark green peas of exceptional quality.

DWARF TELEPHONE or DAISY-Medium tall, vines exceptionally strong growing, producing freely, large well filled pods. A favorite with shippers because it carries well and commands a high price because of its quality

LAXTONIAN-An early, dwarf, robust, large podded pea of superior excellence; growth averaging 16 inches. The large pods are well filled, holding eight to ten peas.

LITTLE MARVEL-The dwarf, bushy vines, averaging 15 inches, are loaded with firm square-ended pods $21 / 2$ to 3 inches long, tightly filled with plump, luscious, deep green peas. As early as American Wonder and far outyields it.

AMEIRICAN WONDER-One of the most popular and best of the early wrinkled sorts; stout, branching vines, covered with well-filled pods containing seven or eight large, exceedingly sweet, tender and wellflavored peas. Height 10 to 12 inches.

PREMIUM GEM-One of the earliest and best of the dwarf garden peas. The vigorous, luxuriant vines average about 15 inches in height, heavily loaded with well filled pods of rich, fine flavored sugary peas. Continues in bearing for a longer period than most varieties in this class. Splendid for successive planting and for canning.

ALASKA OI EARLIEST OF ALL - A smooth, blue pea, of even, vigorous growth and extra early maturity. Vines 2 to 3 feet high, unbranched, bearing four to seven long pods. filled with medium sized, bright green peas of excellent flavor. A favorite with our market gardeners for Fall or early Spring planting.


## PEPPERS

CULTURE-Sow early in hotbeds; or later, when the weather becomes warm, in open beds. When two or three inches high, transplant to a warm, mellow soil, in rows eighteen inches apart and a foot apart in the rows. Guano and hen manure are excellent fertilizers and will greatly increase the yield. CHINESE GIANT-Fruits are a rich deep green when immature and bright scarlet red when ripe. Flesh is thick, mild and sweet, exceptionally desirable for use in salads and also one of the best varieties for stuffing. Plants vigorous and very productive, peppers often growing to be five inches in diameter, almost square in shape, and divided into four sections. Our seed of this variety grown from especially selected stock. Pkt. 10c; oz. $80 \mathrm{c} ; 1 / 4 \mathrm{lb}$. $\$ 2.50$; postpaid.
PERFECTION PIMIENTO PEPPER-Unequaled for quality, sweetness, large, smooth, flesh 3 times as thick as in other varieties. Skin can be slipped off by heating or boiling a little, or pare like an apple. Growth is vigorous. Yield is heavy and continuous, bearing until frost. I'kt. 10 c ; oz. 65 c .
RUBY KING-Very large, sweet and mild; bright scarlet. Pkt. 10c; oz. 65 c .
LARGE BELL or BULL NOSE-Large, mild, thick, fleshed variety. Fine for stuffed pickles. Pkt. 10 c ; oz. 65c.
CAYENNE-Pods long; bright red; very pungent and used with pickles when green. Pkt. 10c; oz. 65c.
CHILI-Pods small and pointed; brilliant scarlet; very pungent when ripe. Pkt. 10c; oz. 65 c .

THE PRICES ABOVE ARE POSTPAID


WINTER LUXURY

LARGE YELLOW OR CONNECTICUT FIELD-Large, round; deep, glossy yellow. Vines vigorous and very productive; good keeper. Grown extensively for stock feeding. Pkt. $10 \mathrm{c} ; \mathrm{oz}$. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .35 \mathrm{c} ; \mathrm{lb} . \$ 1.00$; postpaid. GIANT OF ALI-"King of Mammoths"-This colossal pumpkin is almost a globe in shape. Skin a rich golden yellow, tlesh firm, fine grained and deep yellow, sweet flavored, very thick and of excellent quality. Pkt. 10 c ; oz. 20c; 1/4 lb. 40c; lb. \$1.35; postpaid.


## "EVER GREEN"

NON-POISONOUS INSECTICIDE


SURE DEATH TO PLANT INSECTS

HARMLESS TO MAN BIRDS AND

ANLMALS

## EVER GR <br> REEN -Poisonnous insecticide

PRICES NOT POSTPAID $11 / 2 \mathrm{oz}$. bottle $35 \mathrm{c} ; 6 \mathrm{oz}$. bottle \$1.00; 16 oz . bottle $\$ 2.00 ; 32 \mathrm{oz}$. bottle $\$ 3.85 ; 1$ gal. bottle $\$ 13.00$.

A sure killer of most plant insects-and yet offers no poison whatever to human beings, livestock or birds-it is positively not a poison. The active principle is Pyrethrum, or insect flowers, which has this valuable property of being deadly to nearly all insects.

Especially recommended for killing CUT WORMS, CABBAGE WORMS, GREEN FLIES, WHITE FLIES, THRIPS, LEAF HOPPERS, CURRANT WORMS, APHIS, ROSE CHAFER, ROSE SLUGS, PEAR SLUGS, MEALY BUGS, MITES, RED SPIDERS, JAPANESE BEETLES, LEAF TIERS, POTATO BEETLES, SQUASH BEETLES (Stink Bugs), ASTER BEETLAS, BEAN BEETLES, CUCUMBER BEETLES, ANTS, PLANT LICE, MELON BUGS.

Non-Injurious to Plants-You can use Ever Green as strong and as often as necessary. It will not damage the tenderest shoots or harm buds or blossoms.
Appearance of Plants Not AffectedEver Green will not even "burn" the edges of delicate celery leaves. It does not lower the market value of crops.
Does Not Deteriorate-Ever Green can be kept in the original package for years without loss of effectiveness.
Easily Mixed-Ever Green mixes readily with water or soap suds. Simply pour it in and stir thoroughly.
No Gumming of Sprayers-Ever Green does not form a sediment-hence it does not clog sprayers, nor does it have to be kept continually agitated.

Does Not Act On Metals-Ever Green will not corrode metal or rubber.

Pleasant to Use-Ever Green has a pleasant odor and being non-poisonous does not affect the person spraying.

Kills Slowly But Surely-Ever Green affects the nervous system of the insects so that they are paralyzed and invariably die. The length of time required to kill varies with different insects. Aphis die in a few hours, potato bugs may linger 24 hours.
Economical-Ever Green is highly concentrated and requires a dilution of from 1 to 100 up to 1 to 800 , depending on the pest.

Mailable - Being non-poisonous Ever Green can be sent through the mails.


CRIMSON GIANT
EARLY CRIMSON GIANT - The Largest Early Scarlet Turnip-Shape Radish - An early Radish, double the size of any of the turnip-shaped type, but, notwithstanding its immense size, does not get hollow and pithy. The flesh is a sparkling white, solid, crisp, juicy and of the mildest flavor. The shape of bulb varies from round to almost oval, but the bright, deep crimson color of skin remains quite constant. Excellent for both loreing and open ground. Pkt. 10c; oz. $20 \mathrm{c} ; 1 / 4 \mathrm{lb} .40 \mathrm{c} ; \mathrm{lb} . \$ 1.00$; postpaid.
EARLY SCARLET GLOBE-A small, scarlet globe-shaped Radish, with small top and of very quick growth, very early; rich color and crisp, tender flesh. Pkt. 10́c; oz. 20c; 1/4 lb. 40 c ; lb. \$1.00; postpaid.


## RADISHES

CULTURE-To secure Radishes with crisp, tender flesh, grow them quickly in rich, loose soil, and gather before reaching full size. Our Radish Seed is strictly of the finest grade, being grown from carefully selected roots. Frequent plantings should be made for succession so that a supply of fresh tender Radishes in the finest condition may be had at all times.

## EARLI SCARLET TURNIP - White

 Tipped-A beautiful variety; deep scarlet with white tip. Very early. Has a small top, and may be planted closely. Flesh crisp, tender and sweet. Cannot fail to give satisfaction as a forcing Radish. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .40 \mathrm{c} ; \mathbf{1 b} . \$ 1.00$; postpd.WHITE ICICLE-This Superb Radish is the finest and longest of the very early, pure white varieties. Planted in the Spring, ready for use in twenty to twenty-five days; the long, slender form and pure, paper-white skin most attractive when bunched for market. This Radish is not only crisp and tender when young but also retains these qualities until the roots attain large size; is excellently adapted for forcing purposes or successive sowing in open ground and gives a continuous supply of tender, crisp Radishes for the table or market throughout the season. Pkt. 10 C ; 0z. 20c; $1 / 4 \mathrm{lb} .40 \mathrm{c} ; 1 \mathrm{lb} . \$ 1.00$; postpd.
IMPROVED CHARTIER-Roots long, tapering and attaining a very large size. Of rapid growth; remains crisp and tender until fully grown. Color, scarlet above shading into white at the tip. Flesh white and mild flavored. Pkt. 10c; oz. 20c; $1 / 4$ lb. 40 c ; lb. $\$ 1.00$; postpaid.

CHINA ROSE WINTER-One of the best Fall and Winter varieties; a favorite with market gardeners, bright rose color; flesh white, firm and of superior quality. Pkt. 10c oz. 20c; $1 / 4 \mathrm{lb} .40 \mathrm{c} ; \mathrm{lb}$. $\$ 1.00$; postpd.


## RADISH MIXTURE

Just the thing for the family garden. Oz. 10 c ; $1 / 4 \mathrm{lb} .25 \mathrm{c}$; lb. 75 c ; ppd.

FRENCH BREAKFAST OR HALF LONGMedium size, quick growth, crisp and tender; lower end and taproot white. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .40 \mathrm{c} ; \mathrm{lb} . \$ 1.00$; postpaid.

## SPINACH

CULTURE-For Spring and Summer use, sow either broadcast or in drills one foot apart and one inch deep as early as ground can be worked, and every two weeks for a succession.
IMPROVED THICK LEAVED-A variety which grows very rapidly, forming a cluster of large, very thick, slightly savoyed leaves of fine color and quality when cooked. Best for market gardeners. Plit. 10c; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .25 \mathrm{c} ; \mathrm{lb} .60 \mathrm{c} ;$ postpaid.
KING OF DENMARK-The most valuable of new introductions of early sorts, remaining in good condition from one to two weeks after other varieties have gone to seed. Plants are of rapid growth, leaves thick and stand well after cutting. Pkt. 10c; oz. 15c; $1 / 4$ lb. 25 c ; lb. 75 c ; postpaid.
SAVOY LEAVED-ISloomsdale-Very early; of upright growth; leaves pointed. Plant in the Autumn for Spring use; grows quickly. Pkt. $10 \mathrm{c} ; \mathrm{oz} .15 \mathrm{c}: 1 / 4 \mathrm{lb} .25 \mathrm{c}$; lb. 55 c ; postpaid.
PRICKLY WINTER-Hardiest variety; must be sown in the Fall; seed prickly; leaves long, pointed, thick and succulent. Plat. 10c; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .25 \mathrm{c}$; lb. 55 c ; postpaid.
LONG STANDING-An improved variety for general use; large, fleshy savoyed leaves remain in an edible condition over a long period; slow to go to seed. Plat. $10 \mathrm{c} ;$ oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .25 \mathrm{c} ; \mathrm{lb} .55 \mathrm{c} ;$ postpd.
SALSIFY, or VEGETABLE OYSTER
Salsify is a nutritious and wholeome vegetable with a flavor close ly resembling oysters, for which it is resembling oysters, for which it is a good substitute. Sow early in Spring, in drills a foot apart; when 2 or 3 inches high thin to 3 or 4 inches. Cultivate the same as carrots. Roots are hardy, may remain in ground during Winter or be stored in dry earth or sand.


MAMMOTH SANDWICH ISLAND-Produces a large crop of smooth roots. Pkt. $10 \mathrm{c} ; \mathrm{oz} .25 \mathrm{c} ; 1 / 4 \mathrm{lb} .75 \mathrm{c} ; 1 \mathrm{~b} . \$ 2.50$; postpaid.


## SUMMER VARIETIES

WHITE BUSII-The best Summer sort for the home garden or market; very productive and of good size. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c} ; \mathrm{lb} . \$ 1.25 ;$ postpaid.
EARLY SUMMER CROOKNECK - Early, prolific, solid curved neck; skin yellow, thin, hard and warty; flesh tender and of good quality. Earlier and larger than the ordinary Croolsneck. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c} ; \mathrm{lh} . \$ 1.25$; postpaid.

## WINTER VARIETIES

IMPROVED IHUBBARD-The best seller and most popular variety on our list. Rind dark green, warty and very hard. Flesh light orange, very dry, sweet and rich flavored. Has no superior. Long keeper. Plat. 10c; 02. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c}$; lb. $\$ 1.25$; post paid.
MAMMOTH CHILI-The largest of all Squashes, growing to an enormous size, often weighing over 100 pounds, while its rich, fine flavored flesh insures its value for all purposes. Its size makes it valuable for stock feeding. Plkt. 10c; од. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c}$; lb. $\$ 1.25$; postpaid.
GOLDEN HUBBARD-The same in size, shape and quality as the well known Hubbard Squash, except that it is bright red or golden color, and somewhat earlier. Good keeper. Pkt. $10 \mathrm{c} ;$ oz. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c} ; \mathrm{lb} . \$ 1.25 ;$ postpaid.
BOSTON MARROW-Skin yellowish, very thin; flesh dry and finc grained; of unsurpassed flavor. Pht. 10c; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .35 \mathrm{c} ; \mathrm{lb} . \$ 1.00$; postpaid.
SIBLEY OR PIKE'S PEAK-Shell smooth, thin and of a pale green color; the flesh is thick, solid, deep orange color; very dry, fine grained, with a delicate flavor. Pkt. 10c; oz. 20c: $1 / 4 \mathrm{lh} .45 \mathrm{c}$ : ib. $\$ 1.25$; post pain.

CULTURE-Plants are tender and sensitive to cold, and planting must be delayed until settled warm weather. The principles of culture are the same as for cucumbers and melons, hut squash is less particular as to soil. Plant Summer varieties 4 to 6 feet apart each way and the Winter sorts 8 to 10 feet. Three plants sufficient to a hill.


TABLE QUEEN-Small very dark green acorn-shaped squash of very finest quality. Makes excellent pies, can be cooked whole when young and bakes splendidly when matured. Grows 6 to 8 inches in length and 3 to 4 inches in diameter. The small size makes it ideal for individual service when baked. Matures early, is a good keeper and extremely prolific. Also known as Des Moines Acorn, and Danish Squash. Plat. 10c; oz. $25 \mathrm{c} ; 1 / 4 \mathrm{H} .50 \mathrm{c} ; \mathrm{lb} . \$ 1.75$; postpaid.


## BANANA SQUASH

BANANA SQUASH-Grows from one to two feet in length. Flesh firm and solid, of beautiful orange-yellow, and excellent quality. Rind of shell smooth and grayish-green color. Resists heat of the sun better than the Hubbard and because of its excellent flavor and splendid keeping qualities, remaining in good condition from one season to another, is superseding that variety in many localities. 11k. 10c; oz. 20c; $1 / 4 \mathrm{lb} .50 \mathrm{c} ; \mathrm{lb} . \$ 1.50$; postpaid.


## Germāco

## Hotkaps

## Individual Hothouses for Every Plant

## "HOTKAPS" FURNISH EACH YOUNG

 PLANT WITII COMPLETE PROTECTION FIROM WIND, RAIN, FROST AND INSECTS.They are individual hothouses for each plant, economicaliy priced, to insure against the crop hazards of frost, rain, wind and insects. They are made of strong, durable, properly ventilated wax paper, light in weight, easy to use.
"Hotkaps" bring crops to earlier maturity. Many write us that they have been first to market by from one to three weeks, and as a result, have been able to get higher prices.
Farmers quickly appreciate them. Once you've tried them, you'll always use them. Tlaey afford the best crop insurance, and bring you more profit.
We have them for sale at the following prices:

| M |  | \$11.50 per M |
| :---: | :---: | :---: |
| 5 M . |  | 1 1.25 per M |
| 10 M |  | 11.00 per M |
| 25 M |  | 10.75 per M |
| "Hotkap" | Setter | 2.50 Each |
| "Hotkap" | Carrier | 2.75 Each |

ALL PRICES F. O. B. PORTLAND

## Diamond wava TOMATOES



T'HE. NEWER types of hardy, prolific Tomatoes are better adapted to the cool Coast climate than the older sorts; splendid crops are now being grown where heretofore it was thought Tomatoes would not thrive. A good plan is to try several varieties and find which is best suited to your special conditions.
CULTURE-Sow early in hotbeds, and as soon as they have four leaves transplant into shallow boxes. Harden off, and set out as soon as danger of frost is past. An ounce of seed will produce 3000 to 4000 plants.
If blight appears use "Bordeaux", but it is better to use as a preventative before blight strikes the plant, and is a control measure for flea beetles, spraying the under side of foliage.

IBONNY BEST-Has given splendid results wherever tried and, being early, hardy, very productive, is recommended for outside planting wherever Tomatoes can be grown. A good forcing variety. Fruit smooth, round, slightly flattened, solid, a bright scarlet. Quality excellent. Pkt. 10c; oz. $45 \mathrm{c} ; 1 / 1 \mathrm{lb}$. \$1.25; lb. \$3.75; postpaid.
"BURBANK" TOMATO-Earliest, smoothest, most productive and best early Tomato, bright crimson, thick, smooth and firm with few seeds. Unusually heavy and of the finest quality. Keeps well; a good shipper; a prolific, continuous bearer, has the unusual feature of being easily peeled, the skin slipping readily from the flesh. Resistant to wilt and other diseases. Plit. 10c; oz. 65c; $1 / 4 \mathrm{lb}$. \$2.00; postpaid.
CHALK'S EARLY JEWEL-Large, bright red, smooth, round fruits, colored evenly with the stem; solid, almost seedless, fine flavor. Vines are vigorous, not subject to blight. We recommend as an early Tomato for either market or home gardens. Pkt. 10c; oz. 40 c; $1 / 4 \mathrm{lb}$. $\$ 1.25$; Ib. \$3.75; postpaid.
DOHN BAER-Produces perfect, solid, high crown, brilliant red Tomatoes. They ripen ten days before Earliana, bearing 50 to 100 fruits per plant. The flavor is deliciously sweet. The plant will stand plenty of fertilizer without going to vine. Keeps well; a good shipper; a prolific, continuous bearer, easily peeled. Resistant to wilt and other diseases. Plat. $10 \mathrm{c} ;$ oz. $40 \mathrm{c} ; 1 / 4 \mathrm{lb} . \$ 1.25 ; \mathrm{lb} . \$ 3.75 ;$ ppd. STONE-Popular with canners, growers and market gardeners. Solidity and carrying qualities are remarkable. Color a desirable red. Shape perfect smooth and thicker from stem to blossom end than most varieties. Plt. 10c; oz. 40 ; $1 / 4 \mathrm{lb}$. $\$ 1.25$; lb. $\$ 3.75$; postpaid.
COMET-FORCING-The very best forcing variety and a general favorite with greenhouse growers. Color is a beautiful scarlet; fruits are of good size, very smooth and uniform. Plat. $10 \mathrm{c} ; \mathrm{oz} .50 \mathrm{c} ; 1 / 4 \mathrm{lb} . \$ 1.50$; postpaid. LIVINGSTON GLOIBE-One of the best Early Tomatoes, Hardy and Blight Resistant-Fruits large, even size; very early; ripen through; always smooth, firm, round, solid meat, few seeds. Color beautiful glossy, rose-tinted purple; very productive. Is also an excellent forcing variety. Pht. 10 c ; oz. 45 c ; 1/4 lh. $\$ 1.50$; postpaid.
DWARF CHAMPION-Dwarf, upright growth; smooth, purple fruit. Pkt. 10 c ; oz. $45 \mathrm{c} ; 1 / 4 \mathrm{lb} . \$ 1.50$; postpaid.


## Tomato Plants

Standard varieties for seasonable delivery - Healthy transplanted and pot grown plants - Safely packed and shipped to any point in the Northwest. Refer to our Plant Department (see Index).

GROUND CHERRY OR HUSK TOMATO-Grows to great perfection under ordinary culture, yielding abundantly; very much prized GROUND for preserving; the fruit grows encased in a husk. Should be in every garden. Pkt. 10c; oz. 50c; 1/4 lb. $\$ 1.75$; postpaid.

SPARK'S EARLIANA-One of the Earliest TomatoesLarge, uniform size and beautiful red color. Ripens thoroughly all over, the stem end coloring up perfectly. Almost seedless and solid. A vigorous grower, heavy bearer, continuing until frost. Succeeds everywhere, and especially recommended for this Coast. Pkt. 10c; oz. 40c; 1/4 lb. \$1.25; lb. \$3.75; postpaid.


GOLDEN QUEEN-A first class, large, smooth, pure yellow Tomato. Pkt. $10 \mathrm{c} ; \mathrm{oz} .50 \mathrm{c}$; 1/1 1b. $\$ 1.65$; postpaid.
YELLOWV PEAR-A small, pear-shaped Tomato, borne in great profusion, vine literally covered with clusters of fine, solid fruit; excellent for preserving. Very hardy. Ikt. 10c; oz. 50c; $1 / 4 \mathrm{lb} . \$ 1.75$; postpaid.
YHLIOW PLUM-Small plum-shaped, deep yellow skin and flesh. For preserving. Pkt. 10c; oz. 50c; 1/4 lb. $\$ 1.75$; postpaid.
YELLUW CIERRY - Cherry-shaped fruit, deep yellow. Pht. 10c; oz. 50c; $1 / 4 \mathrm{lb} . \$ 1.75$; postpaid.

## TOBACCO

CULTURE-Sow seed thinly in beds, as early as they can be well prepared. Cultivate thoroughly, transplant. ing when 6 inches high to rows 4 feet apart each way. CONNECTICUT SEED LEAF-Hardy, and the best adapted to cool localities. Pkt. 10c; oz. 75c; postpd. MAVANA-Of fine texture and delicate flavor. Pkt 10 c ; oz. 75c; postpald.


## EARLY GARDEN TURNIPS

EARLY PURPLE TOP MILAN-This variety is ready for the table sooner after planting than any other yet introduced. Top small, erect, strap-leaved; bulb a deep purple above, white underneath; flesh white, firm and delicate. Plit. 10c; oz. 20c; $1 / 2 \mathrm{Ib} .45 \mathrm{c}$; 1b. $\$ 1.25$; postpaid.
EARLY Wilite Milan-Same as Purple Top Milan, but pure white, sweet and tender; best early market variety. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .45 \mathrm{c}$; lb. $\$ 1.25$; postpaid.
PURPLE TOP STRAP LEAF-A leading white-fleshed variety, and one of the bcst, either for the family, market garden or field crop. It is medium size, and produces a large crop. The flesh is firm but tender, and of a superior rich buttery flavor. A good keepcr. Pkt. 10c; oz. 15c; $1 / 4 \mathrm{lb}$. 35c; lb. ©Oc; postpaid.

EARLY WHITE FLAT DUTCH-One of the very best and most universally grown. Small, erect top, round, flat; flesh white, firm, but very tender and sweet. Of quick growth, it is soon ready for the table and keeps well. Pkt. 10c; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .35 \mathrm{c} ; \mathrm{lb} .80 \mathrm{c}$; postpaid.
EARLY SNOWBALL - Early round turnip, maturing in seven weeks, is of perfect form, snowy whiteness, crisp fine flavor. Plat. 10 c ; oz. 15 c ; $1 / 1 \mathrm{lb} .35 \mathrm{c} ; 1 \mathrm{lb} .80 \mathrm{c}$; ppd. GOLDEN BALL-Undoubtedly onc of the most delicate and sweetest yellow-fleshed turnips yet introduced. Not of large size, but firm, hard and most excellent flavor. Keeps well and is superior as a table variety. It is extensively used by market gardeners. Plkt. 10c; oz. 15c; 1/4 lb. 35c; Ilb. $\mathbf{8 0 c}$; postpaid.


## MAIN CROP TURNIPS

COWHORN-Sometimes called Long White. Slightly crooked. Pure white except a little shade of green at the top. Grows half out of the ground and is of very rapid growth. Is delicate and well flavored. Has proved itself one of the best stock turnips ever introduced in Oregon. Pkt. 10c; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb}$. 35c; 1b. 80c; postpaid.
POMERANIAN WHITE GLOBE-One of the most produc tive kinds, and in good, rich soil, roots will frequently grow to 12 pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth. Pkt. 10c; oz. 15c; 1/4 lb. 35c; lb. 80c; postpaid.
PURPLE TOP WHITE GLOBE-A large, globe-shaped variety; purple above the ground. It is handsome and of excellent quality; recommended both for family garden and field crop. Plit. 10c; oz. $15 \mathrm{c} ; 1 / 4 \mathrm{lb} .35 \mathrm{c} ; \mathrm{lb} .80 \mathrm{c}$; postpd.

LARGE WHITE NORFOLK-A white variety, usually at taining a very large size. Extensively grown for stock feeding. The leaves are also used for greens. It is hardy and may remain in the ground all Winter. Yields very large crop. Pkt. $10 \mathrm{c} ; \mathrm{oz} .15 \mathrm{c} ; 1 / 4 \mathrm{lb} .35 \mathrm{c} ; \mathrm{lb} .80 \mathrm{c} ;$ postpaid.
WHITE EGG-Is perfectly smooth, of a pure, clear white, growing half out of the ground, and at times to the size of a Ruta Baga, being a very choice kind for table use; of excellent flavor; sweet and mild. Pulls clean from the ground. Plit. 10c; oz. 15c; 1/4 lb. 35c; 1b. 80c; postpaid.
YELLOW ABERDEEN-Round, medium size; light yeilow. Produces a large crop; is hardy and keeps well; flesh very firm but tender and sweet. A great favorite with dairymen. Plit. 10 c ; oz. $15 \mathrm{c} ; 1 / 1 \mathrm{lb} .35 \mathrm{c}$; lb. 80c; postpaid.

## RUTA BAGA or SWEDE

IMPROVED AMERICAN PURPLE TOP-The leading variety; large, immense yielder. Superior in every way. Pkt. 10c; oz. 15c; $1 / 4 \mathrm{lb}$. 35c; lb. 80c; postpaid.

MONARCH OR TANKARD-Very solid, fine grained, of fine flavor; grows well out of the ground and yields large crops. Pht. 10c; oz. 15c; 1/4 lb. 35 c ; lb. 80 c ; postpaid.

WHITE SWEET RUSSIAN-Excellent for table or stock. Very large size; white, solid; sweet and rich; keeps well. Pkt. 10c; oz. 20c; $1 / 4 \mathrm{lb} .40 \mathrm{c}$; lb. \$1.00; postpaid.

# Dedigreea Seed Potatoes 



## How to tell Good Seed Potatoes

Many growers plant Potatoes which are diseased and not vigorous, because certain of our most selious potato diseases cannot be recognized in the tubers. For instance, a potato inspected may be smooth and shapely and show no interior discoloration, yet diseases may be present which cannot be detected even with a microscope. The field, itself, may look healthy up to blossom time and only an experienced judge of the various potato diseascs can tell the symptoms of certain diseases which greatly affect yields but do not materially change the appearance of the plants. Let us take several tubers which look as nearly alike as is possible to select and plant them side by side under similar conditions and you will probably see that each vine shows various degrees of heallh and vigor. It is the vine that tells the story of quality. Thereiore, one of the principal means we use in building up our seed stock so that it is capable of the lighest yields, is to climinate from the fields, by hand work, during the growing season, all vines which are not healtlyy and vigolous, leaving only the healthy vines under which the Good Seed Potatoes, with which we simply our eustomers, are fonnd. Don't plant cull-making and yield-cutting sced potatoes-plant IPedigreed Seed Potatoes, true to type, containing the minimum of disease and maximum of productiveness. Start right if you hope to finish right. Even if you increase your yield by a small percentage you will more than cover the cost of your seed, and good seed is capable of doubling the yield over inferior seed. Let us be instrumental in aiding you toward Quality seed potato supply and service.


Searching for Plants That Show Syuptonis of Yield-Cutting and Cullmaking Diseases. We Rogne On Fields Many Times During the season

## 

Our Seed Potato Improvement Work is done on those varieties which have proved standard with the buyers within as well as those out of the statc, who purchase Oregon stock. We offer some of the finest seed potato stock available in the Northwest; seed stock with a perfommance history behind it. Few farm crops are more profitable than potatoes. Potatoes are of such great importance as food, giving quick cash returns and are so valuable in crop rotations, that we maintain a separate Potato Department, under the personal supervision of a trained Seed Potato Ex. pert-whose sole duty is Seed Potato Im provenent work.


## Fine Tested in the Dield



## P. S. CO. EARLIEST OF ALL certifien

The tubers are of a flattened, round shape with few and shallow eyes, white skin; are exceptionally smooth, seldom making a second growth, which always insures a high percentage of marketable tubers. The tubers form close together in the hills, making digging easy. Large white blossoms easily distinguish this from some of the later varieties, the tubers of which are somewhat similar in shape. A remarkably good keeper for an early variety. An ideal forcing potato for market gardeners who grow for the high-priced early markets. Its great superiority will readily manifest itself at harvest. This is our own introduction, and for years we have made "Earliest of All" our specialty and recognize no competition in this variety. BE SURE of getting the genuine "Earliest of All". Shipped in sealed bags with certified tags attached. 10 lbs . $\$ 1.10$; f. o. b. Portland. Add postage for parcel post. Write for special low prices on quantities.

## BURBANKS certified

This is the standard commercial variety. It is a very profitable potato to grow, meeting the popular demand of the Pacific Coast markets. We offer a select, true, heavy-yielding strain, rogued to our standard of type and freedom from disease. Our Burbank Seed cannot be surpassed in the West. When in doubt as to the variety to plant Burbank will prove your safest choice. SHIPPED IN SEALED BAGS WITH CERTIFIED TAGS ATTACH ED. $10 \mathrm{lbs} 75 \mathrm{c}, \mathrm{f}$. o. b. Portland. Add postage for parcel post shipment.

Write for special prices on quantities.

## NETTED GEM <br> CERTIFIED

(Russet Burbanks) - A splendid late potato that is grown extensively in ir. rigated sections. Tubers are elongated, russet netted skin, flesh white, shallow eyes, good keepers and produce a fine yield. Our seed stock of this variety is selected and rogued to our high standards of Seed Potato requirements, and bear official Certification Tags. 10 lbs . S5c, f. o. b. Portland. Add postage for parcel post shipment. Write for special low prices on quantities.


## PRIDE OF MULTNOMAH

Our own introduction, which has stood the test for 16 years' commercial growing with the greatest success and profit to the growers. This variety produces a tuber with thin white skin, shallow eyes, flesh snow white, the finest table quality and of the elongated type so popular in the western markets. Yields better than many other varieties under dry conditions due to its large root system. SHIPPED TO YOU UNDER CERTIFIED TAGS. $10 \mathrm{lbs} .85 \mathrm{c}, \mathrm{f}$. o. b. Portland. Add postage for parcel post shipments. Write for special low rates on quantities.

## EARLY OHIO

vines erect with rather heavy stems, easy to cultivate, somewhat light yielder but catches the very early markets. Tubers are cylindrical and blocky, skin pink with russet dots. They ship well as NEW POTATOES. (U. S. No. 1 grade.) $10 \mathrm{lbs} .75 c$, f.o.b. Portland. Postage extra. Write for special low prices on quantities.


Vigorous vine, profuse bloomer, heavy setter. Used by truck gardeners for early crops. The elongated shape meets the Pacific Coast market demands. We have the only certified American Wonders in the Northwest. Shipped in sealed bags with certified tags attaclied. 10 llbs. 95 c , f. o. b. Portland. Postage extra. Write for special prices on quantities.


Many varieties of grasses and forage plants offered by Eastern seedsmen (often under new names) will not give profitable crops in our climate and, to avoid disappointment, we refer you to the following list, which has been carefully selected and contains the most desirable varieties. A careful reading of the following pages will give you much valuable information that has required years of observation and experimenting to obtain.

## BARLEY



SUCCESS BEARDLESS BARLEY

$B^{A}$3 ARLEY is a shallow feeder, the roots growing near the surface, and requires a rich, mellow repaid. Responds readily to good tillage, any extra work with disc and harrow will be amply good conditiot try to grow upon poor, sandy or wornout soils, or where ground is not in vated crop, and is the best nurse crop for starting clovers or mixed grasses. Should be planted late after ground is warm and Spring weather settled. Plant two bushels per acre. Crimson clover planted in the Fall and plowed under after blooming in the Spring, leaves soil in fine condition for barley.
SUCCESS BEARDLESS BARLEY Brought out and featured by Pullman Agricultural College. Straw about height of common barley, stands up better than other varieties. Contains no beard. We believe this variety will remain true to type, but do not guarantee it to do so. Write for quantity prices. Price 10 lbs. 85c, postpaid.
NEW TRERI BARLEY-Many crops of Barley are ruined by early frost. The new Trebi ripens very early and there is much less danger of frost damage than with other varieties. Large, plump berry, very thin hull, beards come off easily when threshed, giving grain a very fine appearance. Highest quality, well cleaned, free from smut, etc. Write for quantity prices. Price 10 lbs postpaid 95 c .
COMMON BARLEY - We always aim to have a nice, clean stock of good Seed Barley on hand at all times. This is the common 6-row bearded type. Write for quantity prices. 10 lbs. postpaid 30c.

HANNCHEN BARLEY-Early and best of the two-rowed barleys, drought resistant and a heavy cropper. Grown from seed secured from Oregon Agricultural College. We call attention to the plumpness of seed, thinness of hull and ease with which beards brealk off. Although a Spring Barley the U. S. Dept. of Agr. has successfully grown Hannchen Barley from Fall seeding where Winters are mild. Write for quantity prices. Price 10 lbs. postpaid \$1.00.

WHITE HULLESS or BALD BARLEY -Beardless-An early Spring variety, high feeding value, said to exceed corn as a pork producer. Can be fed to all live stock-especially valuable in a mixed ration. Grain plump, heavy and when threshed is hulless like wheat. A heavy cropper. When grown and cut for hay it produces a magnificent fodder, very rich and almost equal to a grain feed. Culture same as Common Barley. Write for quantity prices. Per lis. postpaid $\$ 1.00$.

## BUCKWHEAT

Can be easily grown wherever wheat will grow, producing a good yield even on light or poor soil and under favorable conditions is very profitable, being in big demand for mill-ing-also the best "bee pasture". Sow 36 lbs. per acre in drills, 48 lbs . broadcast.

SILVER HULL - Light gray color, rounder than common; thin husk; matures earlier, yields heavily, excellent milling variety. Write for quantity prices. Postpaid, 10 lbs. $\$ 1.15$.

IAPANESE-Ripens early and yields the largest crops. Grains extra large, dark brown, very thin hulled, makes the highest grade flour Write for quantity prices. Postpaid, $10 \mathrm{lbs} . \$ 1.15$.

## FLAX SEED

Selected, recleaned, Western grown, new crop, large plump seed. Write for quantity prices. 1 lb. ppd. 25 c.

## COW or THOUSAND HEAD KALE

The demand for this wonderful forage plant proves it to be the most valuable green feed for Pacific Coast dairy and stockmen; endorsed by agricultural colleges and government stations. Should be grown in same manner as cabbage. Can be set as late as July. Write for full information on planting and fecding.
A quarter of a pound of seed will produce enougli Kalc plants for one acre. Postpaid, oz. 10c; 1/4 lb. 25c; lb. 75 c .

## Evergreen Cheat Seed

(Bromus Secalinus) -There are several varieties of Cheats. Evergreen makes hay with a green color, and its feeding value is greater than ordinary. Especially for low or moist soil, will stand considerable overflow without harm. Excellent hay for cows or horses, but should be cut before it gets too ripe. Sow in Fall, about 100 lbs. per acre.
10 lbs. postpaid 60c.

## Japanese Millet

## Also Called Billion Dollar Grass

Entirely distinct from any other Millet, grows 6 to 8 feet high and produces an enormous crop, often yielding 15 to 20 tons of green fodder or 6 to 8 tons of cured hay per acre. The feeding value of this Millet is much superior to that of corn fodder and the Millet is much more relished by all kinds of stock. Japanese Millet is mostly used for feeding green, but on account of the large yield and good quality of forage, it is also most excellent for silo use and frequently a good crop of this Millet can be raised gooder conditions which would not admit the growing of corn for ensilage. An ideal ensilage mixture may be composed of two parts of Japanese Millet to one part of Soja Beans, mixed when filling the silo; this mixture forms a complete balanced ration for milch cows, without the addition of grain.

The seed of this Millet makes good food for poultry and hogs, as it contains almost as much fat and extract matter as shelled corn and a little more protein.
Sow the seed at the rate of 12 to $\mathbf{1 5}$ lbs. per acre.

10 lbs. \$2.00 postpaid. Write for quantity prices.

## MILLETS

Sow in April, May or June, 12 to 15 pounds for seed, or 20 to 30 pounds for hay per acre. Prices 10 lbs. \$1.50, postpaid. Write for quantity prices.
GERMAN OR GOLDEN-An improved variety, yielding a larger crop of seed than Common Millct, also taller than the Common and yields a heavier crop of hay.
EARLY FORTUNE MILLET-Has given astonishing yields of both seed and fodder. Very early. Claimed to be rust-proof. The fodder can be fed to horses and other stock without injury, even after seed has formed, which cannot be done with safety with most millets. Seed is large and of a beautiful red color.
NEW SIBERIAN - Wonderfully productive, extremely hardy, about two weeks earlier than German Millet. Grows four feet tall.
BROOM CORN MILLET - Somewhat variable in character and divided into several varieties, one of which is sometimes called Hog Millet, as the seed is often used to feed hogs. All of this class are better adapted to produce seed than for pasture.
WHITE WONDER MILLET - Grows four feet tall, bearing large heads covered profusely with bristles which repel attacks by birds.

IMPORTAN'T-Read Carefully Clover, Grass and Field Seeds are subjec to market changes, therefore we cannot prin prices good for any length of time. Wher ready to buy, write us for special prices, stat ing quantity wanted; or send in your order We guarantee that we will give you ful! value for the money sent. Pound prices quotec are postpaid.

$P$PRIOR to the adoption of the $U$. $S$. Grain Standards the Pacific Northwest did not use the grades established by the big eastern wheat centers, but since the U. S. Standards have become effective it is impossible to market mixed varieties of wheat or other grains at the best prices, and growers will find it necessary and profitable to plant only clean, pure seeds of standard commercial varieties.

We have provided splendid stocks of the best sorts for this section and when ready to buy any variety of Seed Wheat, write us for quotations on quantity wanted or send in your order and we will give full value at lowest prices. The following are standard market varieties that are known as the most profitable and best yielding.
Price, 10 lbs . postpaid, 85 c . Write for quantity prices. Prices subject to change without notice.

BLUE STEM-Spring-The best known and one of the most profitable Spring varieties for the Northwest. Heads are large and well-filled. Stools freely. Grain very hard. Although a Spring variety, can be planted as a Fall Wheat in sections where Winters are mild. The Blue Stem of the Pacific Coast has a white grain and smooth chaff, quite unlike the Velvet Chaff and Red grains of the states east of the Rockies. Better results are had with this Wheat east of the Cascade Mountains, as it has a tendency to lodge in the moist sections on the Coast.
HARD FEDERATION-Spring-This wheat has been tried out by the experimental station at Moro, Oregon. It is a hard flint wheat, The government test proves it to be high in gluten, and high in yield of flour, making it one of the best milling wheats. Beardless, and a heavy producer, and should be an excellent variety for the Northwest. We highly recommend it.

EARLY BAAPT-Bearded-Spring-A Spring wheat fully as early as Marquis, a better yielder and has a large white grain of finest milling quality. In the big wheat sections of Eastern Washington, Early Baart has matured three weeks ahead of Blue Stem, giving a bigger crop and its earliness insures protection against loss from extreme heat and drought occurring later.
MARQUIS-Spring-Marquis Wheat was produced by a cross of Red Fife and Hard Calcutta. It differs from the parent stock, Red Fife, inasmuch as it has a heavier head, shorter straw, and more flinty, very heavy, weighing about 65 lbs. to the measured bushel. Heads are beardless, chaff smooth.
LITYLE CLUE-Spring-This well-known variety has stiff straw, typical club head and does not shatter easily. A good grower, yields well. Our stock is exceptionally good; being selected from a heavy yielding strain.

## NON-SACCHARINE SORGHUMS

## VETCHES OR TARES

## Prices Subject to Change Without Notice

They are best drilled in-using 3 to 8 lbs. per acre, depending on variety and condition. Plant in the late Spring after the ground is warm. Cultivate often, throwing earth toward the plants.
SUDAN GRASS-The great drought resisting forage cropAll stock relish it. Under favorable conditions, it grows 7 to 9 feet, luxuriant foliage and small stems. Where growing conditions are favorable the stubble makes excellent green pasturage. Price: postpaid, 10 lbs . $\$ 1.75$. Write for quantity prices.
BROOM CORN-Dwarf Evergreen—Grows from 4 to 5 feet high and makes straw of finest quality, being almost if not entirely, free from crooked brush. Per lb., postpaid, 25c; 10 libs. $\$ 1.50$. Write for quantity prices.
MILO MAIZE-Similar to Kaffir Corn. Erect, thick, closejointed stalk. Height 4 to 7 feet. Heads very large, giving a heavy grain yield, is drought resistant, and succeeds on alkali soil. Plant late when ground is warm, 3 to 6 lbs . per acre. Per lb., postpaid, 20c; 10 lbs. \$1.25. Write for quantity prices.
FETERITA-This is drought resistant and 20 to 40 days ear. lier than Kaffir corn. Makes splendid fodder, as well as giving a good grain yield. Per lb., postpaid, 20c; 10 lbs . $\mathbf{\$ 1 . 2 5}$. Write for quantity prices.
KAFFIR CORN-An excellent fodder plant, yielding a large crop of fodder during a season. Grows 4 to 5 feet high. Greatly relished by cattle and horses. The seed crop is also heavy. It does best sown in drills three feet apart. Per lb., postpaid, 20c; 10 lbs . $\$ \mathbf{1} .25$. Write for quantity prices.

## SUNFLOWER

MAMMOTII RUSSIAN-The largest and most productive variety. Grown extensively for silage for cattle and is proving of immense value. The seed is a valuable poultry food, a great egg producer. Drill in 36 -inch rows with hills 4 in. apart in row. Plant as soon as the soil is in good condition in the Spring. For silage it should be cut when 25 to 30 per cent of the plants are in bloom. In food value it is equal to corn silage and the yield 3 to 4 times as great. Lb. 25c; 10 llbs . \$1.65. Write for quantity prices.

IIUNGARIAN VETCH - A very important annual leguminous farm crop for this state, especially the western part. Its aphis resistance is probably the largest single factor toward making it a generally grown crop in Western Oregon. During years when aphis practically destroyed many other farm crops this vetch was injured comparatively little and produced practically normal crops of forage and seeds. Seldom attacked by diseases or insect pests. Hungarian is a heavier yielder in both hay and seed than any other vetches grown here, under similar conditions. 10 lbs postpaid, $\$ 1.00 ; \$ 5.00$ per 100 lbs ; F. 0. B. Portland. Write for quantity prices.
COMMON VETCH-(Vicia Sativa)-Often called Fall Vetches. It furnishes an abundance of excellent feed, either green or cut and cured for hay. Seed should be mixed with an equal amount of some variety of wheat, oats or rye having a stiff straw, and the mixture sown at the rate of two bushels per acre. Vetches weigh 70 lbs . per bushel. Sow in Fall or early Spring. 10 lbs ., postpaid, \$1.00.
SAND or WINTER VETCHES-(Vicia Villosa)-Thrives on poor, arid, sandy soils. Sown either in Fall or early Spring, generally mixed with rye, which serves to support plants. Grows to a height of 3-4 feet; can be cut twice, when bloom appears and afterwards for seed. 10 lbs ., postpaid, $\$ 1.75$.
WOOLLE-PODDEI VETCH-(Vicia Dasycarpa)-It differs from Hairy Vetch, having nearly smooth leaves, purple flowers and hairy pods. On account of its earliness has advantages over Hairy Vetch. Excellent crops are produced in Western Oregon. $10 \mathrm{lbs} .$, postpaid, \$2.00.
PURPLE VETCH-(Vicia Atropurpurea)-Color of blossom is deep purple. Used by orchardists for plowing under. Can be grown as cheaply as Common Vetch. Plant in Fal: on well drained fertile soil, 60 lbs . per acre. It may be used as a hay or silage crop. Free from attacks of the aplis. 10 lbs ., postpaid, $\$ 1.75$.

## CLOVER AND ALFALFA SEEDS

# Write for prices on 100 lbs . or ton lots. They are subject to market changes. Pound prices postpaid to fourth zone. 

## ALFALFA OR LUCERNE CLOVER


#### Abstract

A LFALFA should be cut for bay when the shoots of the next crop appear at the base of the plants. The hay is especially valuable for dairy LFAs. As soon as cut it immediately commences to grow and during the hottest and driest weather when other grasses are parcbed and withered, it remains fresh and green and grows as rapidly as ever. On the low lands it is not an unusual thing to harvest five or six crops of hay from the same field in one season without irrigation, and the same result is obtained on high, dry lands where irrigation is resorted to. It will not succeed on hard, clayey soils. Its roots, in seeking moisture, penetrate to incredible depths. The seed should be sown in the Spring, after danger from freezing the young plants is over, or in the Fall, early enough to give it a good stand before frost. The domestic acclimated seed we offer can be depended upon to give splendid satisfaction. GRIMM ALFALFA-(Certified)-The hardiest Alfalfa known. In trials, at practically every Experiment Station in the West and Northwest, it has headed the list for vigor and hardiness. Being scarce and in big demand the price is high, but the value of Grimm has been demonstrated beyond question and we recommend its trial. Per lb. 60c; postpaid. $10 \mathrm{lbs} . \$ 5.30$; postpaid. Write for quantity prices.

DRY LAND ALFALFA-Will produce large, profitable crops of hay and excellent pasture on the high dry lands, and is especially recommended for the hills and plateaus where irrigation is impossible. Per lb. 35c; 10 lbs. $\$ 2.80$; postpaid. Write for quantity prices.

ALFALFA - Our domestic Alfalfa is acclimated and will thrive splendidly where growing conditions are normal, including irrigated lands. Where dry farming is practical special Dry Land Alfalfa is recommended. $1 \mathbf{l b} .35 \mathrm{c} ; 10$ lbs. \$2.80; postpaid. Write for quantity prices.


## CLOVERS

YELLOW SWEET CLOVER, BIENNIAL - Melilotus Of-ficinalis)-In great demand on account of its earliness, being about two weeks earlier than the white. Does not grow as tall as white, but makes just as good pasturage as white. Produces high quality hay. Per $1 \mathrm{lb} .25 \mathrm{c} ; 10 \mathrm{lbs}$. \$2.00; postpaid. Write for quantity prices.
YELLOW SWEET CLOVER, ANNUAL-(Melilotus Indica) Now recognized as the legume best adapted for green manuring in orchards because it may be planted late in the Call after all crops have been harvested, and will grow all winter with only the season's rainfall. Per lb. $20 c$; 10 lbs. $\$ 1.50$; postpaid. Write for quantity prices.
WHITE SWEET OR BOKHARA CLOVER, BIENNIAL(Melilotus Alba)-Excellent for pasture, hay, and a soil improver. More drouth resistant than alfalfa and will generally produce a large crop of seed and hay the second year. Thrives best on alkali soil, and is well recommended for bees. Per lb. 25 c; 10 lbs . $\$ 2.00$; postpaid. Write for quantity prices.
HUBAM SWEET CLOVER, ANNUAL - An annual white blossom sweet clover, very similar to Melilotus Alba. Kapid growing, ready for cutting four months after seeding. Makes an ideal crop for turning under or soiling in or chards. Bee men are finding ideal for bee pasture, it being available the first season. Good stock pasture. Seed 20 lbs. per acre. Per lb. 55c; 10 lbs. $\$ 4.30$; postpaid. Write for prices on larger lots.

CRIMSON OR SCARLET CLOVER-(Trifolium Incarnatum) Highly recommended for pasture and fertilizing purposes. A thrifty annual, growing 20 to 30 inches high. Germinates quickly, grows rapidly, stools abundantly. Cut for hay when in full bloom. Planted in the Fall can be plowed under after blooming in the Spring, followed with barley or potatoes. Per lb. 25c; 10 llbs . \$2.00; postpaid. Write for quantity prices.
MAMMOTH RED CLOVER-Grows very large and is used almost exclusively for plowing under for manure. Per lb. $50 \mathrm{c} ; 10 \mathrm{lbs} . \$ 4.50$; postpaid. Write for quantity prices. RED CLOVER-(Trifolium Pratense)-The standard Clover for all purposes. Hardy, succeeds well on any good soil. Makes superior hay - especially mixed with Timothy either for dairy cows or for general use. Per lb. $45 \mathrm{c} ; 10$ lbs. $\$ 4.25$; postpaid. Write for quantity prices.
ALSHEE OR' SWEDISH CLOVER-(Trifoliuin Hybridum)A perfectly hardy perennial. Excellent for hay and pas. ture. Valuable for bees. Resists both drought and exces. sive moisture. The hay is preferred to that of Red Clover, being finer, brighter and not so dusty. Per $1 \mathrm{lb} .45 \mathrm{c} ; 10 \mathrm{lbs}$. \$4.00; postpaid. Write for quantity prices.
WHITE DUTCH CLDVER-(Trifolium Repeus)-Superior for pasture and for the production of honey. Makes a beautiful lawn when mixed with Blue Grass. Diamond Fancy, $1 \mathrm{lb} .55 \mathrm{c} ; 10 \mathrm{lbs} . \$ 5.00$; postpaid. Fancy, $1 \mathrm{lb} .50 \mathrm{c} ; 10 \mathrm{lbs} . \$ 4.75$; postpaid.

Prices Subject to Change Without Notice
 Will carry twice as much stock per acre as blue grass. 1 lb . postpaid $\$ 2.00$

## Inoculate Your Clover and Alfalfa with

## THE ORIGINAL SOIL INOCULATOR

Alfalfa, clovers, soybeans, vetches, peas, beans, cowpeas and other legumes should always be inoculated with Nitragin. The lack of necessary bacteria in the soil is often the cause of a poor legume crop-a weak start-or a total failure.

## BENEFITS OF INOCULATION

First-Inoculated legumes take nitrogen from the air to supply the plant, resulting in faster growth, earlier maturity, larger crops.
Second-Inoculated legumes take up more nitrogen than the plant itself requires, the surplus remaining to benefit future crops.
Third - Inoculated legumes develop larger root systems than when not inoculated and therefore reach the immense stores of potash therefore reach the immense stores of potasb and to supply the plant. Wben the roots and up to supply the plant. Wben the roots and stubble decay these elements are also returned
to the soil in a form available for future crops. the soil in a form available for future crops.
Fourth-Inoculated legumes, by taking their nitrogen from the air, save the soil. When not inoculated they drain the soil of its nitrogen just the same as wheat or timothy or other leguminous plants.
Inoculated legumes contain more protein
matter than when not inoculated, greatly increasing their feeding value.

Sold in tins packed in a rich, soil-like granular medium, easy to mix with seed. Contents always fresh and bacteria active and vigorous.

The Original Soil Inoculator-registered in the U. S. Dec. 6, 1898 -over 30 years ago.

Prices for Field Nitragin
$1 / 4 \mathrm{bu}$. size inoculates 15 lbs . seed $\mathbf{\$ 0 . 4 0}$
$1 / 2$ bu. size inoculates 30 lbs . seed $\mathbf{\$ 0 . 6 0}$
1 bu . size inoculates 60 lbs . seed $\$ 1.00$ 5 bu. size inoculates 5 bu . seed $\$ 4.75$
F. D. B. Portland; Postage Extra

NITRAGIN FOR GARDEN USES
Every garden needs Nitragin; garden size is for Peas, Sweet Peas and Beans, including Lima ( 3 in 1 Inoculant). 20c


बIIPONT SEMESAN Semesan Jr. Semesan Bel

## THE PREMIER SEED

## DISINFECTANTS

Semesan can be applied in either the dry or liquid form to prevent or control effectively a most diversified variety of disease borne by seeds, seed pieces, plants and soils. Semesan Jr. provides an unusually effective but inexpensive dust treatment for the prevention and control of field and sweet corn seed diseases. Semesan Bel is an excellent dust or water mixture disinfectant for controlling diseases and increasing yields of seed potatoes and other tubers.

Prices for Du Pont Semesan


## Semesan $\ddagger 1$. and Semesan Bel

1 lb.
$\$ 1.75$
5 lbs
$\$ 8.00$
25 lbs .
.$\$ 37.50$

"DIAMOND QUALITY"
The choicest new crop seeds, RECLEANED IN OUR SPECIAL CLEANING MACHINES IN OUR OWN WAREHOUSE AND TESTED FOR PURITY AND GERMINATION IN OUR OWN LABORATORY, the only exclusive commercial seed laboratory in Oregon. No one, unless they have visited our laboratory, can realize the painstaking study and tests, given grass seeds especially, by our Seed Analyst, cooperating closely with our recleaning department in order to give the very purest seed.
Our SPECIAL MIXTURES have been carefully worked out by the tests and observations of our practical experts familiar with the requirements and conditions to be met, and will give the best results possible to obtain for the uses recommended.
DIAMOND FANCY LAWN GRASS
MIXED WITH CREEPING BENT
This mixture has sufficient creeping bent to eventually dominate the lawn and crowd out the weeds, at the same time giving a fine velvety turf. Sow one pound to 200 square feet. 1 lb . 85c; 10 lbs. 37.80 ; postpaid.

## DIAMOND PUTTING GREEN MIXTURE

For those who want a lawn like a putting green. Sow 1 pound to 200 square ft. 1 lb . $\$ 1.10 ; 10 \mathrm{lbs}$. $\$ 10.00$; postpaid.

## GRASS SEEDS

"DIAMOND QUALITY"

## DIAMOND FANCY LAWN

 GRASS MIXTUREPrepared from the choicest recleaned grass seeds, carefully selected for their fineness, their deep rooting, close growing habits and seasonable qualities; producing an ideal, dense velvety turf of lasting quality that remains green throughout the year. Sow one pound to 200 square feet. 1 lb. 60c; 10 lbs. \$5.30; postpaid.

DIAMOND SHADY LAWN MIXTURE Especially selected for producing a fine velvety lawn under firs and shade trees where most grasses do not thrive. 1 lb. $\$ \mathbf{1 . 0 9} ; 10$ lbs. $\$ 9.30$; postpaid.
DIAMOND TENNIS COURT MEX TURE-Close growing, heavily rooted grasses for a dense, lasting turf. 1 lb . $75 \mathrm{c} ; 10 \mathrm{lbs} . \$ 6.80$; postpaid.
FINE MIXED LAWN GRASS-A good clean mixture for general use. Makes a quick lawn and if kept cut will be lasting. $1 \mathrm{lb} .50 \mathrm{c} ; 10 \mathrm{lbs} . \$ 4.30$.

To have a good lawn the soil must be fine and rich, and well leveled. Then the best seed obtainable should be used. Plant any time from September until late Spring, depending upon weatber and soil conditions. Raking in the seed is advisable, and rolling greatly improves the turf. In watering your lawn soak it deeply and not too often, as licht watering every day brings the roots close to the surface, where they quickiy burn or dry out. You must not expect to make or dry out. You must not expect to make a fine lawn with cheap seed. The best lawn grass mixture costs more at first than the poorer substitute, but will be found much one pound to 200 square feet.
PACIFIC CREEPING BENT GRASS
(Agrostis Maritima)-This is the true creeping bent, grown on this coast, acclimated to this country and especially recommended for lawns and golf courses. It makes an exceptionally fine turf that smothers out weeds. $1 \mathrm{lb} . \$ 2.10 ; 10 \mathrm{lbs}$. $\$ 20.00$; postpaid CIIENING FESCUE (Festuca Duriuscula) - A low-growing grass, fine leaved, forms a close turf that prevents ingress of weeds, permanent in all kinds of soils, even the lightest and dryest; unexcelled for lawns and golf courses when properly grown. 1 lb .50 c ; 10 lbs. $\$ 4.50$; postpaid.

## FOR LARGER QUANTITLES WRITE FOR PRICES-SUBJECT TO MARKET CHANGE

## Grass Seeds for Lawns and Pastures-Diamond Quality

KENTUCKY BLUE GRASS-Used extensively for lawns and found in all lawn mixtures; hardy grass. 1 lb . $40 \mathrm{c} ; 10 \mathrm{llos} . \$ 3.65$.
RED OR CREEPING FESCUE (Festuca rubra)-Forms a close turf, valuable for lawn and golf mixtures; thrives in sandy soils and along the Coast. ( 14 lbs . to the bushel.) 1 lb. 50c; 10 lbs. $\$ 4.30$; postpaid.

ENGLISH RYE GRASS-Short Seeded Used by many gardeners. Sown thickly, it makes a fine lawn, and for large grounds and parks is very successful. 1 lb .25 c ; 10 lbs . $\$ 1.80$; postpaid.
ROUGH STALK MEADOW GRASSFor shady lawns or wood pastures. An excellent grass. $1 \mathrm{lb} . \mathbf{8 0 c} ; 10 \mathrm{lbs}$. \$7.30; postpaid.

RED TOP (Agrostis Palustris)-A good perennial grass for permanent lawns and pastures. Does best on moist marshy land. If not overflow land, it is advisable to mix it with Meadow Fescue, Orchard Grass or Alsike Clover. Sow hulled seed 14 lbs. to the acre. Diamond Fancy HulledFree from chaff and light seed. $1 \mathbf{l b}$ $60 \mathrm{c} ; 10 \mathrm{lbs} . \$ 5.30$; post paid.

WHITE DUTCH CLOVER—Diamond Fancy, for lawns, the finest grade, $1 \mathrm{lb} .55 \mathrm{c} ; 10 \mathrm{lbs} .55 .00$; postpaid.

## Mixtures for Golf Courses, Putting Greens and Fairways

We make a specialty of assembling combinations of seeds suited to any soil and to meet any specifications. All our seeds are of the highest quality, direct from the most reliable sources of supply, and are carefully tested in our own laboratory for purity and germination, and percentage tags are attached showing tests by our certified seed analyst. We invite correspondence and specification bids.


## New! WINTER Blue Grass

BULBOUS BLUE GRASS or POA BULBOSA-A new winter grass recently discovered in Southern Oregon. It grows only in the Winter from October to June. Starting with the Fall rains it produces a beautiful green dense growth 3 to 6 inches high, remaining green and furnishing splendid pasture the entire Winter and Spring. It does not produce flowers or seeds but instead produces a great abundance of small bulbs both above ground and in dense mats just under the surface. During the Summer the grass dries up and remains dormant and then about September it revives again. Cattle do not track it up on account of the heavy sod. The milk is very sweet with a rich color. Solves the poultryman's problem for Winter greens. Crowds out weeds such as foxtail, broncho, etc. Grows on nearly all soils. A limited amount of seed available. Lb. $\$ 1.25 ; 10$ lbs. \$11.50; postpaid.
TALL MEADOW OAT GRASS-The earliest grass to start in the Spring and the last to die in the Fall; withstands drouth, heat and cold much better than other grasses. A long lived deep rooted perennial and with proper care will make large annual yields for a period of 3 to 6 years or longer. In favorable seasons it will produce two crops in a year (second crop does not produce seed). First crop grows 5 to 6 feet tall, making an abundance of forage and pasture; can be grown with red or alsike clover and matures for hay with these legumes. Grows equally on bot. tom or upland clay soils. Its deep root system does not rob the surface soil of its fertility. $10 \mathrm{lls} . \$ 3.10$, postpaid.
TIMOTHY-(Plileum pratense)-This is the most valuable of all grasses for hay. Thrives best on moist, loamy soil. Sow early in the Spring or Fall. Sow 15 to 20 lbs. per acre. Fancy, lb. 20c; $10 \mathrm{lbs} . \$ 1.65$; postpaid.
ITALIAN RYE GRASS (Lolium Italicum)-A quick-growing grass, attaining a height of $21 / 2$ to 4 feet; very desirable for temporary meadows or pastures. Thrives best on soils that are slightly moist, and will even stand considerable overflow. Grows easily and bears an abundance of foliage that makes the best and sweetest hay imagin. able. Sow 40 lbs . per acre. $1 \mathrm{lb} .25 \mathrm{c} ; 10 \mathrm{lbs} . \$ 1.80$ ppd. ENGLISH RYE GRASS-(Lolium perenne)-A strong-growing, hardy perennial grass, noted for its nutritive qualities. It is equally valuable for both grazing and hay. 40 lbs. per acre. $1 \mathrm{lb} .25 \mathrm{c} ; 10 \mathrm{lbs} . \$ 1.80$ postpaid.

MESQUITE-(Holcus lanatus)-Usually sown on virgin soil without cultivation, after ground has been burned over. Sow 35 lbs . to the acre chaff seed, hulled, 15 lbs . per acre. Fancy hulled seed, 1 lb . 30c; $10 \mathrm{lbs} . \$ 2.75$; postpaid.
ORCHARD GRASS-(Dactylis Glomerata)-One of the most valuable of all the cultivated grasses, blooming with Red Clover, and making with it admirable hay. As a pasture grass it is more productive than any other, and does best under close feeding. Sow 28 lbs . per acre. Fancy Eastern, $1 \mathrm{lb} .35 \mathrm{c} ; 10 \mathrm{lbs} . \$ 2.80$; post paid.
KENTUCKY BLUE GRASS-(Poa Pratensis)-One of the best grasses for permanent pastures furnishing a constant supply of the most nutritious feed during the greater part of the year. Sow 28 lbs . per acre. $1 \mathrm{lb} .40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.65$; postpaid.
CANADIAN BLUE GRASS-(Poa compressa)-Recommended in all pasture mixtures on dry soil; thrives well on clay or hard trodden and poor soil. Sow 28 lbs. per acre. 1 llb . $40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.65$; postpaid.
MEADOW FESCUE-(Festuca pratensis)—Perennial; grows 3 to 4 fect high. Roots deep, thus resisting drouth. It succeeds on any ordinary soil; yields a heavy crop of superior hay; one of the best grasses for pastures, being valuable to mix with other kinds. Sown alone, use 40 lbs, per acre. $1 \mathrm{lb} .40 \mathrm{c} ; 10 \mathrm{lbs} . \$ 3.30$; postpaid.
TALL FESCUE-(Festuca elatior)—Succeeds best in moist alluvial and strong clayey soils; is very productive and lasting; valuable for permanent pasture, is relished by stock and on rich land makes fine hay-height 3 to 4 feet; weight 22 lbs . per bushel. 1 lb .35 c ; 10 lbs . \$2.30; postpaid.
BROMUS INERMIS-Russian Forage Grass-A wnless Brome Grass-This Bromus, on account of its strong perennial character, and its unusual drouth-resisting powers, is the best grass we have for the semi-arid regions of the Northwest. Grows luxuriantly, is freely eaten dry or green by cattle and yields from two to six tons to the acre. Sow 25 to 30 lbs . per acre. Spring or Fall. $1 \mathrm{lb} .35 \mathrm{c} ; 10 \mathrm{lbs} . \$ 2.80 ;$ postpaid.
BERMUDA GRASS-(Cynodon dactylon)-Suitable only for climates where the Winters are not below the freezing point. It stands the hottest and driest season. Sow 6 lbs. per acre. $1 \mathrm{lb} .85 \mathrm{c} ; 10 \mathrm{lbs}$. $\$ 7.80$; postpaid.
CRESTED DOG'S TAII-(Cynosurus cristatus)-A perennial grass with short, narrow leaves; valuable for lawns or pastures on dry, light land; makes excellent sheep pasturage. Use 20 lbs . per acre if sown alone. 1 lb . $70 \mathrm{CO} ; 10 \mathrm{lbs} . \$ 6.30$; postpaid.

## SPECIAL PASTURE MIXTURES

No. 1. FOR GOOD LOAMY SOIL-A mixture of Grasses and Clovers, prepared especially for good, loamy solls, that will give satisfaction as a permanent pasture, or for mowing for mixed hay. For pasture, sow 20 lbs . per acre. 10 lbs . $\$ 3.50$; post paid.
No. 2. FOR IRRIGATED LANISS-Use grass pastures and avoid bloat from green Alfalfa-Sow 28 lbs . per acre, prererably in early Spring. As soon as well established give water as needed. With proper atttention a permanent pasture can be maintained. $10 \mathrm{los} . \$ 3.60$; postpaid.
No. 3. FOR LIGHT SANDY SOII-An extra fine mixture for sandy or light soils. This will make a good, strong turf, that under ordinary circumstances should last for many years. Sow 20 lbs . per acre. 10 lbs . $\$ 4.00$; ppd. No. 4. FOR DRY LAND-Mixed especially for the regions between the Cascades and Rocky Mountains, and on good, common wheat land. Try this mixture, as we believe that it will give you best possible results. Sow 20 lbs . per acre. 10 lbs. \$3.80; postpaid.
No. 8. FOR ARID OR ALKALI LAND - Particularly for arid alkali land. This mixture is composed of varieties that have proven to be the best for the soils mentioned. Sow 20 lbs . per acre. 10 lbs . \$3.50; postpaid.

No. 10. HAY AND PASTURE MIXTURE FOR DRY HILL LAND-Especially suited to the dry regions, such as parts of Southern Oregon, Eastern Oregon, Eastern Washington and Idaho. This mixture is made up of varieties that can endure a great change of temperature from heat to cold, and at the same time will make a splendid mixed hay. 10 lbs. \$3.50; postpaid.
No. 11. FOR GRAZING PURPOSE-This is a mixture of grasses only, being made up for those who wish a mixture without Clover, and makes a fine permanent pasture, but is not intended for hay. 10 lbs. $\$ 3.60$; postpaid.
No. 12. FOR BURNED-OVER BOTTOM LAND, OR LAND INCLINED TO BE RATHER DAMP-This is a mixture that will do well either for hay or for permanent pasture on land that is too wet for many of the grasses and clovers. 10 lbs . $\$ 3.50$; postpaid.
No. 16. LOWLAND PASTURE MIXTURE-This mixture is for continuous pasture on low, moist ground. 10 lbs. $\$ 2.30$, postpaid; 100 lbs . $\$ 17.50$, f. o. b. Portland.
No. 1\%. UPLAND PASTURE MIXTURE-In selecting different varieties for this mixture we have taken those grasses which are well known for their drouth resisting, deep rooting qualities. $10 \mathrm{lbs} . \$ 2.30$, postpaid; 100 lbs . \$17.50, f. o. b. Portland.

MIXTURE FOR BURNED-OVER LAND-In grading and cleaning grasses and clovers, we frequently find combinations that are difficult of separation and while the seeds are often of excellent germination and quality, they cannot profitably be separated and cleaned, so we blend them to produce pasture mixtures suitable for sowing on burns and loggedoff land. Splendid value and very economical for such purposes. $10 \mathrm{lbs} . \$ 2.05$ postpaid; 100 lbs. $\$ 15.00$, f.o.b. Portland.

## Important Note

In our catalog we have listed our flower seeds alphabetically, and to assist in your selection all those marked by (B) ARE BIENNIALS, and those marked with (P) ARE HARDY PERENNIALS. THOSE NOT MARKED ARE ANNUALS.

# More Seeds In Each Packet This Year 

We have completely checked the quantities of seeds for packets and ALL PACKETS ARE MORE GENEROUSLY FILLED THAN HERETOFORE. YOU WILL BE WELL PLEASED WITH YOUR PURCHASES OF OUR PACKET SEEDS. DIAMOND QUALITY.


#### Abstract

Annuals bloom and ripen the first year and then they perish. Many annuals in warm climates, or when taken in, or protected during Winter, become perennial, with short lives.

Perennials flower several years in succession. Biennials do not generally flower the first year, and are in their perfection the second year.

HARDY Annuals, Biennials and Perennials can be sown in open ground early in the Spring if desired, and Hardy Biennials and Perennials require no protection in Winter.

HALF-HARDY Annuals, Biennials and Perennials should not be sown in open ground until settled warm weather, though they can be sown in the house if desired, early, and afterwards transplanted. The two latter need to be protected in Winter, or carried over until Spring in cold frames or greenhouses.

PLANTS IN SEASON-In season we have a great many of the perennials that will bloom the first season and annuals


 for transplanting. See plant department.
## Try some of these surprise collections. Especially put up for purposes named

## "Wild Garden" Mixture

## 25 c

In this we offer a splendid collection of hardy annuals consist. ing of experimental hybrids, and special selections from fifty-acre trial grounds; also a large collection of wild flowers and standard sorts, well calculated to make a display to meet the demand for odd corner mixtures or to beautify the vacant lot where cultivation is difficult and weeds predominate. Put up in ounce packets at $25 c$ each postpaid.

## "Cut Flower" Garden Mixture 50c

This consists of a mixture of hardy annuals blended to give a continuous succession of cut flowers from early summer until late fall. Put up in ounce packets at 50 c each.

## Shakespearean Floral Collection

After giving the matter careful study, we find the charm of the great poet's flower-scenery consists not in the abundance of varieties mentioned, but in the touches bestowed on a few, especially when those few belong to the ranks of the "common." One of the most trustworthy tests, perhaps the final test of the great poet is that he makes the oldfashioned seem new, and the unimportant rare and golden. Some few of the flowers mentioned in his works such as Crown Imperial, Lady-Smock, Long Purple, Mandrake, etc., have been difficult to identify or impracticable to procure. Nevertheless, we have worked out a collection of fifteen items which will make a splendid showing, and, we believe, be as complete as it is possible to obtain. These are the Aconitum or Monks Hood, Bachelor Button, Carnation, Columbine, Cowslip, Crow-flower, Daisy, Hare-Bell, Mallow, Marigold, Oxlip, Pansy, Pink, Poppy and Primrose. Purchased separately these would cost $\$ 2.25$. We offer the collection complete for

## \$1.65

POSTPAID
The Violet also can be liad in plants at $\$ 2.00$ per dozen.

## Everlasting or Straw Flowers

Acroclinium (Everlasting),
pkt. ...........................................10c

Gysopliila (Baby's Breath),
Pan. Fl. Pl., pkt......................16c
Helichrysum (Straw Flower), pkt. $10 c$ Statice (Sea Lavender), pkt........................... Collection 1 pkt. each of above 35c postpaid.

Acroclinium-A favorite with florists. Very long, narrow petals, toward the center they cross and recross in splendid confusion, strong, branching habit
Gysophila - A pretty, free-flowering plant bearing beautiful, small, starshaped flowers in great profusion. Grows from 18 to 24 inches, sometimes reaching a height of 3 feet. Fine for bouquets.

Helichrysum-One of the best for Winter bouquets. Hardy annual. Colors, red, yellow and white. Effective for bedding.
Statice-Splendid for border or rockery, producing panicles of minute flowers, can be dried and used for Winter bouquets.


## ASTERS

Asters grow to their greatest perfection in our mild, cool climate and splendsd strains of careful selection. As F'all bloomers, for gar den or cut flowers, asters are most satisfac tory, and the varieties we offer can he depended on for best results, rivaling the chrys. anthemum in size and beauty. A rich moist

## CALIFORNIA GIANTS

Today the most popular Asters in all flower shops and also in exhibition shows, and then the immense size and beauty, is well as the long sturdy stems, make them very attractive When alranged in floral work. They combine acterizerous and robust growth, which char Ostrich Feather type of flower, and are a true non lateral type. The petals are stronger and last longer than the Creco. We offer the folDeep Rose, Dark Purple, White. Packets $15 \mathrm{c} ; \mathrm{t}$ oz. 75 c . Mixed, pkt. 10c; $1 / \mathrm{k}$ oz. 65 c .

## Beauty Type

The plants grow 2 to 3 feet high, are of branching habit; flowers are large. borne on long stout stems from 18 to 24 inches, mak. can cut long stems from an Aster branch and stlll have your plant grow and develop more flowers. The fieduty type forms a shrub more than a plant and does exceptionally well in this seection

## EARLY BEAUTY

EMKH, BEAITV-For localities where the season is too short to flower the late type before frost, also for early, for ing. It must be remembered, however, that this is not an extra early Aster such is Early Express or Queen of the Market. Planted at the same time this type flowers with the crego and American Branching. We list the following shades: Azure Fairy, Carmine kuse. Crimson IBeauty, Lavender IBeauty, White Beauty, Peach IBlossom, September IBeauts, Pumple IBeauty, Kase lieauty. Plat. 15c; lí oz. 50c.

## LATE BEAUTY

LITE HEII'TV - Large flowers borne on long stout stems hegiming to flower early In sentember and lasting until destroved by frost. Crimson Beanty, Lavendel Beanty, ty, september Ibpauts. IPkt. 15c; lioz. 85 c .

## "CREGO GIANT"

CREGO ISTERS- Disthet in every way, magnificent flowers of tare leauty of form and hrinant rolngies Pink, rase crim free white, lavender, purple or mixed colors Fkt. 10 c ; $1 / 4 \mathrm{oz}$. 50 c

## ASTERMUM

ANTER.MCM - Resembling chrysanthensums in form, hence the name "Aster-Mum" lel than Crego; mixed. Plit. 10c;1/4 az. 50 c

CilINT COMHT-Flowers large and beautiful ise az. 60c.
BATE IBRINCIIING-FIowers latge, beautl ul, houble ath horne
MIK.IINO OH ROCHESTEIR - 1,ong, narrow betals, towatd the center they cross and re 10c 10c: 1/ 120 c QEFEN OF THE M.IKKHT-IESt early As Pkt. 10c; 1/1 oz. 60 c

IWRENNI.II, INTERN - Hamly handsome fowers of easy cultme. appearing at a time inloors very earls and veedllas wet in open s soon as large enough to hancle, svll foom the first season. latrge flowering mixed. Plat. 10 c

All lricrs On This Page Ire Postpald


ACKOCLINICD-Everlasting - Ahout 15 in hes high, white or mink flowers, when cu ter houquets. Sow early in sheltered loca on and transplan io permanent bed. Pic AGERATM M-(Mexicanium)-Wicture on page 33.) For borders and hedding: covered with feathery hlossoms all summer; sow in early Spring in looxes to tiansplant or sow out of doors and thin to 4 to 6 inches. Shading tall Dark Blae. White or lixed Pkt 10c; 1/4oz 250 AGRONTEMMA (P) - Itro-Sanguinea)-Foli age silvery white blossoms crimson resen hling single pinks. Strikingly beautiful for heds and borders. sow where plants are to remain and thin to prevent crowdine Height 2 ft . Perennial. Pkt. 10c; nz. 65c A1JSNCM (IP) - (Sanatile) - Showy, yellow indoor fine ar horly indoors. Fine for horders. Height 6 to 12 M1. inches: Plit. 10c; 1/1 12.40 c
ALINSL'M-A dainty white flower, for borders edging and rockwork. In horders, so thick Iy so as to form masses. Height \& to 10 Mehes Sow in Spring or late August. Malitimum-Sweet (picture on page 33) Pkt. 10c; oz. 50 c .
Little Genl-Pkt. 10c; oz. \$1.00.
Procumbens - Of trailing hahit; profuse AXI
thR.NTHCS-Handsome follage and in teresting flowers, making a striking effect in borders and beds. Thrives in hot, sunny Sow early and transplant
Salicifollus-Willow leaved.Pkt.10c;1/4oz50c Caudatus (Luve Lies IBleeding) - Graceful drooping flowers (page 33.) Pkt. 10c;oz. 25 c Tri-color, or Josepli's Coat-Foliage scar
ANCMESA (1') - (Italica) - (IDrop More)- A splendil, free hooining plant for hardy bor ders, height about is feet. Flowers a beaut ful gentian blue color. Sow in sheltered place outdoors and transplan
ARAIBS (P)-(Rock Cress)-One of the earli est and prettiest spring flowers for rock eries or edging: pure white flowers; with stands arought. sow in permanent location and thin to 6 inches. Height 6 to 8 inches.
(Picture on page 33.) Alpina. Plit. 10c; (Picture on
$1 / 10 z .30 \mathrm{c}$
AIRCTOTIS GR.INIIIS-(African Daiss)-Plants form bushes about 2 feet across with deeply cut foliage. and daisy-like fowers often 2 i/ mehes in ilameta, color of a lilac tinge Pkt. 10c: \}z az. 50 c
BACIFLOR'S IBLTTON--(Centaurea Cyanus or corn Flouer-A hardy annual, easily cultivated. Fowers of a great varety of rich colors on tall. branching stems. with but little follage. Sow in open gro und early

Fine Ningle Mixed. IJt. 10c; nz, 40c Fine Iomble Mlued. I'kt. $10 c$ az. $76 c$ Single Blue. 1'kit. 10c; oz. 50c. Douhle Elue Florist Ntrain. 1'k. 10c;oz. 75 c I ) auble Pink Florist strain. IPk. 10 c ; oz. 75 c B.1LLOON UINE-A Hubl rowing climber Blossoms very small and white. Light naceful folidgen ceeds best in lisht wirm soil 10 to is feet tall. J'kt. 10 c ; oz. 35 c .
BALS.MM-("I ady Nlipper")-Handsome plants, producing masses of various colored flow ers, half havis. Curious seed porls which. when ripe, will explode when touched. If sown in day shouk bleom from July unt rost. 1 to ild feet tall
Double Canmellia Flowered - Mixed. Pkt Oc: 1 ; oz. 30c

BLIE I.ICE FIOWHRS-GDidis(41s)-Plants about is inclies high, covered with clusters hlue, fiving the effect of dainty lace fhown on page 36). Plit. 15 c ; 1/4 oz. 65c.

CNIENIDELI-(Pot Marigold) - Valued hy Flowers are drind in Fatl and kept in paper balgs for ust. In nilit climatos they bloom nearly the year arount? Colors, yellow, or anser and wold. 1 to 2 feet tall. Sow in wily sprink in open pround (spe page 36). Oranke Kink-bouble. Plkt. 10c; o\%. 50c. Arpor-bouble. Pld. 10c; uz. 25c. Armont querollouble Plat. 10c; az. 35c. Bonble Mised-Pkt. 10c; az. 20c
C.NADOPSIS-Always covered with a mass of bolt flowers, yellow, rimson and macomy situation will hoom all Suminer Fine for "at flowers. 1 to 2 feet tall. (Pic. tured on mage 36. .
(ioldenn Kink-Plit. 10 c ; az 60 c
Goldell IV ave (1)rmmmondi)-Plit. 10 c ;om. 50 c . Combata Maximallld. 10c; or. $\mathbf{7 5} \mathrm{c}$. Tall Double vived-plat 10c; 1)wart Mixpl-Plt. 10c; ve. 50c.

CANISTLFT-(Iberis)-Cone of thu most highly prized annuals for beds or masses, ew indoos transplantine to raden when 2 to 3 inches high. sowings every two weeks in the open whll flower from Juty until frost. I to $3^{1 / 2 / 2}$ fert tall. (l'ictured on page sillat
('ardinal. Crimeon larmine, lilestl l'ink, Rose Pht. 10c; oz. 65c. (thematia- Giant IV
Pkt.10c; 10. 30c.
 plants trowing ere 36.$\}$ Ornamental garden blants srowing $21 / 2$ feet high, producing larqe, noddink. lell-xhaped flowers of many expulisite shades; a hardy hiennial. Sow
seedls in May. keep seedlings well waterea seedl: in May, keep seedlings well watered July or August. (iive rich soil and plenty of room.
Medimin Single-Itlue, rose, white or mixed. Pkt. 10c; $1 / 402.25 c$.
Calycanthema- (Cup and saucer) - White. pink. light hlue or mixed. Illt. 15c; $1 /$

## ©. 80c.

Persicifolia (P)-Very fine, blooms in June. Plue or White. Plit. 15c.
Pyramidalis ( $\mathbf{P}$ )-Stately, hardy plant for pot culture or garden. Blue or White. Ilat. $10 \mathrm{c}: 1 / 4 \mathrm{Iz} .50 \mathrm{c}$.
CARDINAI. CLIMBBER-Considered the most beautiful and brilliant annual climber. A age literally covered with with fern-like folilar cardinal red flowers from midsummer until frost. Annual. D'lt. 15c; 1/402. 95c. CRNATIOX (P)-(Diantlus ('aryoplyilus)Carnations are tender perennials, heing easily Winter killed. Splendid for cut flower*, deliciously fragiant. Colors pink, white, red Sow indoors in March; transplant to other boxes when 1 inch high. Keep them grow ing untll soil is warn, then transfer to open garden. Height 3 to $11 / 2$ feet.
Chabaud Everblooning-Extra choice douhle mixed. Flower in 5 to 6 months. Pldr. 15c the double flowers are very "arly and the double flowers are valuable for bouHuets. Red, White. Pht. 15c.
4 months from seeding. Pht. 10 cithoom in ${ }^{4}$ months from seeding. Pkt. $10 \mathrm{c}: 1 / \mathrm{moz.50c}$. Giant or Malmaison-Mixed. Pht. 16c. Double Dwari Vienna-Mixed. Large flow ered, blooms early, flowers of many colors and markings: largely double. Plit. 10c. CASTOR BEAN-(Ricinus)-Tropical appear ing foliage plant. Highly ornamental, of stately growth. large leayes of hronze or soil is warm. Grows 3 to 5 feet tall.
Sanguinens-lirilliant scarlet stems and fruit. Plit. 10c; oz. 25 c .
Zanzibariensis-Surpasses in size and beau liest Varietien Mixed. Pkt. 10c: 02. 26c.
CATCHFLA-Silene)-A hardy annual, yietd inge as profusion of umbels of bright colored flowers in various shades of pink. Fine for horder or rorkery. The plant is covered with glutinous moisture, to which flies adhere, hence tis name. Sow in boxes and transplant as som as large enough
Fine Mixed. Plst. 10c;oz, 45c.

tractive and showy, producing mawive heals of deeply colorent flowars. Colors, ret. purple and rolow. sow very thinty toxes or thumbrots until little combe at at peats (irows! to te inches tall.
Cockscomh Tall Mived-llki. 10c; oh. \$1 Warl
 Mums hathe. bor pots or "prn prownd. Finest Mised-l'kt. 10c; or. \$1.00.
WII PRICEN ON TIIS PMEE POSTPBMB


 latige locid of divll foimson flow wils that look as if matle of salky wool. lifferctive in leots atd bordeos, Virtiable for fortiong. ats they can lap driud. reotainias thoir bright eotors for wiroks. IVt. 15 c ; i, oz. 7 Ec.
 ut. Sow whene phants aro lo romain, thin. alng ta i:. in apari. (irows 1 lo 3 ft . $1: 111$ Imperialis-(Giant) - White, गirnhe rosi suaveolalls - Ipllow swiot sullant. I'kt. 10c; ! 0\%. 30c
Moschatit Minal-l'ht. 10c: 1/1 of. 30c.



 1kt. 15c; '1 w\%. 25c
 10c: wh. 50c.
 $10 \mathrm{c} ; \mathrm{OR} 40 \mathrm{c}$
 abler flowerime plants for the whirlow gor-
 "overing the plam with at sheret of bloom thould be sown wndel mlass in finn sobl. Ilybinia dirambillot:a-…hoicest mixed (1'o time. fot. 50c
Isbrida-lönc Mived. \|ltt. 25c
 Mant: hatf hatras meremmial P'kt. 10c; 1/1 'If.ikIII.
 and athratlive finw fres rolting. ldoes well
 (latmois-With tonch wr pink. I'kt. 10c; i $0 \%$ 35c.

Sahmon (thrert-l'lat. 10c; $1 / 101.35 \mathrm{c}$
W'lite-I'lit. 10c: 门 o\%. 35 c .


 shrublers bowler. (of branshing habit. eath Brancle proturing a larere host of attractive fowtrs. how 16 ghen krombl as noon its ferl. Fins for buss. Wival. Mot. 10 c w\%. 65c.


 curious tendrils. Aceds should bre planted on erler in shallow boxes of soft soil. Cover
ing with glass motil seedlings apmodr. Trans
 W'lite-jlki. 10c; 1, w\%. 50c.
 foabed ornamembial grass. hevong largu. tear

 hormers atrd bets, no other plitit hats so airy Rrark or is whare "ffertively adapted for cut flowers. (Hitlural on ladie 34.)
Lonk Sparred Hsbridh-Fxtra larke flower. of colors. I'kt. 25c; 1/If w\%. 50c. simale Mived-lıt. 15c; '1, \%\%. 50c bouh.e Nixed-l'kt. 15c: ! (1\%. 50c
COHFOPSIS (1) - (Iancooluta)-lawke beight yellow flowers in tretat abuntance from seeds incloors very early, tranmplanting to open when soi is warm Height 1 to feet. Jkt. $10 \mathrm{c}: 1 \mathrm{w} .66 \mathrm{c}$.
Cosidos - Beautiful plants moducing thou sands of artistic flowers in pure white pink and crimsou shades, furnishing an abundance of cut blooms. In this climate the late fowering types do not, as a rule, hloom much before early frosts, hence we list only early flowering types which by careful se. lection now have flowers as large as the late flowering kinds. Seed sown in the open ground in April should produce plants covered with blooms in July, or 6 weeks to 2 months eariler than late plowering. Plant not less than 18 inches apart in rows or in masses in beds. Pinching out tops when plants are foot high makes them bushy and sturdy. (Pictured on page 36.)
Extra Early Manmoili Flowering-Crimson. pink. White. Pkt. 10c; oz. 66c.
Finest Mixed-Pkt. 10c; oz. 60c
Extra Early Double Crested or Anemone Flowered - The newest thing in Cosmos. Crimson, pink, white or mixed. Pkt. 20c. Klondyke-Blooms very early and continu. ously. 3 to 4 leet high; large, orange flowers on long stems. Pht. 10c; 1/4 oz. 75c.
CYPRESS VINE - (Iponoea Quamoclit) - A cimnise of rapid growth; delicate fern-like roltage and great numbers of star shaped night in warm water, then sow where vine is to grow. Hoes hest in warm, sunny locathon. Grows 10 to 15 feet. (Pletured on page 36.) White; scarlet or mixed. Plit. 10c; az. 75 c .
D.MHLA (I)-A magnificent, Fall-blooming tuberous-rooted plant. Sow seeds in boxes indoors very early transplanting to open
when danger from frost is past. Will bloom when danger from frost is past. Will bloom first season. Tubers of the hest ones may Iouble Mixed-Pht. 15 c ; $1 / \mathrm{He} \mathrm{oz}$. 50 c
Single Mixed-Pht. $10 \mathrm{c} ; 1 / \mathrm{m} \mathrm{nz} .40 \mathrm{c}$.
Cactus-odd fantastic shapes; all colors,
Iinest mixed. Pkt. $15 \mathrm{c} ; 1 / 16 \mathrm{oz}$. 50 c
MNSI (P) - (lBellis I'erennis) - Low-growing blant bearing beatutiful flowers. Hardy perennlal. Sow in boxes about August and transplant to cold frame or some location where they may be protected the first Winter. Ilant in permanent locatlon early in Spring. Heirht 6 inches.
Exira Donhle Mixed-Fkt. 10c; $1 / 8$ oz. 50c Giant Double thonstras rose-pink. Plit. 26c; 1/16 o\%. 60c.
Miasta Nlaska- lery hardy: profuse bloom ers: flowers very large and borne on long stems. single; betals pure glistenine white dark center. 1'lit. 15c; hoz. 95c.
Orange Aliean laisy (see Dimorphotheca) DTTRI--Ladge. strongegrowing plants trumpet shilled flowers, white, somelimes ike bahlias bow inoots can be preservel and transplant sow in sheltered bed in open Give plenty of room and rich weiles high 2 to 3 feet.
Fastmosa-jouble nuxed. INk. 10c; 0z. 65c. Cormucopia-Plat. 15c; oz. \$1.25
HMORIIIOTIIECA AURANTIACA-(Orange Afican llais, - Extremely showy annua With bushy plants 12 to 15 inches high gold, with dark disc end haoss, rich orange More Seeds In Each
Packet This Year



## DELPHINIUM

＂The New J＇opmiar folower of the Dins＂ ］n？lphiniums has ultanerorl trementously．par－ －limatio comrlitoms are so favoralife for their frofevt levelopmbent．These lorofuse hooming phats with tallshikes of many colored blooms

 IHEIJIINICN IJIISRISA
（hismat stork ramw frome the fatmous
kins sitmmels，Wroxham strat from
spent in pure hissinge pults of mone
Thate ：and batsente were spent in theis cult
vation thmination of whak varteties and re
selection．in order to find bot only the rarns

two to three inches in diametas amd the platat

$\qquad$

$\qquad$
$\qquad$

 MIId IN．N－I atrge single，Mazarine or sky
latue heavily tinted Mallow pink：＊nall darh
 leghliar white bee；outer petals sky－blue banderl hase moner petals hlate
Toll N T．IIII－A very fine semitalonllle，outa violel blemaral with Salvial blue．Curved V．iNITS FABR－Semidoulle flat flown with brown bere．feathered kold：prtals pale Am

Prackets of 100 seed $\$ 1.50$ encll．
Colleclion of 8 natiels for $\$ 10.00$
IIIN（B＇S＂WIRENIIMM＂STR．II．
IIMIRIIS MIXEI
The range of colors in this mixture runs through the most delicate combination of Mauve and light blue，Crater Lake blue，helio－ trope，pink－laventer，creamy－white，deep blue purples，以 H ，jackel of 100 seed $\$ 1.00$ ．

ST．INJ．MHI V．IRIETIES
We ako off $\in 1$ the following very excellent collection of the regular stanciat sorts of Del－ phiniums for those who desile some of the older and le ※ss explensi
ISelladoma：－lıikht blue．Plat．25c；1／noz．\＄1．35． lsellanosinm－lark blue．I？ Cardinale－sicartet Plit．15c；ís oz．\＄1．00 Chinese Mure Fairy－Plal． 10 c ； $1,1 \mathrm{az}$ ． 50 c Chinese lahu lbultully－lhi．10c； $1 / \mathrm{oz}$ oz． 60 c Chinese Albmm W＇hite－Pla．10c；it oz． 50 c one farlent rall above six varielies for 60 c
blyhinium seceds ithe too valuable to be slugs innl other ebemies． Sow in well dratned hoxes of rach meflow soil，if jou havi rottol leaf mok，mix about
half ami half with sobl and about one quarter half ath Thalf with sonl and about onseduarter box hefors sowing the sect． soil to da depth not to exered an cighth or one
 Shatle laring beriort of germination，which most exsemtian things is 10 lieep thes soil moist during this time as it is fatal if seeds get ory While gorminationg，even for at few hours，
If the seods in sown in the Fali and not too rowdel，the small blants may be left in
the boves owel Wintry，to be planted ont in the opren in the spring．In ans everth，the plants may be loft without
monnt whon Winter starts in
If sown lather spring．Hlant thom out in
the opron inhout onte foot abart when size of
 eral fertilizing．When plants beromme batge ${ }^{4}$ $2 x^{2}$ ，

 and spented flowers，time for herders or trot in Atay，kefl seallings well watered
filoviniflonat－Mixed．V＇KI．1Gc；1；ox． 25 c E＇Plllolklsl．1－1stancling，hushy plants with suitable for beds or bothers．Sow in open high．＇ive plenty of room．（ieool foliage Vaniegata，Now on Nomntain－rkt．10c； i oz． 25 c ．
Heterophylli：－－ainted lataf．Ammal poin．

 are the Alpestrin－of trailing lathit．with prett． flowers：hlue or mixed．I＇kt．10c；1；az．65c fine for lorikrs．I＇lil．TOc；is oz．70c fonforllorens－l）warf：continuous bloome lime I＇lat． 15 c ；1́к ev． 70 c ．

 of ron at four orelock，close in morning．Sow sferels eindy in the open and transplant．

 karten plant，with lwillamt flowers；free
hlooming from early summer until dutumn： hlooming from early Summer until Autumn： ＂spectany effective in masses．Sow early and orange．Splendid cut flowers．Height 1＇icta lorenzianti－looulre：finest mixed： amutal．J＇kt．10c；1／：0\％． 25 c ．
P＇ieta Ningle－Fine mixed．Ilit． 10 c （！iom． 25 c （I＇）Eramfllora Navima－l’lat． $10 \mathrm{c} \cdot 1 / 10 \% .40 \mathrm{c}$ ． HRSNILII（I＇）－A half－harty perennial．eas－ thinls in boxes indoors，covering with glass until seemings apprar．When about one inch high tramsplant to small pots in rather por soil firmly pressed down．Can later Zonale－bxtra choice single mixed the well known herklins Geranimm．Plit．15c；1／roz．95c． Jady Washington－（l＇elargomiun）－Foliage freen：flowerc birire Finest Dixer Plat 25 c ： 1 bo serd \＄2．25．
 son．domble．lifooms all summer＇．Heitht
 GODETM－I－Wshy growth，profuse constant hoomers Colors rose crimson，White and
pink．sow indoors in boxes and transplant． Sucreods in poor soil．Heishlt I foot．（I＇ic
 （ileriosa－1 billk red．Ilkl．10c；1／1 ol． 35 c ． 1hnchems of Nlbing－White．Pk． $10 \mathrm{c} ; 1 / 402.35 \mathrm{c}$ GOlKDS－bood climbers．for covering veran． fruts ef ls Waran．Ileight 10 lo 12 feet

GiPMOI＇llll．I－bas ily raised from seed． starsh 1 s to $\frac{t}{}$ ine hes beraring beautiful sowings in flats very early and transplant． ed．Make later sowings in open ground．
Girandillora Elogans－W゙hite Paris market Jlit．10c；oz．30c

GYPSOPIILLA（P）－（Baby＇s Breatlı－A pret． ty，free blooming mant．Fine fur bouquets． covering lightly with sifted soil firmly pressed down．Transplant soon as large enougil to hande．Height 2 to 3 feet． Paniondata－Foliage fine；covered with tiny， pure white flowers．Hildy perennial．Hit． pure white flower：
10c；${ }^{2 / 1}$ oz．25c．
Panionlatalli＇l．－About $50 \%$ double．Plit． 15 e IHEADCHIRSSLM－Straw Flower）－Monstro－ suin－Eivellasting；one of the best for Win－ ter bouquets：hardy annual；red，yellow and White．Effective for bedding．Sow in open and transplant or thin to 12 inches．（Pic－ tured on page 37．）
Houble Nixed－Pkt．10c；1／1 oz． 25 c ．
HOLJJiloCkis－（New Annnal）－llybrida Semperflurens－This splendid variety will bloom in August，from Spring planting，con－ tinuing until frost：a great advantage，as other varieties do not bloom until the sec－ ond year．
Finest 大ingle Mixed－Pkt． $10 \mathrm{c} ; 1 / 1 \mathrm{oz} .30 \mathrm{c}$. HOLJJIIOCK（IF），or Nllhaea－A great im－ brovement over the old type，the flowers grounds there can ine nothing better Har dy．Should be sown in open from Spring to mid－Summer，transplanting in late Fall． five rich soil for best results．Height 5 feet．（Pictured on page $3 \pi$ ．）
（＇haters－superl，strains．Jouble varieties： of greatest perfection，Scarlet，rose，pink， maroon，yellow，white and mixed Pkt．
 py or Isush Fschasclultzia）－liest of the Pop－ by family for cutting．Seell sown early in May will，by the millle of July，produce plants coveren with thisir large，buttercup yellow，poppy－like blossoms，and never out of flower until a hard frost．Heikht 2 to 3 ft ． Fumariateloliz－llst． 10 c ；oz， 75 c ．
HN：INTH ISEAN－（I）oliclios I ablab）－（See picture page $371-1$ aplid growinga ornamen tal，chinbing annual，bearing clusters of beantiful pulple and white flowers，fol－ lowed by highly ornamental seed pods．Sow sereds carly where vine is to remain．Mixed． 1＇lit．10c；02．15c
 umb－rety summer（railing ammal for vases and rock work：leaves covered with Heirht 6 to 12 inchess Plid． 10 c ，in 75 c ．
 page 40 for birture Forms sxmmetrical feery red in Autumin．Sow in open and thin to 15 lnches．V＇aluable for Summer hedges． Heigbt 1 to 2 feet．Pki．10c：oz．35c．
KUDZV VINE（1）－（Pueraria TJunbergiana） －Peautifui Japanese elimber，hardy neren． nial with fragrant purplish－violet，wisteria like flowers．Height 10 to 12 feet．I＇kt． 10c；uz． 75 c
AARISII＇CR－The annuals are quite hardy and bloom in summer months，furnish ing flow forms ind color．Tall warieties are suitable for shrub） beries and horders，white the owarf sorts produce charming effects in luds．IIt．1－2 ft．
Juarf liocliels－Ioouble．Colons mixed．I＇lat． Hwarf Rockels－1
10 c ： $1 / 20 \%, 75 \mathrm{c}$ ．
 blue，light blue，rose，white or mixed．I＇lal $10 c: 1 / 2$ w\％． $75 c$.
 las pale green foliage goes well with ans flower．Meight 1 to 2 feet．（ ${ }^{\text {sumalis proma }}$ Faten from（uttinge）Pkt．15c；is n7．60c LINLM－（Giandiflorini Kıhrams）－Scarled Flas －One of the most shows lochling plants． 10c： $1 \% .45 c$
 1202．35c
＂eremme Albim（1＂）－Nilk while flowirs

LOHELAB-(Pictured on pare 32.) Delicate, alue for borders, ribbons, edgings, loch work and hanging baskeis. Sow very thinly in lioxes, curering with glass until seandings 'ue hiroukh surface Height 6 to 8 inches
C'rystal Palace Conpacta- Dwarf flower"s rich. bripht blue, finest for bediling and edgink. IKt. 10c; 1, 0\&. 90c.
Grarilis-Blue, trailing: beautiful for bas kets. Plit. $10 \mathrm{c} ;{ }^{\prime}$ ' oz. 40 c .
Foyar Park blue, dark foliage Pla. 10 c : $1 / 3$ oz. 75 c
Sapphire-beep blue with white eye. long drooping flower stallis; klows rapidly: trail.
mg. Jlit. $\mathbf{1 5 c}$; $1, \mathbf{o w} \mathbf{\$ 1 . 5 0}$. Ocio oz 65c 10c; $1 / 102.85 c$


 Mived-l'ht 10c ir 50 c

 lardy b leng timt bis simion. Siants choulil be sown wher Hadevand Hybrida--Mixed. Flkt. 15c
 dwalf and tall varieties, folinge lotight कrern ant decply cut Flowers are various farly in flats and transiblant to garden when 3 to t im he tall. For specianen plants soll shoukd be light, rich and deeply spated.
Hight to $21 / 2$ feet
Divan-Tall or dwarf, Uouble Fistulosa type, mixed. Ikt. $10 \mathrm{c} ;$, 1/4 oz. 35c.
+renof-liwarf or tall foulle, mixed. Plot 10c; 07. 65 c .
Golden Ball-New dware Freneh toublo. Littfe Ibrownies - (Legion d' Honnemr) bwarf totible lrownies. Hk. 10c; oz. 65 c
 fragramt alinual. Prostuces the large'st and
finest spikp of blossoms during cool, moist wedther of early spring ancl late Fall months. but will flower frecly throughout the summer from seed sown edrly in Spring.
$A$ second planting should be matl ahout the A second planting should be matle ahout the
first of August. Sow seeds where plants first of August. Sow seeds where plants
are to remain. Jifficult io transplant. Ileight 1 foot.
Odorata (irandiflora-large fragrant flow ers. Pkt. $10 \mathrm{c} ; \mathbf{0 z}$. 25 c .
Marliet - White with reddish tince. I wart variety. Pht. 10c; 0z. 75 c .
Golden Queen-wlense, dwarf growth: flower golden yellow; fragrant. Pkt. 10c; oz. 75 c . Dobbies Giant Red-Mammoth red spikes Plat. 10c; 1/ oz. 35 c
MIMOSA-ANensitive Plant)-Pudica-A good foliage plant. Very curious and interesting leisht to 21 fret. Plat. $10 \mathrm{c}: \mathrm{oz} .75 \mathrm{c}$.
 of easy cultivation, attaining a height of 10 to 12 feet. The dwarf varieties flower Plant seed early where plant is to remain. (Pictured on page 40.1
Convolvulus Major- Tall, choice single, Doubl allolors. Pk. Sc Convolvulus Minor-Dwart mixed Pli 35 c . Convolvulus Minor-iowari mixed. Pkt. $10 c$. Imperlal Japanese Fringed-Very large fringed flowers in a variety of exquisite colorings; variegated ioliage. Pkt. $10 \mathrm{cc}: 1 / 2$
oz. 40 c .

 on clouity diyx whe is covereis with fram rant white thwers 4 to 5 inches in fiamoter.
 NEDESI!


IHE (iem-Fl: 20 c
Triun renli Hivid-FLi. 200.
Nf(i)TZ.iN s-A showy nlame
shaped flos
up in
bloon
nual: 3 fiet higli. Sow seeds in hoxes in
 rich soll andi sumlight.
Afinis-White Pkt. 10 as
Sylvestris lure whita dronpmin tlowers
Sianderat lotiak, Pke, Do, ir 75 c .
rant flowesヶ. Plst. 10c; w. \$ 1.25.
OENOTHERS IAMIHG'FIN
 pressed down, Transphant seedlings
Plit. 10c; $0 \% 75 \mathrm{c}$
PASSIFLORA (I') - (I'assion Flower) - Most interesting and well known chmber, learing
 PE IS Pelennial (D) It athyrus Itat PFis-Perennial (P)-(Iathyrus Itatifolius)sminar to sweet peas hat hot so Ragrant they bloon through a long season. are per.
fectly hardy. and will live for years. Should fuctly hardy. and will live for years. Should
be sown near a fence or other support, thin. ning to 2 or 3 feet apart. Height
feet. Mixed. Plt. $15 \mathrm{c} ; 1 / 202.95 \mathrm{c}$
PETCNII-(IIybrida)-(Pictured on page to. During the whole season it is covered with
Jarge, showy blossoms, always bright and farge, showy hossons, winays oright and fresh; an infinite variety of form, fringed and plain, dounte and single. Fiardy annual. Sow seeds very thmly indoors under glass. Care should be taken to save the weaker seedlings as they produce the finest flowers Tiansplant to garcen when soil is warm Height 1 to $1^{1 / 2}$ feet
Single Choicest Mixed-Plat. 15 c
Double Clioicest Mixed-Plit. 35c.
Double Fringed Mixed-Pkt. 50 c .
Giants of California-Choicest fuffled mixed
flarge thruat). Mkt. 25 c .
Ellis Pride-Ween jurple, very large flow ers. Plat. 35 c
City of Pottland-Einsist shave of pink Flowers large and ruffled. Pkt. 35c. Ros, Morn-Pink, white thro
 NASTURTIUMS

## Hariv annuals up easy cultura, bhorra. Ca

ing in unintarrupted plender from co
early Suminer to frost. The chowent
varieties are in this list. See pare 40 for illustratien
TMI
VARIETIFAS
Chameleon-Marked and blotcherl in brilliant colors
Crimson-large and velvety
Cloth of Giold-Fiery red, zollenl lenved. bannet's orange-Golden yellow.
Moonliglit Yearl--soft primine
Primes Ifens:-Lemon yellaw
Reqah.itum

Nivture Tall Varietips ith. 50 c Inlikf VARIETIES
(lizmelton
Cloth of Gold-Irilliant wearlet, yellow
Fimpess of India-intense scorme pur
Prisce Henry-Lemon yellow. carmine
Regotheri.
Vesuvius-Salmon orang
Mivture Jwarf Varieties
Plit. $10 \mathrm{c} ; 02.20 \mathrm{c} ; 1 / 1 \mathrm{lb} .60 \mathrm{c}$

 liant bellshaped flowers hom on lons
spikes alundantly all Summer. Colors range through red, rose, chers. carmine, pink and purple. Should he sown indoors, Cover lightly and press duwn firmly, Transplant to open. Mixal. Pkt 10c; if of. 50c
"Sensation"-As a hedrling plant this takes rank with the I'etunia Alsout 2 Reet. Drery
branch it spike of flowers ill it wide range of loright colors. Treatert it petunias. Plat. 15 c ; 1 n 02.90 c
PISKS-swer page to for colored matures The dimthus family embrace some of the are of the richest and most pleasms colors. and nothing ("dil surbacs the extllisite flag rance of some varieties. Thay ale liarely dnd become perennial in warm chmates. good soil when it to 2 inf hes high.

CHINENSN TJPF
Single Mixed-Pkt. 10c; $1 / 1 \% .25 \mathrm{c}$
Double Mived-Pht. 10 c ; $1 / 3$ or, 35 c
HEIDDEW IGIH TXPE
Crimson Belle-Single. Plit. 10c; ${ }^{1}{ }^{1}$ oz. 25 c
Fastern Queen-Single roso. Pkt.10c;1/102. 25 c Vesuths-Single arangescarlet. Pkt. 10 c Finest Ningle Wixrd-l'kt. 10c; oz. 75 c Fireball-bouhle scarlei, Ikt 15 c 1/4 60 c.
Salnon king-Double. Pkt. 15 c ; , 02.65 c showball-Double white. Pkt. 1bc; o7. 65 c
Firast Domble Mixed-Fkt. 10c: $1 / 4$ oz. 30c.
ALI IPRICES ON THIS PAGE ARE POSTPAII)




## Diamond Quality Sceds

SAPONAKI.I OCYNOHDES (P)-Very showy hardy perennial rock plant ${ }_{1}$ producing masses of small bright rose flowers during Summer months. Pkt. 10c; 1/2 oz. 45 c .
SCABIOS.S - (Sweet Scabious, or Mourning Bride)-Free flowering annuals; white, car mine, lilac, maroon, ete.; effective for gar den decoration and valuable for cutting. Sow seets in open as soon as sin is wan thinning to 8 to 10 inches. Blooms from early July until frost. Height 2 to $21 / 2$ feet. (See page 41 for colored picture.)
Double-Mixed. Pkt. 10c; uz. 75 c
Azure Fairy-Pkt. 10c; 02. 7bc.
Black Purple-Pkt. 10c; oz. 76c
Fiery Scarlet-Pkt. 10c; oz. 76 c .
Rose-Pkt. 10c; oz. 75 c .
Pure White-Pkt. 10c; oz. 75 c .
SNAPDRAGON-Antirrhinumbone of the showiest border plants of almost every color: splendid for cut flowers. Greatly innproved in recent years and really magnificent. Plant indoors very early, trausplanting when about 3 inches high. Height 2 to 3 feet. (See ored illustration on page 41)
TALI, GLANT FLOWERED
searlet-Pkt. 10c; $1 / 40 \mathrm{oz} .25 \mathrm{c}$.
Golden King-Plst. 10c; 1/4 oz. 25 c . Qneen Victoria-White. Pht.10c; $1 / 202.25 c$. Rose Queen-Pink. Pkt. 10c; 1/4 oz. 30c. Mixed Varieties-Pkt. 10c; $1 / 2$ oz. 50c. MEDICM TALA VARIETESS Florist Strains
Purity-Pure white.
Gloria-Deep rose pink
Nelrose-Deep rose.
Philadelphia-Pink.
Defiance-Orange scarlet.
Empress- Velvety crinson
Silver Pink
Each Pht. 15c; 1/3 0z. 50c
Rose Dore-Rose, suffused with orange
Golden Queen-Giant yellow
Each Pkt. 10c: 1/ uz $25 c$
Wixed Varieties-Plit. 10c; $1 / 407.25$ c
STATICE (P)-(Sea Lavender)-Splendid for border or rockery, producing panicles of minute plowers, can be dried and used for Winter houquets
Latifolia-Sow like other perennials in flats or cold frames and transplant when large enough into permanent positions, 12 to 18 inches apart
Blue-Pkt. 10 C ; $1 / 402.35 \mathrm{c}$.

## Stocks (see picture on page ${ }^{4}$

STOCKS-These popular flowers are easily grown and are so highly fragrant and of such beauty they deserve a place in every garden. Should be sown under glass in a garden place givint plenty of air after scedwarm place. Tiansplant when about 2 in . mperial Large Flowering Ten Weeks-
Blood Red
Canary lellow
Chamois-I vory rose
Dark Blue
Flesh Pink
Lavender
Rose
White
Choice Mixed
Giant Perfection, Perpetual or BranchingThese ever blooming stocks are popularly called tut and Come Again. Sown in March thes flower profusely from late du tumn. Very fragrant.
Princess Alice-White
Princess Ance-Elush pink
LaFrance-Elush pin
Brilliant-Elood
Sapthire-Violet
Creote-Canary yellow
Each Pkt. 15c
Nay Queen-Trale blue
Ruse Pink
Choice Mixed
Virginian Stocks - A fine, early flowerint plant. Hardy annual. Mixed. llit. 10c 1. oz. 15 c

Evening Scented Stock (Matthiola Hiommis)Old fashioned annual which has no beauty to recommend it, but well worth growing for its entrancing fragrance each evening Pkt. 10c. oz 60c

SINFLOWER (Ifelianthus)-Stately zrowinf annuals with immense kolden gellow flow ers; effective for garden clecoration. lheight Wwarl Donbla-Eright wolken yellow flow ers thee inches across. Fkt. 10c. 0\%. 65 c (ilobasis Fistulosus-Sidfion, rery large Mnllithon hemasome flowe flow乡kt. 10c, o\%. 60c

#  

THE NEW "SPENCER" type has lovely waved fluted flowers of giant size. In ex-
quisite colorings, length of stem and lastlng qualities they are superior to older types.

Our famous "Diamond Quality" Sweet Peas are selected with critical care and we offer CULTURE-Plant as early in the Spring as the conditions will permit. Sow at rate of 1
deep, pressing soil down firmly. After plants are well up, thin to 4 or 5 inches apart, draw soil around them until trench is filled above the level. This gives depth to the roots, preserving moisture. Keep ground well worked and water if needed, an occasional thorough soaking being better than a daily sprinkling. Keep flowers cut close; pruning tips of vines winsuring in prolonging the season of bloom and insuring hetter flowers

## Early Flowering

 Spencer Sweet PeasSIX WEEKS EAIRIJEH THAN STAN. IDARI) SPENCERS, those new Harly Flower ing varieties begin to bloom 106 days from planting in the open ground and flowe through a long season-about four months You will he suiprised and delighted when you
inclade Early. Flowering in your plantings.
VERI GENEROLSIS FII.I.EJ) PI(KETS IAIRII GIINT ROSE-A warded the silver medal at the great New York show. A cross of Zvolanek's Rose with Hehe which pro duces a vigorous grower. with blooms half as large again as Zvolanek's Rose. Stems are much longer and color brighter. The Tines are free flowering, flowers large and up with an equal number of stems of other varleties. The stems average twenty inches long. five blossoms on many stems, and flowers with great standards $2 \%$ inches across. Pkt. 26c; oz. \$2.60
SUPERIOR PINK-Awarded silver medal at International Flower Show at New York Florist Club. Beautiful rose pink. very Florist Club. Beautiful rose pink, very
slightly shaded salmon, strong growth and slightly shaded salmon, strong growth and
under good growing conditions the stems measure 18 incles and carry four fowers. Pkt. 16c;oz. 75c.
VULCAN-The brightest of all scarlets. Never burns or scalds. The hotter the sun, the Pkt. 1 Gc; oz z 5 c .
ZVOLANEK'S ROSE-Deep rose pink. Flow. ers large and produced on stems of good length. One of the best commercial varieties. Pkt. $16 \mathrm{c} ;$ oz. 65c.
WHITE HARMONX - No Farly Flowering Sweet Hea novelty has been so senerally
welcomed as White Harmony have heen looking for a hlack seeded white. of pure white color. White Harmony, being hlack seeded, germinates regalily and White Harmony is a sport from the poptart. White farmony is a sport from the populai
lavender, "Early Harmony". A fine grower. lavender, "Early Hormony". A fine grower.
stems are long, flowers aie large and pure stems are long, flowers are large and bure
paper white of grand substance. During dull weather, under glass, White Harmony does not show the green edge on the flowers
which other black seeded whites have Which other black seeded
shown. Pkt. $20 c$; oz. $\$ 1.50$.
HARNONY LAVENDER-A splendid variety, rich true deep lavender throughout. Flowers of large size, beautifully waved. Con-
sidered the best in the lavender class. Pkt. silleled the bes
16 c ; oz. $6 \mathrm{6c}$.
SNOW'STORM-A pure white with large flow. ers usually burne in fonrs on very long stems. The best of its color. I'kt. 15 c ; oz. $65 c$.
BI. (EE IBIRI)-A magnificent violet Hue, pro-
fuse and continuous bloomer. Plil. 15 c : oz. 6ec.
GLITTERS-The standard is a bright fiery orange, with wings of lleep orange; strong tinuously for long period. Ilst. 15 c ; oz. ooc
AFRR.IWA-Large flowers, averaging $21 / 2$ inches in diameter. many leing duplex or
double. Pright rose pink with a clear creamy base-realiy a bi-color. Plit. 15 c ; oz. 60 c .
E.IRLI JLLCE BOX-A fine large clear blue Very much the shade of Mrs. Tom Jones,
which is admired so much. A vigorous Which is admired so much. A riforout 15c; sz. 60c.

## Collection 8 Packets

 Thationt $\$ 1.00$ poxpaid

Diamond Mixture Sweet Peas
varieties it is possihle to moduce. This mix. ture contains namis famous novelties, the bes
of Cimandiflords, atso standard Spencer thoes. and will delight thro most erstieal. sold in

## Grandiflora ollatime favorites, vur nixturr it

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## Diamond Qualify

NWENT ROCKET (IP)-(Ilesperis)-An old harily karien favorite Fragrant white nial that. Sow
10 c 1, 0 Oz 20c.
WEET WIIILIM ( 1 )-(Dianthus Barbatus) -1zamarkalle free flowering phant of hioldarkest erimson. and purple and emitting a wery celicate and refreshing fragrance. May be sown in open and thinned to 6 to 8 in Hefight 1 to $1 \frac{1}{2}$ feet.
('oppers Red-Single

Piuli leaut -l'ink single single color | Sweet Beatuty-Single | rkt. 10 c |
| :--- | :--- |
| IPule |  | Domble Hixed-l'ht 10c, $1 / \frac{1}{4}$ oz. 75 c Ningle Vived-Pkt. 10c, $1 / 2 \mathrm{oz}$ 60c

THLNBERGII (Blark Eyed Susail)-Rapid growing annual climbers: splendid for trail ing over trellses, fences, ete, huff, white hlv Pronn seed sown in the olen. $\mathbf{4 5 c}$. TIBITOMI (I') - (Red IIot Poker) - Bright, showy flowers produced in large spikes of lotilliant rich colors. Although hardy, re "uires xome protection through the Winter. Will hloom first season from seeds sown inchons very eariy and planted out as soon as Heikht 2 to 3 feet
(varia-vazaling orange red. Pkt 15c VILERISNA (P)WGarden Heliotrope)-Sweet produced in bume heads. Fine border plants. - to 3 fert hiyh. Sow early in boxes and have enoush to handle should have rich soif 13ed-l/kt 10c, $1 / 4 \mathrm{oz} \mathbf{3 6 c}$
VNC (P) - (Old Maid) - Tender perennial Mixed-1'kt. 10c. y oz. 50 c .
TERBENA-Start seed in the house or under ghasm early in spring and transplant after 3 to + inches of growth. They flower in July and until frost Height 8 to 12 inches
Mannumth Mixed-Selected; extra large, fine. lkt. 10c. 1/4 or. 60c
Fine Mixed-Pkt. 10\%. $1 / 10 \%$. 40 c Nat let Defiance-Pkt. 10 c , 1/4 oz. 60 c Prinkt shades-Pkt. 10c. 1/4 oz. 50 c . Candidissima-White. Pkt 10 c , $1 / \mathrm{o}$ \% 50 c W.ILL Fi, WWEIR (B)-(Clreirantiaus Cheri)Spikes of beautiful. exceedingly fragrant flowers. ("olors yellow, red, orange, ๆrown, Half hardy perennlals. Sow in open, transplant to permanent location late in Summer, Should bloom second season. Height 5 to 1 te feet
Single Hixed-latrge flowering. Pkt. 10c, Finest Tall Domble Mixed-Branching. Pht. 16 c .

## ZINNIAS

NHW DMIISI FLAWEREI RINNIAS-The morduc. mans flowers with stout stems. The flowers in full bloom often measure 4 inches in clepth and 6 inches in diameter. Dasily grown from sees sown in the open Golden State-Rich orange yellow. Yellow in huit, turning orange when in full bloom. Crimson Monarcli--Largest and best red. Dreau-A fine, deep lavender, turning to purple (mallow purple).
Old Rose - Real old lose, for charm and heauty ranks next to Exquisite
Scarlet Flanse-A beautiful bright scarlet with a blending of orange throughout petal, Oriole-Considered the most beautiful of its class. Immense orange and gold bicolor, Changing slightly as it ages.
Meter-A rich glowing deep red, the darkest of all the red shades, fine form. Very large and greater bloomer than other reds, Suttercup-An immense deep creamy yel in every collection. Separate colors above named varieties-Pkt 20c, $1 /$ oz $^{025 c}$
Gold Medal Mixed-All colors. Dahlia flow. pred. Pkt 15c. $1 / 2$ oz $\$ 2.00$

GRANIIFLOIA ROBLST/ ZINNLAS-Douhle giants. A speclal strain, producing most 1y double flowers of immense size. Plants are of extremely robust growth. attalning height of ahout 3 feet
Tpricot, Yellow, Deep Flesli, Golden Yellow, Rose King, Salmon, Slurinp Pink, White Wixed- Pkt 10c oz \$1.85
DWAKF DOLBLE MHXED ZINNLAS-Pkt PICOTEF $\$ 1.86$.
10c. ${ }^{1} 0 \% 25 c$
VICTORV QLILIEIS ZINNIAS - All colors


## FLOWER SEEDS for GREENHOUSE CULTURE

ASPARAGUS SPRENGERI (Emerald Feath-er)-One of the best of the new so-called quets, wreaths or sprays, for weeks after cutting. Seeds should be sown under glass with night temperature of about 65 degrees. Will germinate $\ln 4$ to 6 weeks. Height 2 to 4 feet. (For plants see plant department.) Pkt $10 \mathrm{c}, 1 / \mathrm{oz} .76 \mathrm{c}$. ASPARAGUS PLUMOSUS (Asparagus Fern) -One of the prettiest house plants. The leaves are bright green, gracefully arched, surpassing Maidenhair Ferns in grace, deli cacy of texture and richness of color. Culture same as Sprengeri. Height 6 to 12 feet. (For plants see plant department.) Pkt. 25c, 1/8 oz. 96c.
CALCEOLARIA-Beautiful flowers of unique form and colors, ranging from red, yellow. brown and orange. Fine for pot culture. Should be sown in flats very thinly, covered lightly with sifted soil firmly pressed down.
As soon as large enough to handle, trans. As soon as large enough to handle, transplant to thumb pots, shifting from size to value outdoors, as the hot sun ruins hlooms. Hybrida-Finest mixed. Pkt. $\mathbf{5 0 c}$
CANNA (Indian Shot)-Large, ornamental, tropical looking plants of easy culture. Soak seeds in warm water for several bours, or until they commence to swell, then plant under glass When second leaf appears, transplant into pots and keep under glass until soil outside is warm. Colors red and bulbs see plant department.) (For Canna bulbs see plant department.
Crovis Probly $\mathbf{6 0 c}$ met mown and most popular ornamental foliage plants, Leaves of all shades and colors. Tender perennial. Sow seeds in flats indoors. Transplant seedlings to other flats until settled warm weather, then transplant to open garden. Pot for house culture bcfore frost. Height 1 to 2 feet.
Extra Choice Mixed-Pkt $25 c$
CYCLANEN-Florists' pot plant. Beautiful $W$ inter and Spring floweriug plants for window and greenhouse.
Giantemm Hybridum- White with carmine eye, dark red, salmon pink, rose Pkt 25c Papillio Hybridum, or Butterfly Cyclamen -Pkt. $25 c$.
DRACAENA-Ornamental greenhouse plant Indivisa Lineata-Pkt. 10 c. $1 / 3$ oz. 30 c

GREVILIEA ROBESTA (Silk Oak)-Very beautiful and graceful plant witio fern like foliage-a splendid pot plant. Sow in boxes in late Winter or early Spring. potting the seedlings when 2 to 3 inches tall. Repot frequently to maintain rapid growth. Height IEL 4 feet. Pkt. $15 \mathrm{c}, 1 / 2 \mathrm{oz} .96 \mathrm{c}$ owers in large clusters of , Dhatightfully fragding and free blooming. Splendid for bedclass vers early in spring , Start under pots or open garden. Will bloom in a to 3 months.
Fine Mived-All colors. Pkt. 10c, 1's oz. Fime Mixed-All colors. Pkt. 10c. 1/s oz. Clhoic.
Choicest Nixed, from new varieties-Pkt
INTANA A
suitable for free flowering shrubbery plant, suitable for outdoor or pot culture. The flowers emit an agreeable odor and are of many shades of purple, orange and white. Half hardy perennial. . Sow seeds thinly in hoxes indoors, covering very lightly Trans plant to garden when 2 to 3 inches high Height 1 to 2 feet.
Hybrida Fine Mixed-Pkt. 10c, 1/4 oz 20c
PRIMCLA (Primrose)-Of the varieties named below some are hardy, early blooming gar den plants, others heautiful W'inter hlooming house plants. Soak seeds in warni water for 24 hours, then sow thinly in shallow boxes of soft sandy soil, covering lightly with sand. Press down firmly and cover with glass until through the surface. When large enough to handle transfer into hoxes of fine soil. Remove to permanent location when ahout 2 inches lingh.
Polyanthus-Early blooming, dwarf grow ing plants. Valuable for outdoor bedding Mixed colors. Pkt. 25c, $1 / 16$ oz. $\mathbf{7 6 c}$. Vulgaris - Yellow, common English Prim Plot 25c 1/32 oz 75 c
PRINLIA (Obconica Grandiflora)-Beautiful single flowers. This is really an ever bloom ing plant, producing elegant clusters of flowers continuously througliout the
Fine mixed. Pkt. $25 \mathrm{c}, 1 / 64$ oz $\mathbf{\$ 2 . 2 5}$. SMILAX (Medeola Isparagoides)-Charming tender, perennial climber for greenhouse or window gardens. The follage and stems are of pleasing light green. excellent for decoration. If grown from seeds, should be treated same as Asparagus Sprengeri. (For plants see plant department.) Pkt 10c.

## MISCELLANEOUS FLORISTS' SUPPLIES

We carry a complete stock of florists' sup phies, including wire designs, cords, ribbons earthen and paper flower pots, twine, clips, wax and crepe paper, and a big line of bas.

## Round Plant Stakes

PAINTED GREEN


## Bamboo Plant Stakes

Size, in. ........ 1/4 $\times 24 \quad 1 / 4 \times 30 \quad 3 / 4 \times 36 \quad 3 / 8 \times 48$ $\begin{array}{lllll}\text { Per } 100 \quad . . . . . . . \quad \$ 1.00 & \$ 1.15 & \$ 1.25 & \$ 2.00\end{array}$

## Wooden Pot Labels

PAINTED WHITE

ets. Florists and nurserymen are invited to complete stock of general items used in the garden, as described below.

## Tree Labels

Palnted, wired with copper wire. Per 100 40c, postage extra

## Weatherproof Pencils

For marking pot and tree labels. Each 15c. Raffia
Natural color; for basket weaving and other purposes. Per lb. $\mathbf{3 0 c}$, postage extra.

## Vitaplastic

Glazing Compound-The best, most depend able glazing material. Never hardens or cracks. Gal. \$2.00, 5 gal. \$9.25, 20 gal $\$ 36.00$, f. o. b. Portland.
Glazing Points (Peerless)-1000 in box, welght 2 lbs . Price 75 c , postage extra.

## BEAUTIFUL ORNAMENTAL FERNS







6 line Table Ferns for $\$ 1.25$














 mali) -

ASPARAGUS FERNS






 finco hutlse flant thant tha
20 c varlt parapaid: lareer phants, 35 c and 50 c (bly bexpros







## FAVORITE FLOWERING PLANTS

teautirul annail plants for IBaskets, Porch Boxes, Bedding and House Plante add postage on parcel post shipments


 am! hamknt: 200








 ther vint fas Whmlow ant bot
lamsmor laskets. Eath $\mathbf{1 5 c}$.
 (zuildat shapmel. sumbulant leates with largu.






 20 f f(1) $\mathbf{3 5 c}$

Popular Annual Bedding Plants


Anmual bexding plants are so incexpensive and satisfartory that they shomal lof plabted exten sively for cut flowers in the homate as woll as for garilen efferts. They also make splemelith displats in tubs and porth boxess. We hats fat wills it.
 frew theng ghout the stament frimes atre jer dowers. forb. Lemet lami

| 13smam |  | $\begin{aligned} & 10 \% \\ & \mathbf{5 0 c} \end{aligned}$ | Mariguhl |
| :---: | :---: | :---: | :---: |
| Isters |  | 50 c | Pretelinit |
| ('un mations |  | \$1.00 | lhlas |
| Clindia |  | 50 c | silpiglemsi |
| Cinsmos. |  | 50 c | Silvial |
| Getaniums | \$1 | (1) 53 | N:orks |
| latkspur |  | 50 c | lerbenat |
| Isolselia |  | 50 c | Tinniala |

50 c
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## Perennial Border and Bedding Plants－Continued

All Prices 20c Each，$\$ 2.00$ Doz．，Except as Noted F．O．H．PORTLAND，OREGON，HF M．HLED POSTAGE ENTEA

（Dozen Price Applies to a Iozen of One lariety Only，Not Mixed Lots）

D1MNTILS（1’inls）NLIJOODI－ Wonderfal impuovement of the old thbe of llatis．Finks，Are equally hatily and ：1se peribetual flowering， Summer mintil late Fall．Flowers ＋1 sitoms and ane frasrant．FR1CE 30c toz．\＄3．00 Flivs－batach
IIalold－l．alse fouble pure vihite Juan－Whatr．violet evinnson center

 $25 \mathrm{c} .10 \% . \$ 2.50$



Afifite louse white
Latitulions Vlrocorcimede
fal Sumanor ser Willamy－beatio hlormb massses of latiliant colored．

JHGIT．IIIA（F゙ovょJoves）－Valuable Gloxinealfowrorn plants for the
senclen of shrublmos 3 to 5 feet higlo．amd bosen fiom Maty to ，luly． Shiolo＇s fiants－Fixtriat large flow ＂olors tunt th lmant binks．Fiach
$\mathbf{2 5 c}$ ．low $\$ 2.50$

1：1Hh 25c． $110 \%$ \＄2．50
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 Dlixture of colors only：The King－．The hest fitillamatia in tonner 10 dinte．lelowers mestsume ter：，olt stont stomse is to ot inchat lonk livit raimsan conter vellow （from plant：izalumterl from llol l：111，letch 40 c
Portola－stome，vigomons，upright

 Flower （3）$t$ inches an diampter．Netak
 flat，formms at was symmetrical
flower．hrillant wopers searlet， Mow Bac 30 c dox $\$ 3.00$
ォ．11．1IS．I－II．SRT1．INIII－strong hieh．With path pinksish lavember
 25 c ． $11 \mathrm{\%}$ ．$\$ 2.50$
 the finest harely blants，with $1 x-i n$ ．
length luanches of whate and pink orehirl－like flowers．A comtinuous iESV－lnvaluable group for the roskery or lomaler．neat habit，flow fring for a lang period during the Slnong and Nummer．
Mrs．Bradblaw－The old favorite Warh 25c，flo\％$\$ \mathbf{\$ 2 5 0}$
lads stratheden－l $\mathbf{2}$ ich golden yel 25c．lo\％\＄2．50
GIPNOPIIIIAIPNNCEIATI（Pe rennial IBatry＇s Ibreatlo－Myrjads items．formmog a filiry mass which fow rotting is unsurpassext．Will thrive in athy kind of soil in a Elany positiont． $2 \cdot 3 \mathrm{ft}$ ．May－July of the preverling．Charming double osutte．like flowers Limiter stock rwo－seareotd plants，guitranteed to ，fomble flowering．Each 50c Holacieka－TRose ：eoloreal raby Breath．Tiall．gracoful srower with Burge bink flownos．Fine border hant tund makes a wonduwfulder flown forlehk 30c，for $\$ 3.00$ eut







effertive perennials for planting thens shrubbery or in cumps in Kigidas maponica－Golden yellow with dark renter． 5 to 6 feet July to sentember
Sparsifulius－The best of the Sum mereblounang varieties，of to 6 ft HELIGI＇SIS－IPTCIIEICIIN：－Simi lar in habit to Helianthus，but golden yellow flowers， 2 to 3 in in diameter，on stems 24 to 30 in ． long．Two＇rols wich season
Srabrat（fratisvinal（NOW）－Large orknge semi－thouble flowers． 3 to inches in diameter．Mmre olwar ing．Eactl 40c．lor．$\$ 4.00$
HED，LIEIBORIS（C＇Inistman IRase）
 enmals，armmerd for the ir very leaves．brert frowng． 12 to 1 inclus：high．With larse malmately thivired leaves．Latge pink flowers
 the burls and flowers．A nooist wed thamod．baltially shathen sith ation is mereralno．and should not

 MOH＇TERKII－A IWaff liay Lily 12 to 18 inches high．Wrange col Ones of the first to boom ka． $\mathbf{3 0 c}$ Flatal（lemon laly－swrot sient
exl．rlozt yellow．2f to 3u inches

 Hatema Miejor－Flowers sohlen gellors．＂inches arross，on stout branching strons．of feet high One of thr lest and martienst．July Earlh 30c．1oz．\＄3．00
 TRON． 11,1 －siwret scented purple

IIIINCIS MOSCHEOTES HI IßRIIDS（Giant Flowered Mallows）－ Thx mammoth Hollyhock－shaper flowers tange in color from white to intense crimson，but there is a that make them harmonize with almost any color scheme． 6 to 8 mehces in diameter high．August and Septela
yourold plants，each $\mathbf{3 0 c}$
JOILIHOCISS－A native of China bethr one of the rery oldest of cultivated flowers．Prefers a po－
sition where it rectives the full sum．Doubly and single flowering
 （ilosine：a）－lange，rich rose．Glox 114
 （alry－oth of tha mom attrantive



## See colored pictures pages 48－49

IOEELII CNIEINXILIS（Cavanil lemit）－Scartat with orange lip flow dons the tall spike along the tall spike，thus hearing flowers for several weeks，Prefer a moist deev loam in a partially harter．or if given more waster，a and Aug．Each 25c，do\％\＄2．50． Quetil Iideria－This variety has crimson foliage，which with the hor scarle 40 c ， tivar Eizlh 40 c
1．NIIRI．I BIENNIS（IIOBESty or Money IPlant）－A hardy hiennial flow tr＇s in sprine or as drich ever dasting flowers，their silvery moon shaped seed hods prestating a

䢂
Fuch 25 c ．toz．$\$ 2.50$

3 te $f$ feet．Bach $\mathbf{3 0 c}$
I avender duecn－1 avencler．tinted
with rose． $\%$ \＄3．00 30c．vlo\％\＄3．00
Flliott s．Swat Sirntad－Nemb strain ors，invatlins pinks，fawn，purple
 IIathores＇IIylnids－Wonderful mixture rontimins many bwati

LIPINS－IIARINPSN REGM LIPDS（Hybridh－This mew me

 por sean of＂bor hlredm of．Thes
$\qquad$


$\mathbf{5 0 c}$ ．low $\$ 5.00$

LUIINUS－NEJMIUS SWEET I．AVENINEIG（New ISBrid）－F＇ine
Fath 50c. lo\% \$5.00
 saleth（roms）－ 11 eites of lrilliant
 high．Will thrive in any soil．
liadaria splendens－N゙ゃt tufts of datk ereen foliage with reatish high．Exerellont for hot summy bo．

$\qquad$ f mose cokerat flowers from，fuly
 SET－The hest of the various forms on thic aromatio Dlant．Stout liant scallat flamars． 2 fout，Jume
 filinf plant．G
 ：1and sumall splkt：of gresulish white





1'APIIER.NIJINTM-A diminu ive species: neat tufts of foliage white, pink. yellow and buff. Witach 52.50

Nudiraule-Improved siumbeam lice. land loplis-Includes many new tints, such as maize, creams and are trains larzer than the old then. on lons. thick stems. is Orientalis- actus Fuenigin-large deep salmon pink flowers
Hrs. Isalier-s rich wine
Princess Virtorba Lonise-A dell are sharle of salmon pink. Matim, Maroon shaded crimson. The darkest Papaver yet introand color Gach 30c, doz. $\$ 3.00$. Perry's W'hite-Fine satiny white with crimson bloteh at base of each petal. Guaranteed true to name. Each 30c. doz. \$3.00 Rembrandt - Magnificent orange arlet; the most gorgeous of al the Papaver. Each 30c, doz. \$3. Hrs. Fislsev (New) - Large dark crimson flowers bornt on stout
stems. 2 to 3 feet high. Each $30 c$, 10\%. \$3.00
PII,OX JHCLSSITA - Perennial Phlox succeed in almost any kind of soil enriched with manure in Spring and allowed an occasional soaking of water during the hot weather. If the spikt's of bloom are removed as soon as over, they will proluce a second supply con. IRICHOF FOLI, OWING IPHLON (ath 20c. 10\% \$2.00
1 bisclem-Pure white
Edilitroll-Rosy makenta
Limropa-White, crimson es
Latendor (Quren- Will not
Lavender Quedn - Will not sum. burn IR. J. Sinuturebert white.

Nelinit-b'ale rose minute, clamet eye
 Isirom Von Diden-Searlet, suf fused orant
IBencon-lirillia
Flizabrth (amplesll-Siamon bom With lighter shadinas One of the Goliatls-brimht Irol. Srdiliensinu - birisht $11 /$ as f10we-
Brol'. dirifow - Jivizht carmine Rlseinlialdur salomen bink red eyt.
ASyntrocme-Lively dose: pink. Thor-berp salmon pink, suffused
with scarlet glow. bisht halo sur". with scarlet giow. lit
rounds analine led eyt
Hish Jingard (Suffiutacosta) Far



1B:aren lion Heediey





## Perennial Border and Bedding Plants-Cont.

## 20c Each, $\$ 2.00$ Doz., Except as Noted

F. O. B. PORTLAND, OREGON, IF゙ MAMED) POSTAGE ENTRA (Bozen Price Applies to a Docen of One Varicy Only, Not Mixed Lots) PHI.ON-PEUERJBRANITT -
-olon that has hesen unknown it lohlox. A lujpht irtmilion satirle

PENTSTF, ION-IS.1RIS.1TES TOHR-JREII-Spikes of brixht searlet flowers on stoms ? to 3 feet high
 els in varieties of color, including Jose, cherry, ribnson and purple anly 25 c colol anly. ratch 25e. low. \$2.50
 bushes, 12 to 1 inches high. Flow-
ers ahout 1 insh lonk: pink or rose ers about 1 inch lonk: bink or rose
purple: shender at ladse, but full or purple: xhenter at lasase, but rull or inflated aloove lips well marked,
May to July, reeond cutting in September. Each 30c, doz. \$3.00 IIVSIIIN.FIRINCIIETTI (Chinese lanferin lant)-An ormamental va rjety of the Winter Cherry. Forms dense bushess about 2 feet high producing fyeely its bright orange scarlet liantern-like fruits whicon when cut, will last all Winter PIINONTEGII - A beautiful mid summer flowering plont, not un llke a rimantic Heather. Will thrive in stmy soil and under any conditions:
Allio-llhite flowering
 Aiscob's Ladiler') - Useful border plants, succerding best in partial shisle. leel green. finely cut rol iuge. spilhes of showy blue flowers

 harser, ind invaluable as a cut
flowiry lasting longer in water
 mofusion of flowers throughout the entre Sumbore. from Nay to
duly. While we som only from the


son. Eitll 30c. de\%. \$3.00.

 low flowros with blatk putple corse fioldan filow-C)me of the most pop. alar hamiy blants, Frowing. 6 to 7 latre double ywlow flowers, shaped like it citcqus lowhlitat. Gellow flowers with purnlish hlack
 l'ecular redilish burple flowers, with a bery large brown cone
to \& $f_{\mathrm{t}}+\mathrm{t}$. Vatch 25 c , doz. $\mathbf{\$ 2 . 5 0}$ Filpidi:i Variathilis-somewhat like 1 litadi-leyent susan. Tallos and
stiffor stolns. Floweys remain in \&omi comblition for from + to S(1) 4 in, F゙, 30c. loz $\$ 3.00$
 an

SIINI.I-IZLRII (iR.INJIFLOR.I IRurlas Mt. Nasr) Srows 3 to f fret high, woduring masses of sky blue flowers from August to OC position.
Grrgyii-A natise of Texas and Mexico. A shamely bushy plant ber leears niasses of rich stoptern farmine flowers. Stork limited. Fizeh 50c.
Nutans-Hardy imrennial. 2 to 3 feet high, violet flowitas borne in Whorls at tob of flower stemn. 6 to O)fficinalis (Giant sage)-The well Officinalis (Ci
known Herl.
Pafens-A horatiful plant for the lorcler Flowers of the darkest Hue known. Should not be plant ed in position which is Plooded dur. Ing wht season. Each $25 c$
Sclarea (Clary)-Large woolly leaves, often $X$ to 10 inches long and 4 to 6 inclises broad. The bluish white flowers come in whorls on spikes 24 to 30 in Euch 30 c tive plant for the horder, growing from 2 to 3 reet high and produc infr its datk purplish blut flower May to September. Fach 30c
sCABIOSA-CACCANIC: - A sof
charming shade of livender, commencing to bloom in June, throw until frost euts them down. 30c. Iha - White flowering forn of the precerlinz. Wach 30c.
 mense fluffy white flowers with *ieger-A European introluction and the larkest flowering baisy foom 4 to 6 inches across. Eiach 25 c . 10\% \$2.50
SII.N.CRA-ROSE QI FEN - Erect growing. mobe or less branching
plants. pworbing the if rose pink flowers during July und August soil. Vach $\mathbf{3 0 c}$, doz. $\$ 3.00$.
 Fine old fashmomed cottatge gration STITJCE J. ITIFOI,II (sora daven ller"- A valumhe plant for the hor tel or rockers. tufts of leathery lik" leads of purplish blue flowers Theste, if rut intrl slried, will last STOLFAIA-CXINEA-A native blant, beaving freely from "arly June tu late Fall: hanalsome bright 12 to is inch stetias. finacinn - a recent introduction
from Europe. Flowers 3 to 4 in. across, on stems 15 to 18 in . long. $t$ to 8 flowers on one stem. At
peasing lavenrler. June to sepHeasing
tomber. Fach 30 c . June to Sep SW'ENT WIIJIIIM (INianthos Jaar. batus)-IOHNSON:s fillNT-The finest of the sweet Willam mix.
turse riant flowers in narvelous OHnlitit-Larse flowers in vari. Vewpori l'inli-Waternelon pink. Pumcemsliak 25 c .
 tud ross parpla or white flowers






 (13, y yellow lateros livantel flower. (idpliten I, than Thimme-ferives

 pale wallos to saratlet. Sinplly in
 that hoons from ertly Nlay until Lo (अ1naly sellow. Each 25c.
P'ilmplii - liver-blowning INlame Flower. The free and erver-hlonm-
bhg qualities of this variety have midde it ome of the greatest bed. mondr it ome of the greatest bed.
ding beremmials. From Junw to Oe. ding beremnials. From Juns to Oe
tobrew, spikes 3 to $f$ foet high, heads tober, spikes 3 to + foet high, heads
of a lich orango scaslet, produeing a grand effert planted singly or in Mstswes liatch 30c

 hom : and July, with a doliomous
 lllat'llat white form of preceding. VERISASCI M-GIGiNTISUM-Foli.
 tuful subyouts for the harly garden.
 himblsonocst bolfe flowering plants.
 on 3 fown higlı. completoly studeled with luautiful blue flowers from Spiratia-lbense tufts, from which itrose ereat spikes of chear hlues
flowers. Is innhes Spicata Nhat- White flowering form of wereding.
IOHANTS-No flowe
avorite The volets. we offer are hatrdy, and while they will do well in uhnost any position. they will do Giov, 1levinti-lkinh dern purple loiniresm nf Wiales-lkich violet.
W.LIIJISMIERS-The old forvorite following selnade colors: Farly Giant-1:
Hiarly plowetong.
Hshood Ridf-l.
C'vanford ISeanty- (solthe yellow Crimson line-1 urplish crimson Firblel! liing- (iolden ye
Golden-Vmancelt orange
Purple Queen-a plation hathit Prible Queen-at bedsing contrast
 VCCCNFMAMENTK\& (I dam's Nerdpl-Among har of mants.
there is nothing mere refective and striking for isolisted positions on the lawn or on dry hantis where few other plants thate it is also
indispensable for the rockery. Its road sworlhke to ererren fohage and immense loranching spikes of drooping. creamy white flowers, rising to a height of is feet, rerider it a bold and handsome subject wherever placed. 3.yearold piants, each 35 c



DAPHNE
INCARVILLEA GRANDIFLORA BREVITES
SAXIFRAGA

## PERENNIAL ROCK or ALPINE PLANTS, Continued

CAMPANLLA GARGINTICA-The jewel of the rock garden. The
plants form rosettes of smali leaves plants form rosettes of small leaves
covered from June to Sept, with light blue star-shaped flowers, which have a medium sized white
eye. Trailing, 3 to $t$ in. high. Each 35c
Laurii-A new species from the Greek islands. Flowers are of a
beautiful shate of lavender. very large, alout 1 in. across, very at tractiveand turning upward. When in bloons, the plants represent a visible. Each 50c, doz. \$5.00. Nuralis Portenschlagiana-Den tufts of dark green foliage. smoth ered for months with large lizht septenber. Each $\mathbf{3 0 c}$.
 Pusina - fels cense spreating
clump of fine foliage with many flowers, carried on slender stems $f$ to 6 in . high. Flowert blue, not
ding. Jume to getoler: liacla $\mathbf{3 0 c}$. ding. June
doz. $\$ 3.00$
I'usilla Alla - A white flowering form of the preceding. Ea, $\mathbf{3 0 c}$.
Rotundirolia (Ilue Hells of Scot-land)-Siender hranching to 15 in . rovered with dirnty pralt hine flowers from Mray to sept.
Turbinata-lResembles C Carpati. larger. Each $\mathbf{2 5 c}$ c doz. $\mathbf{\$ 2 . 5 0}$ ERASTILM (Tomentusumi) - Ne tufts of silvery foliage, slendes IIEIRANTIES ILIIONII (Linto folius)-Eeautiful new species with litar mauve flowers, vers free eries and horders. Each $\mathbf{3 0 c}$ CRLCISNELJ.I (Stylosa) - Tangle hassess of elegant folidge, crowded heads of bright ros
in. Mas to August.
D.APINE (Cneor umb)-W ith long trail ing hranches, leaves, small, dark
green, glabous above, evergreen Flowers in many flowerecl hearls Pink and fragrant. ${ }^{6}{ }^{\mathrm{t}}{ }^{\mathrm{t}}$.
Mas to July. Each 50 EIDIINHLM (Chimensis) pretty species with fine reathery folage and intense gentian blue Chinensis Allumm - A pure white form of the preceiling.
Nudicaule-Grows 18 to 20 in . high free flowering, hearing a profusion of brilliant scarlet flowers. May 25c, doz. \$2.50
25c, तoz. \$2.5
ANTHA-This genus contains some of the most chroming of our Apine plants, most easily culti
ed in gritty well drained soil. dinimus-liery dwarf, flower ste dpinus-lery dwarf. flower stem.
rarely reaching more than $3 / 4 \mathrm{in}$. high. Dark shining foliage. Flow ers deep rose. or purplish and
crimson spotted, 1 in . across, with a darker ring around the eye. May to June. Earh 35c. Caucasicus-Compact tufts, cos
ered with deep rose colored flow ers. 6 in. May to July. Each 25c, doz. \$2.50
Caesills (Cheddar Pink)-Pretty banks rocks and old walls. Bright

All Prices 20c Each, \$2.00 Doz., Except as Noted
F. O. B. PORTLAND, OREGON, IF MAILED POSTAGE EXTRA
(Dozen Price Applies to a Dozen of One Variety Only, Not Mixed Lots)
pink flowers on stems 6 to 8 in.
high. June to August. Earh $\mathbf{2 5 c}$ (loz. $\$ 2.50$
Deltoides (Maiden I'inkth-A beauti ful little plant with narrow leaves ers, deep rose color from May to
duly. to 6 in . Earh $\mathbf{2 5 c}$ do\%.

## $\$ 2.60$

halut habl. " to 8 in. high. Flowery purple or vivid rose will he among them. July to September. Fach 25 c . $1111 \%$
H.INTIIL's (Neslertis)-per halls the Most beautiful of all Alpine Pinks Neat tufts, flowers salmon rose, to + in. June to August. Each 35 c do\% \$3.50
I'lmuris (Pheasant Eye Pink) Large flat masses of blue green
foliage. bearing many fine long. stemmed flowers through a long flowering season. Colors diverse. May to July.
Semperflorens Perfection-A splen did strain which protuces an infinite variety of shades of red, such as crimson carmine bink, rose, an eye of deeper hue. Can supply 12 in doz. $\$ \mathbf{3 . 0 0}$.
Sternbergii-Very neat plant, bear ing white fringed flowers. Most May July for rock Superbus Crasy folinge \$3.50 ties of palest lilac or sometimes white flowers, which are much cut and very fragrant to Sept, Each 25c. doz. \$2.60 Sylvestris-Tufted plant, about 1 it. Beautiful salmon pink flowers. Each 30c. तoz. \$3.00
I)RA1BA (Cuspidata) - An Alyssumlike plant. Tufted, about 4 in . high with light yellow flowers during February and March. Prefer the qull sun. Each 30c. (loz. \$3.00.
ECHEVERIA GLALCA (Hen and Chickens)-The glatcous leaves are in small but dense rosettes. Flow high. Rendish
ERIGEIRON (Aurantiacum)-Close tufts of dark green foliage with bright golden orange flowers. Yery Gach 25 c . do K in. May to June Humpatus - $\$ 2.50$
Mrrwonatus - turts of dark green foliage, small pink and white May Oct. Each 30c doz. $\$ 3.00$ Nultiradiatus - Very dwarf, pin Dajsy.like flower. $\& \mathrm{in}$. Each 30c
RINL'S (Alpinus)-Diminutise ever green rock plants. from close tufts of dark green foliage ema nate numbers of short spikes, well set with purplish flowers. 3 to 7 $\$ 2.50$
. Alpinns Albus-A white flowering

ERIOPIDHLAM C.AESBITOSEM (Oremon Sumshime) - Tufted herba foliage. Prefers a rather poor soil. ERIN(illin (Bowsati) - Vers dis tinct species, spiny stems and bracts, which are often of a hright steel blue color. Flower lwads blue
to Aus. Nach 35c. $10 \%$ \$3.50
RISCEM RUPESTRE NIRAN TIDCLM (Eairy Walllower) Dense tufts of bright green foliage
and lemon yellow or hight orange colored flowers. April to Junc.
to $\$ \mathrm{in}$. Each $\mathbf{2 5 c}$. doz. $\$ \mathbf{2 . 5 0}$.
RUONIMLS (Radiants)-This trail mg Euonymus. with beatiful matl green and white bariegated extreme havelintreen foliase ant of the English loy for wall cover ing. Witkes a splemdid mround con the rockery sach 75 c . El'PIIOIRI3NA (Csparissias) - Many the crown and adventitious root huds, covered with spredding dark green leaves. hright yellow flow

EIICII. - IETIOI.IT.I ROSE.I with bink Daisy-like flow ber Planted on a wall it will hang lown from ? to 4 ft and it flower: lmost continuotsis. A verystrons grower Each 25 c do\% $\$ 2.50$
FRAGMIKII 1 N 1$) 1(C A$ (rreping runner's as much ats 5 ft . long. Has a small red fruit. Excellent for ranking haskets, walls, rocks ant banks. Gentiant-One of the most fasci nating native plants. The flowers, which are tightly closed. are borne at the top of stemss 8 to 12 in . high August. Each 25c, doz. \$2.50 GERARI)I: (IIybridia)-lesembles a pentstemon Gloxinoides in growth and flowers, stens being more slender and flowers smaller. Colors range from linkish lavender to light purple. 2 ft . May to Aug. Each 25c, $10 \%$ \$2.50.
CECM-An invaluable sroup for the ockery, neat habit, flowering for and Summer, easy cultivatiour IBurisii-The finest of this showy family. Neat tufts of eversreen coliage producing an abuntance with large well formed flowers of a vivid tangerine or orange sear.
let. S-10 in. May Oct. Da. 50 c Bngmaticum- lavge orange yellow fowers. leldreiclait
erx and lighter green folia
Mity to sept. Each 40 c .
Montanum - Dwarf Alpine with large rold
Each 40 c
GIPNoPIIIIII (CPrastoides) - A anter of larm freeper with smal in, across, of a silvery white or
lilat color with pink veins. June
mal July. Fach $\mathbf{2 5 c}$, loz. $\mathbf{\$ 2 . 5 0}$ Repens-A frailing plant with

 blants for the rorkery whare they

## and the only one wath pure oramge

## 25 c 小11 52.50



Eich 25c. do
HFIINNTHEXIM Num Rome o JRorls [Rosel Jutabile--Low krow ing then flowrrink season. May t milliant colored flowers 10.12 in Boule de $\mathbf{F t a}$-bouble red flowel IIEL.NINE (suleirolii)-Is one of the hish luut weedels to ove solid flelicate carpet. Fine for rock Each 30c
IIEP'ITIC.I-A Charming groun of arly Spring flowerimg plants, it markable for the way in whicl lope where they receive partia hade. although will do fairly wel

Iratiloba - Fixuly Suring flowea
Tuileba, Nlla-White Hatlly 25 c oz. $\$ 2.50$
Tilioba Combit-1ilut: Vil. 30c doz. $\$ 3.00$

Which turns a deep luonzs redt in
Wintel. Sntall suenish flowes luring summer. Thrives in the hardiest trablels. Weath 30c
HECDIERS S.IN(ilINEA (forat Bells) - lavaliful henit shatped lumes whe to somer lowers on stems 12 to 18 in. Iun IITCHINSII ALERS IV IIJI bense rounded cushions of fich lainty white flowers. Wrill bloom under favorable conditions for months, May to July. 3 in .40 c

## PERENNIAL ROCK or ALPINE PLANTS, Continued

All Prices 20c Each, $\$ 2.00$ Doz., Except as Noted
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LINDNI (Perenne)-Perennial. wie. gant foliage, graceful arehing
stems, bearing many large circular flowers of an intense sky blue. ft. May to August
LINCM IDIPNDM-Oni of the dain
tiest of the spectes. Trailing, not over $t$ in. high, with clear sky blu flowers. Each 30c
Mirsutun-Distinct and rare. Col or hard to describe reddish purple coming very cose. Branching July and August. Fach 35 c .
LIPPI:I IREPENS - Fxcellent for rock or steej) banks or to hang making dense ground cover which may lie mowed or left as time may le mowed or leit, as time cate pose colored fowe of hel cate rose hise will hive mom soil, and after first year does not require water during Summer require water during summer come a muisance
MCIIXIS (Alpina)-Close tufts of olive green foliage. Long spike of deep rose colored flowers. On of the hest for the rockery. $\$ 6 \mathrm{in}$
June Sept. Fa. $\mathbf{2 5 c}$. loz. $\$ 2.50$ Arlowightii - Magnificent novelt in lovely shades of color. Extra ordinary hybrid of L. Chalcedonica and Haageana. 15 in . June Flow Cuculi (itasged liohin-The red or bink flowers are in loose paniculate cruster Ilaaseana (Ilybrids) -- lery effer tive when planted in clumps. Neat hushes with large flowers of a hril hant crimson bach 25 c
LININACIII ( Anmmularia)-Very es: also for carpeting sharlv places small yellow flowers. ian Cowslip)--Tluish gres foliage Long archmg racemes of rich sky blue flowers. bemand a moist 30 c . doz. $\$ 3.00$
M10.00TIS (Forget-me-nets)- Hardy mennials amd peremnials, which newed of cen. Farly spring to mial Appestris zladigo 1:luce- Intense IBisitifloral Giandiflora berfection






OLSNTHOGABIM I MBELJATU. (Star of Betlileliem)-F'lower heads of 12 to 20 white flowers on stems

## sulbs, each 10c. loz \$1.00

IICIVNANIOR. TERDINAIIN (Id
panese Spmrge)-A trailing plant mats of glossy green foliage and small spikes of white flowers dur ing May and Iune Winl grow in ll shady situations and trees. Eiach 25c. doz. \$2.50.
PIPAVER (.Alpinus)-A diminutive species for the rock garden. Neat tufts of foliage and dainty flowers in shades of white. rose yellow. of color only 6 in One vear old plants 25 c each. two year old plants 26 c edch. $\mathbf{p 5}$ edch. Nudicaule (Iceland Poppy) (Im. proved Sunbeam-This strain in cludes many new tints, such as maize, creams and various tones of rose. The flowers, which are much larger than the old strain,
are borne on long thick stems. 18 are borne on long thick stems. Nudicaule (Excelsior Re-selected)In this new and re-selected strain, the proportlon of new and beauti. tul colors. incluting many art shades, with delicate rose blush and apricot tints, is much greater than the strain hitherto offered. Free flowering. Can supply in mix ture of colors only, Each 30c doz. $\$ 3.00$
PENTSTENION(Glaber)-Of prostrate habit. Flowers, which are a bright hlue, seldom pink, on stems about $25 \mathrm{c}, \mathrm{doz} . \$ 2.50$
Glaber Gordoni-Native of Oregon 3 to 4 ft . tall. latge bright blue Hetersplnyllis - Flowers about in. long. pink or rose purple, slen per at the hase but full or inflated o July. 15 to 18 in. Each $\mathbf{3 0 c}$ doz. \$3.00
Itrnaiesii (Davirlsonit-An Alpine (warf having its touglı and almost herbareous stems underground ex cell: the very short and erect flow ering branches, which are 2 to "3
in high, the flowers ustally ex ueding in size all the remainder of the plants above ground. Flow os 1 in long. lilar purple. June
o dugust Each 50 c . Arwherv-shrublery plant, is to s flowers. Junerselt. Each $\mathbf{5 0 c}$.
PIlfol (Amoena)-This is one of the for hameting the ground. Grows
but $t \mathrm{in}$. high and in the sping Enn $\mathbf{2 5 c}$. (lo\%. $\mathbf{\$ 2 . 5 0}$ camadensis llivaricata-One of the preltiest hardy mants in rultiva
tion Neat tufterl habit, slender tems terminating with corymbose hlut flowers yay-June hut flowers iblat in May June



HITHL MI (N'dem'luzeri)--Belongs ook-loving amula fammy full sun, without damp, little soil and that only of leaf mold and sand. Stems slender and flexible 6 to $x$ in high. Bracts about is in. long. Deep violet hlue flower in rounded heads. Mar and June. Each 30c. roz. \$3.00
PLATVCODON (Grandifiora) (Japa nese Ballonn Flower)-Large deep hlue or whit flowers. daponicuin Floue Plena-Is itronger and hushier iena-Is of stronger and hushier growth and freer flowering. The flowers av erage $21 / 2 \mathrm{in}$. arross; the inner and outer lobes alternate with one an-
other, giving the flower the appearance of a ten-pointed star Habits same as preceding. Two veat old (guaranteed as to form)
40 c , seedlings (about $90 \%$ true to 40 c, stedl
$\mathrm{form}) 26 \mathrm{c}$
PLCMIBGO (Larpentae) - Dwarf spreading hahit, 6 to 8 in . high covered with deep cobalt blue flow ers late Summer and Fal
POTENTILLA (I)onble Flowering Hy brids)-Neat low growing tufts of strawberry-like foliage. With bris. to is coln June to ausust PRIMILA-Gne of the most inter esting and pledsing hardy plants beautiful Succeed best in partial beautiful Bulleyana-Strik
Cies heariner severs Chinese spe oronge ring several whors of rich daing spot. 18 to 24 in. Ea. 50 c . Caslimeriana-Iarge globular heads of purplish blue flowers. Prefers a moist, shaded situation.
March to May. Each $\mathbf{5 0 c}$
Veris (Triumph)-The finest strain of $\mathbf{P}$. Veris in cultivation. Many new colors, flowers extra large. long stens. Can supply in mixture only: Each SOc, doz. \$3.00
PRI'NELILI (Incisa Rubra) - Close tufts of dark green foliage, vitout well furnished spikes of hrilllant Summer. Each 25c
SAGINA (Subulata) - Mossy green cushions. studded with tins white flowers during Nay and June. Fx. cellent for stepping stones
PONARII OCEIVOIDES-. Bril nsping. in. ored form of preceting. Trailing and lavger flowers. Each 25c loz. $\$ 2.50$

SANIFRAGA - It is impossihle to och gine this extensive genus of ulls srown in rey. can be success nd sand in any sumn postion of the following val ieties: imbrosa (London Pride) requires shade and considerably mole molsture than ans of other Saxifragis. The Mos. Saxifraga, such as becipiens chopio von Ronsdorf the differ ent dizoon valuties and the Cordi olat require partial sharle.
li/own-A very variable' Alpine plant. nuch tufted and forming is on items 6 to 111 in. high. Mlay and June. Lach 30c. tloz. \$3.00 dirom Flavescanw-i free growing
and decotative Saxifrasa with cleal femon sellow flowers produced in June Eath $\mathbf{3 0 c}$, doz. \$3.00. lizuon lkusea-A blight pink flow 30c. loz. \$3.00
Isithoniensis-A rapial grower, in to I'2 in. haph, with stout branch lowers. Avol and Mas Wach 30c. loz. $\$ 3.00$
urniner to lioht fien old Manch. Eitch 50c cloz. \$5.00 pripbedr (ciandiflora)- Ch:Hmins harles from white to rese and

# PERENNIAL ROCK or ALPINE PLANTS，Continued 

All Prices 20c Each，$\$ 2.00$ Doz．，Except as Noted F．o．b．PORTLAND，oregon，IF MALED POSTAGE EXTRA
Dozen Price Applies to a Dozen of One Variety Onily，Not Mized Lots）

$40 c$ ．lo\％$\$ 4.00$
 above．Flowers white．numerous
heavily speckled with pink to pul ple dots，dots belng latge．．h1116 Aegasea cordilotia－breen foliage which alont rencer then usefut．While the pretty rose
pink flowers．Which appeat early in Suring．make them doubly
fertive io to 15 in．Markh a
 ft．high when in flower＇The the flowers very nomerous in a
latre panich．white specklect with


 nal racemes．Nay to sept．
frientalis－A low growing sperbes
nevor more than a foot high，wath

## 110\％．\＄2．50






| hatwes of varving colots． <br>  leenk－Catlers so on atcoount of mearly all of the tips of leaves be ing connewterl with long soft white <br>  ert on stems + to bith high．Ither to Siow（1mber． <br> Sbownii－Vary distimet with darli |
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THyBlts－The Thymes ate useful rock pants．formimg sherts of at
trative foliage，usuful for＂alphet ing and very wetty for elping． （itriodoms ．Inred－A polden yell． low form of the well known latm．
on sienter Thyore．in in．
 Forms dense mats of tark green
foliago and clouts of tilar flownors．
 red flowering form of the wight ing but has a lomger su：tsoll．Junt
10 dept．Wial $\mathbf{2 5}$ c．はい\％． $\mathbf{\$ 2 . 5 0}$ wopyllum Danusinosa－Foliart best Thyme for tha rockery ont ft ．in lian．Ea 25 c loz．$\$ 2.50$
 ibg stems： $1: \frac{2}{2}$ to 1.5 in ．high．Wither in white or lavender blue A stamy
spot but requires moistum． TROIIIIt（Giohe F＇lowers）－Ar flow ins show of diark sreen
 whers of water gatilens，although
rloing well in a good satiolel sam．

 is to $2 t \mathrm{in}$ ．Will do berst if mat Each 50c dow $\$ 5.00$ （rad tratis－robarn yellow

## 50 c 11\％\＄6．00

ERIBEN．I（V（rmosia）－
ries from s． $1: 1$ a\％il athat Alowentina
25 c． $10 \%$ \＄2．50

INENSIK－Mases of pink
high from July to Oct．Platsteit Fingland but sembis to be unknown in its hatict countrys latyuires


ERONIC．I NMETIISTIX．
slencler spertes with shemt stemse of
 Corsmbosa－A dwatf platht，is in． Fiauh 30c doz．\＄3．00． luman－shlvers atay foliage，vo
let blud flowers．in high．July let blaw flowers \＆in．high．July
：ind August Prostiatil－s itherts of olive green folitite smothered with dainty
sphes of rublut flowers． 4 to 5 In．May and Junt a form－form for the rockery where it gets partial sharte．It flowers for a long period
with flowers like Pansies of the with flowers like Pansies of the grower．Spring to late summact
Each $\mathbf{2 5 c}$ dow． $\mathbf{\$ 2 . 5 0}$ ． Ibonniara－A filse，new European introdurtion．Neat dumps covered
with redrish volet flowers thru． －ies Ench $\mathbf{3 0 c}$ du\％． $\mathbf{\$ 3 . 0 0}$
lathar－Rather large flowers，vio－ stems f to is in．long．A rood Alpine Fawh 30c
Winter flowning viola that can be found．Bloonsed plat ticatly all Winter in the garitens．Small
blussoms of a pleasine botut．Is the product of the well known sis． Henl！Cormsom．ま゙いch 30c t．Wrmis－A Cornutar small ditr itable shmet of hloum whale saman． sersey frem－Possesses the＂Wart
halhit and continuty of blooming
 nuta）ant the vigorous，bowhy growth and loundish foliage of the
finest binglixh bedding variotits Color is a pure violet and flowers Earh 25 c．loz．\＄2．50． Inteil splemiens－liright yellow Summer：Varh 25c．औoz．\＄2．50 Rivimiana－An exeellont plant for thought lattor that any othey if सivin a little waterl．Flowers a Each 25c．duz．\＄2．50
 hodutiful dwarf Alpint Ithe flow buly 150•h

50 c
 lornia Furlsias－A low growing
 in．lonia A flamsing shewt cluring the months of dug．and sopt．It is
remarkalls resistant to drought Fiteh 40 c

## Wonderinl Japanese Lities

We show here in colurs some of the Lilies listed on page ill. giving you an idea of the won derful colorings and attractiveness of our import. ed Japanese Lilifes ant of the remarkable Regale Lily which is becoming the favorite among Lilies.
A. Tiger Lily
tigibincm splendevo (muproved single tiger Lity)- Very large flowers of excellent form color orange salmon. with lark spots; hariy and a free lloomer latge bulbs, eacl 20 c 107. $\$ 2.00$
B. Speciosum Album

A pure white Hardy Japanese Lill free flowet
ing, very fine fange lullus ea. $\mathbf{3 0 c}$, dlo\% $\$ 3$
C. Speciosum Magnificum

Hardy Japanesp Lily, deep, carmine flowers, spot ted hooid red, vely vigorous, early lhooming
Each $\mathbf{2 5 c}$, doz $\$ 2.75$.

## D. Auratum Lily

acientive (Gorden Banded Lily)-The hanusom est and best known of the Japanese Lilies. Im mense ivory-white flowers with yellow and crimson dots; in the center of each petal is a gold land faling into white; very fragrant Woom June to Uetoler. Large isullws, each 25 c , Ioz: $\$ 2.75$
aLRATLM PIATYPHYLAM-Similar in color to Auratum, heavily spotted but much larger. Nammoth bullss, eacli 30c doz $\$ 3.25$
E. Regal Lily
hilitim regale on miriophillicm-The nosst interesting Lily that hus ever cone under our olsereration. Perfectly harly, of medium height. often learing five to eight large hand some bloons. Color white, outer petals shaded in varying amount with pink, the throat suf fused priminose vellow. Delighitfully perfumed reminding one of the jasmine. One year size. earh 50c doz $\$ 5.00$ postraill: extra large two year size each $\$ 1.00$, nostpail, three year luthes, each $\$ 1.50$ postyaill.


IMPORTANT NOTE ABOUT CAIRING FOIR LILIES The apmination of semesan to bily bulls has been found very effertive in prevent ing rot and fungous diseases. Particulally valuable is its use with the turatum Lily, Being slowly solunle semesan maintains an antiseptic zone around the bulf,


Special Sale Giant Darwin Tulips


FINEST JAPANESE CHRYSANTHEMUMS
Price 200 each, set of 1\% sorts $\$ 2.00$, posiage extia

CITIRONLILL-Large incurverl lemon yellow E. HRLI FROST-Pure snowy white flowers, inner petals incurving and outer reflexing. GOIVEN GLORI-Deep yellow flowers of incurved form. Early and free hlooming.
NETTE PARKEIR-Deen vinous pink, perfect

WHITE CHIEFR IIS-('ompact ineorved flow. W. II Il aite-Immense fubl flowers of incurverl OCONTO-Large pure white flown of of fine wisk


| I Joss- Pure white, vers latge grobe |  |
| :---: | :---: |
|  |  |
| OONZE QCELSA-Golden lnomze, relaxed form. |  |
| Carly and free blooming |  |
| FTAN-Very large | tly int |
| ers, silvely pink |  |
| LOIRS - The fiam | ow in | lowers, silvely bink

IRSSOL, IR. - The fincst vellow in the collec-


ENGLISH GARDEN CHRYSANTHEMUMS

MfinoN--Rosy pink sharterl silvers. Strong
vigorous growel and very flee QLENS OF IIIIITES-Snows white flowers cover the blant early in the Fall.
sotrc's DE OIR-Tawny red flusher with pronze and ehamois Natrow tubular petals. WOLSERINE- (Folden yellow of splentid tex-

## 




TEN CHOICE CARNATIONS
(arnations will thrive in any gom fresh garden soil. After danger of frost is over set 10 to 12 inches apart each way, cultivate and water as tions are rasily grown in the house for Winter flowers.

Price 20c earh, set of 10 somts $\$ 1.75$, postage extra

BONORA-Funcy variety of fine size and form, borne on long, stout stems. White, splashed. EXCIIINTRESN-Flowers very large long stems. flesh pink: early and continuous bloomer
MATCHILSS-Very large, pure white maculated

MRS. C. W. WARI-Brimiant dark pink, of im POCAHONTAN-Rich crimson maroon flowers of fine size and build. WIIITE WONDER-Snow white flowers,


## Novelties Single Geraniums

## I'rice 25 c parfl set of 10 surts $\$ 2.00$ <br> Idd mostage on parcel post orders


 latge found full trussess; yary strikine burple IIIII. CIINE-Immense eirenlar flowe rich lwisht scarlet: lare, heavy trusses (o) in base thasses. freely produced: fine low

 pure as snow. Alwiys in hoom. light bosy silmon with a reticulated foffert. Lpus retals feathereal with crimson,
 bels of fine sik: wolor bright scarlet. White eve.
vitio Mtsisi--ltich velvety crimson flowers of fine size: one of finest rark colored sorts. IICTOR GRONSET-RICh apricot samon shat.

## Fine Single Geraniums

## I'I ite 20 c eacli, set of $1 \geqslant$ sorts $\$ 2.00$ <br> Idd postane ohl parcel post orders

IIICE I.F:XION- l'ure white sharled with perd h
bink in "nnter
IIBION- leantiful frek flowering show white

 IMQUEIKIF:
MES. 1. ISLING- Silvery salmon shated MAD.IME MOSN:IX-Peruhturnade of
 MELEOLK lifilliant rrimson matoon. it mak. WIIIVKED IIIV'II, I'ure
sibuous white bloteh on two uprer lettals. WRS. E. Ii. IIILI, Very larex trusses of single



## 保

## Ivy Leaved or Tråiling Geraniums

Fnexcelled as hasket or window bon mants, as weal as helng useful in lexdlang. Woveling the



 proseh t" " pure white variety in this class
F"ine large trusses. - II.ARLEA TURNEIR-IBAllianl bink, approach ing scar,et. l'pper petals niekly featherd ma
 INCOMII IR, IBLE-K-HAquisite shat of rosy (at
 rose pink, upper petals delicatemy feathered with romson maloon; undulatiod petals, im-

## Novelties Double Geraniums

## Prise $25 c$ eathl, set of 10 serts $\$ 2.00$

Idd postame on bavcel post orders
 fiowers of Womerful phinty of color. Sturaty
E. II. THEGiOE-Soft veltety searlet, flowers of fine siz*: splendiel berlding variety.
ERNEGT CIIEBROR EIRNEST CIIFBROXX-VRYM large trusses of lielt bright ersise colored flowsts, eath floret FISEXIRE BIANC-IEry large double plorets in
 111 buthe masestre trusses. Always in Hown.

 lant revmilon sarlet with prominomt white
 ing with very large trusses of wide plorets: Lrounh color pure white rosy sammon center.
IDERER COIRTOIS- Velvety purphe spotted


## Fine Double Geraniums

## se 20c earh, set of 13 norts $\$ 2.00$

 IBHIE SCHANFFER-Rich letp rrimson ma
 lallge tghsses on stronfy stalks. Masmificent
 IHish violet flowers londor in greatust freedom. With white at hase of petals. Heavy grower; free blooming.

 M.IIDME IMNIDIX - Wistimet salmon pink. VME. RECIMIIEIR-Snow white: strong vigor. MISS. I.IW RENCE-Meantiful satiny pink shas *. N. NTTT-Rich bark rrimson varleties in
 thusses holding color well in hottest weather Never out of hoom. Nisf HWarf crowst witl handsome foliage.


## Pelargoniums

LIJV IVINIINGTON GERANICMS

## 26c eacll, set of 5 sorts $\mathbf{\$ 1 . 0 0}$,

Mi.ITIIEA-Whondage entra
with apple blosson ICCHESS OF POIBT Miroon.
fhind large round flow petals harkiy blotched and veined (ppe LISTEE GIKEETISG-
blooming prochyities, equatly as fine thete or as a pot plant. Fiery amaisanth red, boteher maroon.
FiIf MIIID-Lower betals white flushed light bink: upper petads blarkish moroon surround
('d with erimson and boudered white



Pive 15 c eal, set of 6 sorts, 76 c : postage extra AMEII,Coveled all summer with umbels of little florets, red on the outer edge and orange yellow in the center.
col'NTESS DE BIENCOURT--bich bose cen tererl mimrose yellow. Fach flocet with goken throat
COLIRBEHLIN INE ARGENT-LANGE uInbels of puse white flolets centered with yellow: free mommine
DELICITISSIMA-The wewping lantava, litac mank flowels in geat profisions: spleneial bed (ling plant; finc for lasket or porch loox. low flowes's chatbing to at leatutiful shate of IR.IIIITION--lisonzy red with \&゙ulthen sellow center. One of the larghtest and luest bediling A fine class of summor blooming bedding f.ants also koown is shrubby lowhenas. They vie with geraniums and ('almas in their bril lianer of rolor in the Summer


## New Heliotropes <br> fice 20 c eat., set of 4 sorts. 65 c ; pastate extra

 IIBSTROSK-Elegant swarf. bushy growing: linge panicles of pure white flowers in treat IEFIIINNIIexquisite lizht blue flowers with panicles of exdussite light blue flowers with a white eye
IAVENDER QUENS-A beantiful shade of lav ender, suffused with rosy mauve. A dwari rohust Hower free continuous Hoomer.
ROMIL PIRPLH-Color deep violet purple white eye: very floriferous: highly recenmanend el for bedding.
Siferial plise on Royal Pmple, \$1.00 dozen

## 6 Fine Table Ferns for $\$ 1.25$ <br> see page 47



Pansies in Bloom
 until hume we offer our famous "Xlastodon"
 60 c (1) $\$ 1.00$


## Rex Begonias

Gownd for the berallty of the foliage. The Isabes ar't large, variegited and matgined with peculiar silfer-metallic ghoss. The most ornamental of window plants
'bojce plants, cach 25c: laskey mants 400 60c each, posiake \& 天

## AGERATUM

GGERATEX JBhe Star)-Bedrling and borclev mlant growing one foot high. Feathery hluf flowers all Sumaner. Eath i5c do\% \$1.26


Free Blooming Fuchsias
 INNIE HARIF-Tube and repals waxy white


 of the finest. bonthe
OIOI,NitIORTII-Fine Hatge and elegiant form Nopadis long amd refresed, pure red: eorollit doo ble whild ol pure whise sepats, tris fice well known to all plant lovers.



Flowering Begonias
1'ike 20c each, set of 6 sorts, $\$ 1$; pastage extral II.B. I'lCTA--Dark krleen lfiswes dotted witl white spots: awaif growing, fine houss platit.
 age, clusters of bright scarlet flowers nearls ('0)M以T:-Fointed purplish gieen leaves with silvery wadings. Purn white flowers HOLIONA - The freest flowering lygonia we have Makes a handsome wimbow plant, with its glossy green teaves ankl bright pink flawers. V.IRGitNRTE-Foliage klark litones green ol upper surface, reddish purple on under side Panicles of white flowers with downs rell hairs.
II.IRIORIF: IN. III-A strong variety of slende


## Sweet Violets

10ine 20 c each, set of 6 sorts, \$1: postage evtrit siNill
 - IIAFORNBI-Very show fowers of enurmon procerep velot hlue. delitiously fagrant.
 101) BJ.



 with baverler flowers very distine


## LARGE FLOWERING PETUNIA

PETENAD (Irvington Brants)- single fle, wered Coveros with leratiful light bink flower 1sikll 20c, for 50 c


## Verbenas






IV.NNHRIN(i JEW ('Tradescantia)-White an real variegited. Lash 15 c


C-

Extuisite coloring, vigor, ease of cultivation and freedom from insect pests and disease are making Gladion universal favorites that should bloom at a season when there are few other flowers

Culture-Gladioli may be planted as early as ground can be worked or as late as June. of 3 to 6 inches, depending on size of bulb. Prices are f. o. b. Portland; add
ALICE TIPLADY-A large flowered primu. finus type. Short and stocky of growth with a most beautiful orange saffron bloom: a
vigorous grower. Each 10c, doz. \$1.00, AMFRICA - Exquisite shade of pinktinted lavender Each 5c, doz 60c, $100 \mathbf{\$ 3 . 5 0}$ BARON HULOT-A brilliant indigo blue, free flowering Each 10c, doz \$1.00. BUTTERFLI-Large salmon yellow, ruffled flowers, very vigorous
APi.AsicR C. BiIKER-Rich velvety red 15 c . Large flowers. Each
BYRON L. SMITH-Lavender with sulphur blotch in throat; resembles color of a cattelya orchid. Each 15 c . doz. $\$ 1.50$.
CRIMSON GLOW-Deep rich red; a good talk and stands well, holding its flowers a DOROTIIV McKIBBIN-A wonderful pink, earliest of all to hloom. Ea 15 c, doz. $\$ 1.50$. blotch. Large flower and early bloomer. Each 5c, doz. 50 c
HEIRADA-To all who love a pure mauve
LHis will prove a joy Each 10c, doz. \$1.
large, many flowers open at a time. Each 10 c , doz. $\$ 1.00$
Gladioli
FINE HINEIO-A large ers unequaled for the price. Eich 5c, doz. $50 \mathrm{c}, 100 \mathrm{\$ 3.00}$ Primulinus Hybrids
A beautiful race of (iladioli:


Largest bulbs are not always best as some va rieties do not produce large bulhs. Any garder soil will give satisfactory results, but if wel bulbs first show, Gladioli will amply repay you for this additional care. If cut when thi first bud opens and put in water, the flower: will open perfectly, keep for many days anc coft left to open on plant
ostage for parcel post shipments
POLA NEGRI-Apricot with yellow lip, shad ing to old rose and salmon on outer edges of the loveliest color combinations. Eacl 15 c , doz. $\$ 1.50$
PRINCE OF WALES-Clear light samon ROSE GIORY cent garden variety, pure rose pink, deepe in throat, petals stand wind and heat weld Edges of petals delicately ruffled or fluted Each 15 c doz $\$ 1.50$
SCHWABEN-Large flowers of canary ye) low with magenta line in throat. Vigorou grower. Each 5c, doz. 50 c
VIRGINIA-Large flame red, solid color, vig
WHITE GLORY-Clear white with $\$ 1.50$
ings on lower petals. Tris.like in appeat
ance. Each 15c, doz. \$1.50
MONTBRETIAS
Of the same family as Gladiolus, Montbrt tias are hardier and increase more abundan ly. There are a number of old varieties whic the old varieties are, however, small and no way comparable to such greatly improve varieties as the Lord Nelson, etc. In goo soil these will easily grow three feet in heigh and their spikes are producers for month and are always well branched. They ar with Autunin foliage
CAIIFORNIA-Clear yellow Ea 7c, doz 76c FIRE KING-Scarlet red. Ea. 7c, doz. 76 ? IMIKOVEI) ICRENTICA - Orange yellov LORD NELSON-Orange. Ea, 10 c , doz. $\$$ IESNIDOI-Cream white. Ea $15 c$, doz $\$ 1.5($ MIXED-12 different colors. Doz. 60 c



DECORATIVE DAHLIAS
Prices F. O. B. Pordand; if mailed. add nostage

AL. IIOR.IN--Nf•w Dahlia of immense size and perfect formation. The giant flowers are held on
long strong stems; color, yellow suffused golden. long strong stems; color, yellow suffused golden-
rod amber. Very attractive and highly recomMended. Each $\$ 1.00$
NILNK. New. A very large flower. Gorgeous shades of copper orange, gold and amber and deepening in the center to a rich dark reddish bronze A golf medal Dahlia Prize winner at Many Muhlia shows. Each 50c.
NN.I M.IIEIR-New. A huge flower of peculiar coloring. lark pinkish red, like old velvet, shad.
ing to softer red towards center: fine stems. ing to softer red towards
uninne noselty. Earh 75 c
IBEN WIINON-Vety large orange red, tipped with Eold. One of the largest and best Dahlias. $\mathbf{7 5 c}$.
ISEIRTII STOHI-Now giant, decorative. A deep 3ERTII. STORI-Now giant, decorative. A deep
rose pink: free flowering. Each 35 c . rose pink: free flowering. Each $35 c$.
BIIIIE IBLCRKE-Free flowering; soft
$t$ yellow of xtra large size Flat petals narrow and very
numerous. Very atractive. Each $\mathbf{3 5 c}$.
 HIIMPIGNE-New. One of the largest A delightful color of warm Autumn largest Dahlias. ns from burnish copper to a patne and chamols pper to a clull golden cham lucel frefly on long hard stems. One of the VIIM best Earh $\$ \mathbf{1 . 0 0}$
II.ill--New. A pleasing shade of burnt orange sood stem. One of the late Judge Marean's won. derful Dahlias. Each $\$ 1.00$
Clowg partly rolled; immense flowers yellow; petals long. partly rolled; immense flowers. Each 35 c DELICE-Lovely shate of pink broad petaled flow MOROTII IROLB
distinct sutumn shasle, deep haff, suffused or distinct sutum shade deep luff
WIIIE WIILIMWS-A brilliant crimson scarlet, each petal tipped white Immense giant hlooms
of perfect formation. A prize winner. Each $\$ 1$. EnHTII WOOSTER-Beautiful hending of golden vellow and sunset red, a color which always ap-
peals to everyone. Blooms are extra large; fine. peals to everyone Blooms are extra large; fine,
strong stems: a first clitss Dahlia. Each $\mathbf{3 5 c}$. EL, 11OK.IIVO-New. Giant flowering Dahlia with all the gond qualities of a first class variety. Color a Vivid gold shading to deeper tones at the base of petals. The immense goiden colored blossonis are produced very freely on long, strong stems. Extra tine for cut flowers and exh!hition.
of the very best new Dahlias. Each $\$ 2.00$. LLIZABETII WIIITE-New. A rich color combi. nation of coral pink and sitmon intensified hy a lulght amber-like glow at the base of petals. The hig beautirul hooms, stout stems. a very bole variety. Each \$3.00. cent rose, wonderful color. Each 35 c .
FLORAL. TREASV'RE-New hybrid decorative. A Giant hloons wirh lons wavy petals, fine white. A choice variety. Each $\$ \mathbf{1 . 0 0}$.
EN. CLSTER-Flowers often over 8 in. across: color an interesting combination of vellow, white free. Each 35c.
GLORIEXX-lich, golden yellow, tinted bronze and usually tipped white. A free hlomer and worthy
of a place in the most upto-date collection. $\mathbf{5 0 c}$.
GOLIDEN EMISLEM-New, One of the largest, fin est, purest, deep rich yellow Dahlias A clear
golden yellow without shadings of any other color. The giant blooms, 8 to 10 in . across, are of the most perfect and artistic form with perfect, full, high centers and long, wavy, recurving petals. Blooms held high above the follage on long.
strong stems. Early and constant hloomer. Truly a verv choice valjety. Eneh S4.00.
 fused and tiplot? with Eot
fine variety. Larh 35 c .

NKiLLINID-Holland variety; heautiful golden or ange; very large flowers with broad wavy petals strong, erect stems. Each 75 c .
IEFSEE BEACTY-New. Truly a heauty Very large perfect blooms of a heautiful true pink col. for any purpose $A$ wonderfully fine Dahlia Fieauty has won more gold medals and first prizes at the leading Dahlia shows than any other Hahlia Each \$1.00
IONFHEER IBOREEI-An eiegant large flower of hrownish huff yellow color. Most heautiful shade Each 35 c
KING ALBERT-New Holland variety. Pure vio let purple: extra large, full flowers: strong stems
early, free flowering. Each 50c. Early, free flowering. Each 50c.
LMDY BETTY-Extra large. Blooms freely all season. Color a lovely creamy white suffused with
pink. There are none like it. Decorative. $\$ 1.00$ ATONA-Fine large flower of pretty pale yellow tinged buff and lavender. Freely produced on the stoutest, erect stems. This Holland creation is in great demand. Each 25c.
LE GRANI MANITOL - Extra large variesated flowers; white striperl and spotted violet purple. Each $25 c$
MADONNA-Flowers of hybrid cactus type. One of the most charming white Dahlias. The bloons are often 8 in . across, ivory whlte. Last for days when cut. Each 50c
MARCELLA-A delightful, clear, soft pink. Bound to become a great favorite. Each 25c
MARMION-This new Dahlia is truly a giant for size. The flowers in our display garden this past ding and without receiving any other special at ding and without receiving any other special atention, except good eultivation. The huge blooms are of perfect formation, with long wavy petals Which curl in such a rashion as to eliminate any hint of coarseness. Color a Dure golden yellow with bronze suffusion on reverse of petals. Extra strong, stiff stems. A great prize winner. stock
limited. Each \$7.50. MARY BLRNS (California Inecorative)-A combina
tion of red and old gold, outside of petals old gold tion of red and old gold, outside of petals old gold riety. Each 50c.
MEPHISTOPHELES-Deep ruby red, points of petals nlcely tipped with golden yellow which greatly enhance the beauty of these big attractive flow. ers, Blooms freely. Extra strong, long stems. Fine exhibltion Dahlia. Each 75c.
MILLIONAIRE-One of tbe largest decorative Dah. has. Light lavender shading to white in center. Each 50c.
MINNIE BIRGLE-Bright rich red. Each $25 c$ MRS. CARL SALBACK-New. Immense lavender pink blooms on exceptionally long, strong stems. Euch 50c.
MES. GEO. W. ELLKINS, JR.-New. A wonderful new Dahlia of the largest size. Color a beautiful old gold suffused with salmon pink. Awarded MRS. I. DE VER WARNER-One of the fine decoratlve Dahlias. Deep naauve pink or orchid extra strong grower, producing gigantic hlossom on long stems. Each 50c.
OSAM SHCDOWV-Famous Dahlia of recent intro. duction. Beautiful old rose suffused with lilac, yellow at base of petals. Blooms 9 to 11 in , across Each \$1.00
PATRICK O'MARA-The flowers are 8 ln . in di ameter and borne on long, strong, erect stems The color is an unusially soft and pleasing shade of orange buif, slighti, tinged with rose. One of por POLAfi STMIR-The purest white Dahlia of remark able heauty. Flower is larse and full and carried on 18 in. stems. Each $35 c$.
PORTIIOS-New Holland Dahlia. Large blooms of
deep lavender mauve. Each 50c. deep lavender mauve, Each 50c
PRINCE \LENINDER - A large beautiful salmon rose, tinted mauve. deep cream center; very early PIRPLE Maonerifine stems. Each 35c. best of its color. Earch $\mathbf{2 5 c}$ decp purple. The
R.IINBOW-old goles, heavily suffused with oriental red. Inmense flowers hekl erect on incomone of the best bahlias. Eath 50c
one of the best bahlias. Eath 50c
ROOKWOOD-New. Imnensa giant blooms on ex cellent stems; calor an entirely new shade of pink, leing a pure bright cerise rose. A wonderful
Inahlia: greatly adnited at our gardens $\mathbf{\$ 1 . 5 0}$ Inahlia: greatly adnited at our gardens $\$ 1.50$
ROSA NELL New. A beautiful clear liright rose color: iumense flotvers on excellent steme rose novelty of great inerit. Each $\mathbf{7 5 c}$.
ROSEMAKOR-Giant hlooms ! to 12 in color a
beautiful rich rosv pink. Each $\mathbf{7 5 c}$.
SIMIEEI. L. POIIOCK-New art duin
Flowers of the largest size often duplex Dahlid. with hig wide petals, $21 / 2$ to 3 in . in width: color a rich glowing cardinal red, with a large, bright golden yellow center; long stout stems, Very showy and attractive in the garden and an ideal cut flower Each 50c.
SEQUOIA GIGANTEA-A very large, deep butter. cup yellow: stout stems. One of the largest and
best. Each 50c. SOEVENIR DE GUSTAVE DOAZON-Magnificent rich scarlet, often growing
S'IJPHIRIA-Ar extra Large, clear sulphur yel CI, PHIRIA-Art extra Ladge, clear sulphur yel-
low, without shading. Early and a most constant bloomer. Each 50c.
SUSAN G. TEVIS-A beautiful and distinctive new color tone, a deep shade of lilac with a bluish sheen. One of the very largest Dahlias. Blooms often 10 to 12 in . across: extra fine stems A gold medal winner. Each $\$ \mathbf{1 . 5 0}$
SINCOPATION-New. A big jazzy colored Dahlia that seems to always attract attention and appeals to everyone. Very distinct color combination of bright buff yellow with center of cach petal a
deep cherry red. Strong, vigorous grower, early deep cherry red. Strong, vigorous grower, early and constant bloomer, fine stem.
finest new varieties. Each $\$ 3.50$
T. A. LEON.IRD-New. A giant blooni of very fine color, deep cerise, tinted armine rose. Very One of the hest new Dahlias. Dach $\$ 1.00$.
THE CKITES-New giant Chissanthenum flower ed decoratlve Dahlià. Color it heautiful deep iose veined silver, sllver refiex on reserse of petals: the long lacy petals droop down stround the stems in such a way as to give the his llooms the appearance of huge Chrysar
Inahlia. Each $\mathbf{\$ 2 . 0 0}$
TIIE GRIZZII- \$2.00 son maroon, on perfert stem. of
and a prolific hloomer. Each 50 c .

## DAHLIA CULTURE

about the midalle of locaty we recommend planting will we better alole to shin only of Nixarch, that we may Do not delay your order for some of those listed are in short supply

Dahlias will grow to perfection in any good gar. den soil. preferably one that contains a little vand. Plant as soon as frost is gone and ground warm, cutting tuber to a single strong ey*, placing it on its side at a depth of ahout 6 inches. in ground that has been well cultivated. An excellent way to start Dahlias is to xprout tulsers in greenhouse and set out the rooted plants. Rows should lee ffeet apart plants 18 inches to 3 feet apast in the row. depend. ing on whether for a hedge or specimen plants. Cultivate thoroughly until ready to bloom, then deep thlage must cease and only the surface be lightly stirred, as deep cultivation at this time is fatal to blooming. Tall varieties should be staked If you use commercial fertilizer, do not apply until plant starts growth. then work into top soll, 5 or 6 inches from plant. Hone meal is an excellent fertilizer for Dahlias but must be applied esrly, as it is slow in action. When the plant is well up. say 6 to 10 inches, pinclt off top, leaving 2013 joints. This will cause it to branch out into a more sturdy,
bushy growth. W'ater freely.


## CACTUS DAHLIAS

From combarative tests in the fithl wo have se
wath the following as jaing the best of their types
 Iahlias iss well ats the lest of the ohlar ones
Prices f．w．In．Iortland；it matiled，postage extra

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lonk whers twistol petals：wert hiblt

 Furl 35 c



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 batioty belic：tte blush．Rexpenting towald the center to an introse flowine tint of woft tosy bink lixtra latge．bieh 50 c
BOFJNTNG－A beantiful＇hamois rose with light Frollow at the hase of the long incurverl petals fiee flowerng gidat habrid cactus of grat mert民u b $25 c$
NIBOWITABISE－Long．namow intals．inturved rolor rosy Maduc，EAch 50c． mmonse blomms are freely bathe on long．sitong

nutiety ars thew in renter to pink at points，Fath 50 c
H．ICGREGOR－New 11 C Ratre shade of soft red dy．constant bloomer Each $\$ \mathbf{1 . 0 0}$
 in．across：beatuful ortentah buff．Oatring 50c． I．IRGCFKITE BOCCDION－EXquisite shacle of hrilliant ret voft rose bink，large whith ce
lonk shaight neecile like petals．Farh 50 c Mdilonly－clear sellow，heavily tipued white：layge 111 ．or 118 100ta
IIS．IMOTG．FIJGMAXG－Without doubt one of the numerous as to make monster flowers．Exira fite and constant．erect stem．Bach 50c

 JIK NFJJIE JRKAN－ITright verlse
and attractive fiach 35c
finc for＂xhibition：lwarf grower．Fitch 50 c
「ers larke．attrative flowers．Fath 30c


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THE M．VR（＇IIONESN－New．A Riant ractus often buish lavenule sharding to white．base of petath mon rellow：fint stems．Recelved ratlficate of

TEsTE－lelvety maroon．free floworing．E． 25 c I．S．A．（II，brid（at：（lis）－i mammoth flower of ＂xplusite desp orange．very unusual 111 a Dahlia W．islliNo＇rox CITI（JI．C．）－Ciant startike flow

## SHOW DAHLIAS

ioned Dahlia so inproved that many of our most magnificent flowers helong to this class． INXI FiHORST－Rich deetp sharle of purple． 50 c IIREER＇S I＇IITTF－A magnificent white of largest Ni\％e，great purity，long stenis．Each $\mathbf{3} 5 \mathrm{c}$
 Jreer＇s White，except color．Each 50c
ROItEIRT M．M，Tr，except color，Each 50c．
Each 50c．
W．IV．R．IV＇，NON－lure white overlatit with ame thyst hlue，often 7 in．in diameter；stiff erect


## COLLARETTE DAHLIAS

Prices f．o．b．Pordand；if mailed，postate exta （ilINT INK INON－V＋ry latge：lich velvety ma boon，whlte collar：fine stems．Bath 50 c ．
Hoot MoN－New．Large rosy carmine，wh
HOOT MON－．New．Larke rosy carmine，white rol FiTTAHEN 35c．
 them all：rolor a vivid catmine rose，edged and tippell white，with white collar：homrss often 5

CIRILET（QUENN－N゙W，Bright scailet with yel－


## PEONY FLOWERED DAHLIAS



shatlest violet biulh 25 c （ity Color a cleis，rich．deep truly as wonterful fabliad．
 Long stems．Jeony thoe Eath 75 c

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fons stems and large flowirs．ve

dian sheen．Frew bwommg．Eath 25 c
 fused realdish hown．Forer flowerting heavily suf Stems Each 35c
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NALIV GEINIII－Huge flowns，often 10 Inches color：face of petals sulphor stiff stems bery ordy Mel Fach 75c
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arme the the very latgest
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 for exhhition．Fach 50c．

PRIBF OF I＇OIXTLANID－An immonse flower，ths． the real Each 75 c
 shate of hlac purple vutfaside tart blate on outer stems．Fach 50c．

WIIITE：F1，IG：


Our roses are all large, sturdy, two-year-old bushes, Oregon field-grown, budded on disbudded Manetta stock, and will give you splendid flowers the first season. They are true to name and include the best of the wellknown popular varieties.

The Time to Plant-Roses may be planted either in the Fall or Spring. It should be done early, and we earnestly request our Spring. It should be done early, and we earnestly request our friends to place their Spring orders in mid-Wi
ment can be made at the most favorable time. Stir ground thor-
Planting-Deep preparation of soil is urged. Stir oughly to a depth of at least 18 inches and two feet or more if soil is inclined to be wet or soggy, filling in extra 6 inches with stones, to insure drainage. Bone meal worked into ground at time of planting is a big help, using a large trowelful to a plant. Sheep manure in a little larger proportion is also good. We have prepared especially for roses and the lawn a mixed fertilizer with a high percentage of nitrogen and phosphorus. For 2 -year-old bushes apply about a half pint (cupful), for larger bushes, use a pint to a bush; cultivate into the soil around the bush early in the Spring. When buds are formed use about a gallon of liquid the Spring. When buds are formed use about a gallon of liquid

Rose Fertilizer and water until it's the color of weak tea. If planting in the Fall, prune tops slightly but be sure to trim all planting in the Fall, prune tops slightly but be sure to trim all root ends back unless this has been done at the nursery. In the
Spring, trim back all branches to not more than 4 eyes. Plant Spring, trim back all branches to not more than 4 eyes. Plant
at least 2 inches deeper than the crown from which sprouts arise. Cultivation and Protection-Keep soil well stirred, but do not cultivate deeper than 2 inches. Soak ground when you do water and then do not water again until the surface is quite dry. Protect roses from insects and disease by spraying.

Shipping-We always send all our two-year-old rose bushes charges collect by express or freight, packing so they will carry safely even though they should be on the road for two weeks or more. If necessary, we can send small two-year-old bushes by mail, but in such cases we always prune the tops and roots ready for planting. Add 5c postage for each bush when ordering by parcel post.

## SELECTED LIST OF FAVORITE ROSE BUSHES

## KEY TO ROSES ON PAGE 64

 OpheliaThe Queen Alexandra
Frau Karl Druschki
Los Angeles
Mrs. Aaron Ward Mrs. Aaron Mrus an Teplitz

AMERICAN BEAUTY (II. P.)-One of the largest, sweetest and best; rich, glossy crimson, shaded and veined in a most charming manner. Very fragrant. Each 75 c .
BABY CECIL BRUNNER-Rose and cream. Each 75 c .
BABY PERLE D'OR-Light orange to creamy yellow. Each 75 c
BRITISH QUEEN (H. T.) - Pure white, large, full flowers, opening freely. One of the best white roses for bedding and cutting; stiff slender stems, free and fragrant. 75 c. CHATEAU DE CLOS VOUGEOT (H. T.)-Deep, velvety crimson shaded with blackish maroon. The nearest approach to a black rose. As if cut from so much velvet, the most beautiful rose in color and texture. A true ever-blooming variety. Each 75c.
CHEERFUL-Shining pink, orange and yellow shadings; truly "cheerful'. Each \$1.00.
COLUMBIA (H. T.) - Peach blow pink, deepening as it opens to a glowing pink. A striking peculiarity of this rose is that the shades all deepen as the rose opens. Single buds, long stems, splendid for cutting. Nearly thornless; free from mildew. Each 75 c .
CONSTANCE (H. T.)-Rich orange yellow, distinctly streaked and splashed with crimson, long pointed buds; free bloomer. \$1.00.
DOROTHY PAGE ROBERTS (H. T.) -Coppery pink, suffused with apricot yellow, free and perpetual, delightful garden rose. \$1.00.
EDWARD MAWLEY (H. T.)-Long pointed buds of deep, rich, velvety crimson. Growth is upright and branching with handsome foliage. One of the finest red roses. \$1.00.
FRANZ DEEGAN (H. T.) - Center golden yellow, outer petals soft yellow. Very fragrant. $\$ 1.00$.
FRAU KARL DRUSCHKI (H. P.)The white American Beauty. Makes splendid buds and immense flowers; perfectly double. 75 c .
GENERAL JACQUEMINOT (H. P.) -Bright shining crimson; very rich and velvety, large and rull. Rich fragrance. Each 65 c .

GEORGE DICKSON (H. P.) - Very large, full and perfectly formed flowers freely produced. Color, blackish crimson of velvety texture, reverse of petals heavily veined with crimson maroon. A magnificent rose. Each 75 c .
GOLDEN EMBLEM (H.T.)-A grand new Irish rose of ideal habit of growth with holly-like glossy green foliage, each stem bearing a glorious golden yellow flower of the finest form. Each \$1.00.
GOLDEN OPHELIA (H. T.)-Rich golden yellow flowers in greatest freedom on stout wiry stems clothed with glossy dark green foliage. Beautifully formed buds. Each \$1.00.
GORGEOUS (H. T.)-Strong, vigorous growing, with handsome olivegreen foliage. Color deep orange. yellow, heavily veined reddish copper. Each \$1.00.
GRUS AN TEPLITZ (H. T.)-Fiery crimson, very fragrant. Free blooming, a mass of gorgeous blooms on long stems. Each 75 c .
HADLEY (H. T.)-A fine American pedigreed rose producing flowers of elegant form and substance. Color rich crimson scarlet shaded maroon. Prolific during all seasons, wonderful fragrance. 75 c .
HOOSIER BEAUTY (H. T.)-Crimson scarlet with darker shadings, velvety texture. Bud long and pointed, deliciously fragrant. 75 c .
INDEPENDENCE DAY (Peru.) Sunflower gold, flamed and stained coppery old gold and orange. One of the best. Each $\$ 1.00$.
ISOBEL (H. T.)-Single rose. Rich crimson, flushed orange scarlet with pure yellow center. Fragrant. Each \$1.00.
JULIET (II. B.)-A wonderful combination of old gold on the outside of petals and a rich rosy red on the inside. Flowers large, full and delightfully scented. Each 75c. KAISERIN AUG. VICTORIA (H. T.) -Elegant, large pointed buds; full double flowers; color delicate creamy white; fragrant. 75c.
K OF K (H. T.)-Intensest searlet known. Semi-single, huge petals. Free bloomer, sweet scented. 75 c .
LADY HILLINGDON (T.)-Deep ap ricot yellow, long and pointed bud. Flowers are of good substance and very lasting. Foliage luxuriant. A fine forcing or garden rose. 75 c .

LOS ANGELES (H. T.)--Flame pink toned with coral and shaded gold at base of petals; fragrant, vigor ous and very free blooming, buds long and pointed, mammoth flowers. Each \$1.00.
LYON (Perm.)-Beautiful shrimp pink with salmon and chrome yellow shadings. Large coral red buds, beautifully formed. A continuous and free bloomer. Charming fragrance. Each \$1.00.
MAD. BUTTERFLY (H. T.)-Sport of Ophelia, brilliant pink suffused apricot and gold; buds are lovely for corsages, wonderfully fragrant. Each \$1.00
MAD. CAROLINE TESTOUT (H. T.) -A grand rose of the La France type, but with flowers larger and finer. Color bright satiny pink; very fragrant and free in bloom. One of the handsomest roses and should be planted extensively. 60c. MAD. EDOUARD HERRIOTT (H.T.) -Coral red, shaded yellow at base, passing to shrimp red, bronze and geranium; hardy, vigorous. 75c MAMAN COCHET PINK (T.)-Color is a deep rosy pink, the inner side of the petals silvery rose; buds ex. tremely large, beautifully formed outer petals reflexed. Each 75c. MAMAN COCHET WHITE (T.) Each 75c.
MISS LOLITA ARMOUR (H. T.)-A magnificent rose; color chrome yellow at base of petals, shaded to coppery orange. Flowers very large, of finest form, on stout canes. Each 75c
MRS. AARON WARD (T.) - Deep golden orange shading to creamy yellow. Each \$1.00.
MRS. DUNLAP BEST - A strong growing, free blooming new rose from England; one of the very fin est sorts. Color deep reddish apricot shaded to golden yellow at base of petals. Leathery bronze colored foliage. A splendid garden and decorative rose. Each $\$ 1.00$ OPHELIA (H. T.) - Orange salmon buds, opening to flowers of dainty pink. The foliage is clean, dark and leathery-growth vigorous and free, producing long canes. Blooms early and continuously. Each 75c. PADRE (Pern.) - Coppery scarlet flushed yellow at base, flowers semi-double with 15 to 20 petals, often curiously notched, exception ally free bloomer. Each \$1.00.

## List Cont'd next page

PAUL NEYRON (H. P.)—Deep, shining pink rose blooms freely, the largest variety in existence, finely scented, blooms first season and all Summer, grows to a great height first season, stems almost thornless. Each 75c.
QUEEN OF FRAGRANCE (H. T.)Large double elegantly shaped shell pink blooms, tipped with silver. Noted for its powerful perfume. Each 75c.
SHOT SILK (Ncw) - Coppery rose, overshot with apricot and yellow, unusually beautiful. Each \$1.50

SOUVENIR DE GEORGES PER-NET-Oriental red, tips of petals touched with cochineal. Entire flower faintly shaded with yellow. Very large and full on strong stout stems. Extremely hardy. One of Pernet Duchere's finest productions. Each \$1.25
SUNSTAR-Deep orange yellow, edged, veined and splashed with crimson. Each \$1.25.
THE QUEEN ALEXANDRA ROSE (H. 'T.)-A most distinct rose by reason of the shading of its vermilion petals to old gold on the back, and at base. Each \$1.25.

## SPECIAL <br> "Name-Lost Roses"

During each season the name tags on a limited number of bushes become lost, so that we cannot identify them. These "name lost" roses include the highest priced varieties as well as highest priced varieties as well as quality. If you have no special choice quaity. If you have no special choice this makes an especially good assortat an especially low price.
10 Bushes for \$4.75

## POPULAR RAMBLER ROSES


(Phila. Crimson Rambler)

## Tree Roses

 tree; desirable for planting as single specimens, in backgrounds or in rows along walks or driveways.We have a fine selection of colors. State preference. Each \$2.50, f.o.b. Portland. Shipped by express only.

## Climbing and Pillar Roses

Two - year - old, Oregon field grown, budded on disbudded manetta stock.

Prices are f. o. b. Portland. On parcel post shipments add 5 c each for postage.
AMERICAN PILLAR (H. W.)Brilliant crimson pink single flowers of medium size with large white centers and golden stamens. Profuse bloomer, tremendous clusters, vigorous plant, rather late. Each 75 c. CLCHL IRUNNER CLIMBER (C.P.) -Clusters of pretty pink flowers, especially beautiful in bud. 75 c . GARDENIA, CLIMBER - Creamy white, yellow center, small sprays, beautiful form and hardy. 75 c . GENERAL McARTHUR, CLIMBER (H. T.)-Dazzling crimson scarlet; delicious perfume and magnificent foliage. Blooms in great profusion. Each \$1.00.
IIOOSINR BEAUTY, CLIMBER Identical with bush variety as to flower; it is a rampant climber; crimson flowers, shaded to black. Each \$1.00.
(Tree Druschki)
Standard or Tree Roses are budded or grafted on hardy rose stalks about 4 feet high. They soon make good sized heads, forming a small


Strong, vigorous climbers, growing 10 to 12 feet high in one season. Two-year-old Oregon field grown budded plants. Prices f.o.b. Portland.
DOROTHY PERKINS, RAMB-
LER (H. W.)—A beautiful bright pink; large double flowers. Very sweet scented, hardy, superior foliage. Pink, red or white. Each 45c.

HIAWATHA, RAMBLER (T.)Ruby crimson, with a clear white eye; large single flowers in clusters; excellent for climbing, trailing and forcing. 75 c.

## TAUSENDSCHON RAMBLER -

 A lovely shade of soft pink, bright clusters of blossoms, almost covering foliage, few thorns, free and vigorous; splendid foliage. Each 75c.PHILADELPHIA CRIMSON RAMELER (P.)-A light crimson, improved form of Crimson Rambler, flowers brighter, larger, more double, much less susceptible to mildew. Each 75c


CLEMATIS JACKMANII

## AMPELOPSIS (Ivy)

ENGELMANNI - Similar to Quinquefolia, but leaves slíghtly smaller, and will cling to walls without any support. Very hardy and attractive. Strong two-year roots 50c. Postage extra.
QUINQUEFOLIA "Virginia Creeper"Common American Ivy. Strong twoyear roots 50c. Postage extra.
VEITCHII "Boston Ivy" - Leaves glossy, coloríng bronze in Fall; flowers small; berries deep blue; clings firmly to smooth walls. Strong twoyear roots 50c. Postage extra.

## CLEMATIS

One of the most beautiful and useful climbers. Their magnificent flowers, borne in great profusion in beautiful shades of lavenders, purples, reds and white, make them especially attractive. Clematis requires a rich loamy soil, but manure should not touch the roots. Cut out the weak and surplus branches in the Spring, and tie the vine up well to its support.
PANICULATA-A rapid and vigorous grower; it produces sheets of medium sized, pure white flowers of the most pleasing fragrance; well adapted for covering trellises or fences. Choice plants, each 50c. Postage extra.
HENRYI - Fine, large, creamy white flowers; a strong grower and very hardy. Each $\$ 1.00$. Postage extra. JACKMANII - Intense violet purple with a rich velvety appearance; distinctly veined. The above large plants, each \$1.00. Postage extra.
RAMONA-Beautiful lavender, best of íts color. Each \$1.00. Postage extra.

## DUTCHMAN'S PIPE

ARISTOLOCHIA SIPHO-A handsome bright green luxuriant vine, having large folíage and brownish, pipeshaped flowers. A strong rapid grower. Strong plants, each 75c. Postage extra.

ORNAMENTAL Climbing Vines

## CINNAMON

The most desirable, easiest grown climbers in the world; from Chinathe land of wonders. Their abundant blossoms perfume the air for a long distance with a delicate fragrance. Perfectly hardy-thriving in all soils, in sun or shade, wet or dry. No insects, blight or disease of any kind ever troubles them, no Winter harms. Once planted, they will grow a lifetime. Each $25 c$; five for $\$ 1.00$, postpaid.


CINNAMON VINE

## ENGLISH IVY

Large, thick, shining, leathery leaves; evergreen. Plant in sheltered position. Each 3Oc. Postage extra.

## HONEYSUCKLE

HALL'S JAPANESE - Almost evergreen, very popular; white turning to yellow. Each 50c. Postage extra.

## JASMINE

NUDIFLORUM - Drooping branches, enveloped with bright yellow flowers before leaves appear. Each \$1.00. Postage extra.


KUDZU
KUDZU
PUEIRERA THUNBERGIANA-Large foliage and dense shade, growing 50 feet in one season. Flowers plenti. ful in August, rosy-purple, pea-shaped; racemes. Each 50c. Postage extra. TRRUMPE'VILN
BIGNONIA RADICANS-Strong climb er; deciduous; flowers orange scarlet Blooms mid-summer. Each 50c. Postage extra.

## WISTARIA

W. SINENSIS (Chinese Wistaria) Grows 15 to 20 feet in a season; has long, pendulous clusters of pale blue flowers in May and June and Autumn. Clioice one-year plants, \$1.50 to 75c. Postage extra.


CLEMATIS PANICULATA

## USE MORE FERTHLIZER ON SHADY SPOTS

The roots of trees draw moisture from a good deal of space surrounding the tree, and thus take much of the moisture and fertility under the tree which works more injury to lawns than the shade. For this reason it is advisable to use a fertilizer top dressing more frequently on shady lawns.

A good method for assuring even distribution of fertilizer is to mix it thoroughly with three or four times the amount of sifted top soil, making it easier to distribute uniformly.

## PEONIES



The ranks of Peony lovers are increasing rapidly, and for those who have only limited time for the care of flowers, nothing will give so much joy and satisfaction and endure so long as these wonderful flowers-the Peonies. Color schemes are not necessary for beautiful effects, any combination is delightful. Peonies make a gorgeous display whether in landscape, flower bed, border or garden. By selecting a comprehensive assortment to include colors, types, fragrance and seasons the greatest enjoyment is possible. Peonies are nearly always free from disease, insects do not bother them and they succeed in any soil or climate. The first year bloom is as a rule poor, no matter how well they are planted, but they improve quickly season after season and each year flower and plant become increasingly beautiful.

CULTURE-Fall is the best time to plant because blooms will usually follow the next Spring, although planting may be done in early Spring. Peonies need a deep soil, not too much gravel, a good clay loam is best, and work soil to a good depth. Give a good dressing of lime at planting time and repeat every second year. Bone meal is also good to work in the bed. Cover the crown not over 3 inches deep and plant, if possible, in partial shade. When cutting Peonies allow at least two leaves to remain on each stem; the roots need these lungs for full growth. Do not remove foliage until it is thoroughly dead.

Our list of Peonies includes some of the most beautiful varieties in existence; some are very rare and will well repay their cost in their extraordinary blooms. Prices f. o. b. Portland.

## RARE VARIETIES

ALSACE-LORRAINE (Lemoine 1906)-Cream white deepening to pale yellow; late; pointed petals; water lily center; flowers in clusters, free bloomer, tall and strong, very beautiful. Each $\$ \mathbf{\$} .00$.
E. G. HILH-Pich Tyrian rose, bordered with silvery rose, semi-rose type, gigantic flat flower very full, in immense clusters. A free bloomer even on plants one year from division. Fragrant; early mid-season. Each \$2.00.
KELWAY'S QUEEN - Deep flesh pink, center flecked with crimson, very profuse bloomer, late midseason; one of Kelway's very best. Each \$10.00.
MARIE CROUSSE-Pale lilac rose; mid-season; very large and striking, stems stiff and upright. Each $\$ 3.00$.
MONS. MARTIN CAHUZAC-Dark purple garnet with black reflex; mid-season; the darkest peony; very large. Each \$3.00.

OCTAVIE DEMAY-Pink and white; a large flat crown, guards of very delicate flesh pink, with narrow collar of ribbon-like white petals, center of deeper pink. Habit of plant low, good stems, free blooming and good for cutting. Fragrant and very early. Each \$2.00.
REINE HORTENSE - Hydrangea pink with flecks of crimson, of semi-rose type, large and compact, tall growing with long stiff stems. A very beautiful flower. \$3.00. ROSA BONHEUR-A soft pink with guard petals flecked with crimson; mid-season; erect, large, flat rose type with imbricated petals. Each $\$ 5.00$.
SARAH BERNHARDT - Flat compact semi-rose type; uniform mauve color, silver tipped; penetrating fragrance. Each \$3.50.
THERESE - Very soft pink, lilac white center; with reflex; mid-season; strong plant and stems, enormous flowers. Dessert's best. Each $\$ 5.00$.


## White Varieties

ALBATRE-Large, compact, crown type milk-white, shaded ivory; center petals tinged with lilac and edged with minute carmine line. Each \$1.00.
AVALANCHE - A large milk-white flower of perfect form; the base is of soft yellow and a few petals are flecked with carmine. A strong grower, blooming profusely and fragrant. Each \$1.00.
BARONESS SCHROEDER - Plume shaped flower with irregular and fringed petals; opens a blush, soon changing to milk white; delicate odor; a very free bloomer and considered one of the best peonies grown. Each \$2.00.
DUCHESS DE NEMOURS - Crown type, pure white, with sulphur white collar. Early to medium season. Each 60c.
FESTIVA MAXIMA - Large rose type, white with crimson markings in the center; one of the best. Fragrant. Each 75 c .
IA TENDRESSE-Early, rose type, with very full spreading flowers of immense size in clusters. Petals thick and wax-like. Color milk white, guards slightly splashed and center flecked with crimson. A very choice production. $\mathbf{\$ 1 . 0 0}$. MADAME CROUSSE - Snow white with center petals edged with carmine. Large, compact and finely formed; mid-esason. One of the best all purpose flowers. $\$ \mathbf{1 . 0 0}$. MADAME DE VERNEVILLE Very large anemone shaped flower, pure white with slight carmine touches, of pleasing fragrance; long strong stems; an ideal cut flower. Each \$1.00.
OFFICIANALIS ALBA - Opens a pink, soon changing to white. Earliest of all. Each 75 c .
QUEEN VICTORIA - Bomb type, white, with delicate flesh tint. We consider this our best early white Decoration Day Peony. Of charm. ing fragrance. Each 75 c .
List Cont'd next page

# PEONIES - 

## Red Varieties

ADOLPHE ROUSSEAU - Semi-double type; purple garnet; tall plant; free bloomer; dark foliage veined red; one of the best for landscape effect. Early. Each \$1.00.
DELACHEI - Rose type; dazzling rosy magenta, vigorous grower; blooms in clusters; very fine, late mid-season. Each 60 c.
FELIX CROUSSE - Bomb type; a brilliant red, good odor, vigorous grower with spreading habit, blooms freely in clusters. One of the most enjoyable peonies and one of the best reds. Each $\$ 1.00$.
KARL ROSEFIELD - Semi-rose type; brilliant velvety crimson, mid season, no odor; strong and healthy, free bloomer in clusters; large and fine for cut flowers as well as landscapes. Each \$2.00.
LOUIS VAN HOUTTE - Semi-rose type; dark crimson tipped with silver, with fiery reflex. Medium height. Fragrant. Each \$1.00.
L'ECLATANTH - Bomb type; deep velvety crimson; mid-season; flowers very double and full, each flower standing up straight and erect, well above the foliage, especially attractive. Each 90c.
OFFICIANALIS RUBRA - Earliest of all good reds, a large round bloom of vivid crimson, generally in bloom on Memorial Day. Sold only on orders including other varieties at this special price. 75 s. RUBRA SUTPERBA - Rose type; a rich, brilliant dark crimson; large full double; without stamens; fragrant. Each 75 c .

## Pink Varieties

CHARLEMAGNE - Salmon pink, very double and full. Each 60c. DORCHESTER - Large, full type, very light pink. Each 60c.
DUCHIESS D'ORLEANS - A deep pink, salmon center. Early cut flower. Each 50c.
EDULIS SUPERBA - Crown type, bright clear pink, very fragrant, extra large early Decoration Day Peony. Each 75c.
ELEGANTISSIMA - Light cherry pink; mid-season; an excellent cut flower. Each 60 c.
EUGENS VERDIER - Semi-rose type, delicate blush shading to hydrangea pink, enormous flowers, one of the finest. Each $\$ \mathbf{\$ 1 . 5 0}$.
GENERAL DODDS-Uniform dark Tyrian rose, center touched with a few white dots; late. Each 75 c.
KELLWAY'S MEDIA-A deep, clear pink of exceptional beauty of form. Highly recommended. Ea. \$2.00.
LADY BRAMBVELL-Beautiful soft pink, of the finest form. 75 c .
LIVBNGSTONE-Rose type, a soft pretty pink, center petals flecked with carmine; blooms in clusters; late. Each \$1.50.
MADAME BREON-A light pink, of full compact form, very attractive large flowers. Each 75c.
MADAME LEMONIER-Rose type, soft lilac pink, changing to lilac overcast with white. A large compact flower, mid-season, fragrant vigorous grower. Each $\$ \mathbf{1 . 0 0}$.
VADIMS-A large pink flower with yellow center, free bloomingr, and very desirable. Each \$1.50.


## Single Varieties

ALBIFLORA-Very large single paper white, with long yellow sta mens, blooming in clusters; tall, very early and fragrant. $\$ \mathbf{1 . 5 0}$
DEFIANCE-Bright crimson petals in striking contrast with the cushions of pure golden stamens, won derfully beautiful and "dashing" in its effect. Each \$1.50.
DUCHESS OF PORTLAND-A rich lively pink shading to soft flesh, a free bloomer, medium early. Each $\$ 3.00$.
FLORESTINE - A beautiful dark red single type, large size, very special for this climate. $\$ \mathbf{2 . 0 0}$.


## Cannas

Cannas require a rich moist soil and should not be planted until all danger of frost is past. They are quick growers and the new flowering sorts bloom continuously until frost. Inexpensive, these charming ornamental plants produce rich tropical effects that cannot be excelled, and the varieties offered are equally valuable for the beauty of their bloom.
Bulbs or plants in season, each 25 c ; doz. $\mathbf{\$ 2 . 5 0}$; f. o. b. Portland

FIREBIRD - Green-leaved; flowers fiery, bright red, in immense trusses. 4 feet.
KING HUMBERT - Mammoth flowers of brilliant orange-scarlet, with bright red markings, broad foliage of rich coppery bronze with brownish green markings. Height 5 to 6 feet.

LOUISIANA-Grand Orchid-Flowered variety carrying large spikes of orange red flowers throughout the Summer. Best bedding sort.

METEOR-Large spikes of deep crimson flowers on tall stalks, green foliage. NOKOMIS - Vivid crimson flowers with silky sheen, bronze colored foliage.
PANAMA - Massive orange scarlet with narrow golden yellow edge.
ROSEA GIGANTEA-Deep rich dark pink shaded to coral; immense spikes of bloom in great freedom. Height 4 feet. WYOMING - Immense spikes of orange colored flowers of great beauty. A giant in growth and bloom.

## SPECIALS

Ea. 35 c ; doz. \$3.50; f.o.b. Portland CITY OF PORTLAND - A magnificent pink with salmon suffusion. Luxuriant green foliage, very hardy.
THE PRESIDENT-The best red-flowered green-leaved Canna. Flowers glistening scarlet. Height 4 feet.

$70 |$| EASTER SUNDAYY |
| :---: |
| IS APRIL 8, 1928 |



LILIUM REGALE OR MYRIOPHYLLUM "Lilium Regale or Myriophillum", the most interesting Lily that has ever come under our observation. Perfectly hardy, of medium height, often bearing five to eight large handsome blooms. Color white, outer petals shaded in varying amount with pink, the throat suffused primrose-yellow. Delightfully perfumed, reminding one of the jasmine.
One year size, each 50c; doz. $\$ 5.00$; postpaid. Extra large two year size, each $\mathbf{\$ 1 . 0 0}$; postpaid. Three year bulbs, each $\$ 1.50$; postpaid.


## LILIUM CANDIDUM

(Also known as Madonna Lily, or St. Joseph's Lily.) Ever popular, fragrant snow white, hardy garden Lily; grows 4 to 5 ft. high; blooms in the open ground in June. Our stock is is imported from the Azores, the finest obtainable; plant early. Mammoth bulbs, each $\mathbf{3 0 c}$; doz. $\$ 3.00$. Select bulbs, each 20c; doz. \$2.00; postpaid to 4th zone.


## Mt. Hood Lilies

This is an especially beautiful Lily, a native of Oregon and an interesting Lily to have in the garden. The flower is large open form, white tinted with lilac, and is very fragrant. Grows from 3 to 5 feet high. Choice Bulbs, each 25 c , doz. $\$ 2.50$.

Extra Blooming Size, each 35 c , doz. $\$ 3.50$.

Postpaid to 4th zone


LILIUM CANDIDUM


## Lily of the Valley

One of the most satisfactory and charming Spring flowering plants, producing in profusion its delicate bell-shaped, fragrant white flowers; thrive in any common soil, are perfectly hardy, and will succeed in shady situations. If lefi undisturbed in the open ground, they will increase from year to year, and are charming in beds or borders around the lawn. PIPS, doz. 75c; $100 \$ 5$; postage extra.


## HARDY IRIS

("Iris" means "The Rainbow") ALSO KNOWN AS GERMAN IRIS, LIBERTY IRIS, BEARDED IRIS, FLEUR-DE-LIS or FLAG LILIES

The growing of the Iris is greatly increasing each year on account of their rare beauty as well as ease of growing. They are hardy, drouth resisting; they come at a time when the garden needs their color, they bloom the first season after planting and soon form wonderful big clumps which are easily divided and transplanted.

Cultivation is easy; sunny situation needed; soil dry and well drained (Iris cannot stand water around the roots). Plant with bulb just below the surface, spread the roots out and pack the soil. No fertilizer should touch rhizomes. Fall planting is preferable. Water about once in two weeks until well established. Bone meal and finely ground limestone are good fertilizers.
(In list below, $S$ indicates standard or part of flower remaining upright, and $F$ indicates falls or drooping part of flower.)

## Named varieties, strong roots, Ea. 25c; Doz. $\$ 2.50$ <br> MIXED VARIETIES, EACH 20c; DOZ. $\$ 2.00$

Prices are F. O. B. Portland, Postage Extra

CAPRICE-S. soft rosy red; F. deep rosy red. NIBELUNGEN - S. olive green; F. yellow, HER MAJESTY - S. rose pink; F. bright crimson tinged darker shade.
LIBERTY-Bright azure blue; of the finest. LOHENGRIN-S. and $F$. uniform shade of Cattleyea rose. Large.
LORELEY-S. light yellow; F. ultra marine blue, bordered cream.
LADY JANE-S. coppery ; F. red and white. MIDNIGHT-Rich deep purple; fine cut flow-
MONSIGNOR-S. crimson dotted lavender, inner petal ivory ; F. rich crimson, edged lavender.

NIBELUNGEN-S. olive green; $F$. yellow,
purple and white.
PEARL-S. very light lavender; F. deep lavender.
PERFECTION-S. light blue; $F$. darker velvety violet and black, orange beard.
QUEEN-OF-MAY-Soft lilac, almost pink.
SHERWIN-WRIGHT-S. and F. golden yellow; blooms freely.
WALHALLA-S. lavender; F. wine red.
ZEPHYR-S. and F. clear blue lilac; beautiful and fragrant.

## JAPANESE IRIS (Kaempferi) <br> Japanese Iris are almost too beautiful to attempt a description; all the colors

 of the rainbow are gathered into their wonderful, vivid, yet harmonious shadings and silky texture. The flowers average about four feet in height and 5 to 7 inches across, although in the hands of experts they reach the great size of 12 inches. They are surely worth a choice place in every garden. Each year the clumps increase in size and the flowers become more beautiful.CULTURE-They are very unlike Hardy Iris in culture. Japanese Iris require plenty of water and good soil to get the best blooms; they do especially well on the borders of streams or ponds. A good dressing of bone meal and nitrate of soda is a big help when planting. Plant about 3 inches deep and 4 inches apart, divide the clumps every other year. They bloom after the Hardy Iris. Doubles have six petals; singles have three petals.

## 

## LIS'r OF VARIETIES OF JAPANESE IRIS

The finest varieties to be had in the Northwest, very popular, and priced exceptionally low
for this high quality.
DATE-DOGU-Single ; rich claret red with orange blotches; very charming.
GOLD BOUND-Double; pure white, one of the best and most beautiful.
KUMO-NO-OBI-Double, dark lavender blue, especially fine. Six petals.
KURO-KOMO-Double; purple overlaid with dark blue; yellow blotches, stigmas dark blue bordered with purple.
MOUNT HOOD-Double; light blue, shaded slightly darker, with a bright orange center (just the colors reflected on the grand old mountain as the sun rises over its snowclad slopes of a winter morning).

PYRAMID-Double; violet-purple, veined white in the center of each of its six beautiful petals.
ROSE-ANNA - Double; ivory white, heavy ruby red veins, conspicuous yellow blotch, stigmas dark plum.
SENJO-NO-HARA-Double: vinous purple speckled and splashed gray, primrose blotches radiating out into sky blue, petaloid stigmas purple stained gray.
TAIHERAKU (PEACE)-Double; rich purple with yellow blotches, tipped blue, purple veins radiating out; petalord stigmas gray and lavender; a truly gorgeous flower. Six petals.

(TSE JAPANESE IRIS-Double and single, no named varieties; all colors and shades. Special prices, each 20 c , dozen $\$ 2.00,100 \$ 15.00$, f.o.b. Portland.


Single Flowering. Each 25c; doz. \$2.50 F. O. B. Portland

## Tuberous Rooted Begonias

From early Spring until late Fall they display a mass of gorgeous and brilliant colgeous and brilliant coioring in shades of yeland pink No flower will do as well as these when planted in a shady place. For pots or window boxes they are unexcelled. Culture. Mix a little bone meal Mix a little bone meal the soil. Quickest resuits are obtained by starting indoors and transplanting when frost danger is over. Should be lifted in Fall by frost time and stored in sand in a cool place. Two types, single and double.


Double Flowering. Each 30 c ; doz. $\$ 3.00$ F. O. B. Portland

## TULIPS

Tulip bulbs can be planted satisfactorily as late as March. As long as we have stock we offer these

## Special Prices

GIANT DARWIN TULIPS Fine quality mixed, assorted varieties and colors
Dozen 35c; 100 \$2.50
DUTCH BREEOER TULHPS
Mixed varieties, very fine
Dozen 75c; 100 \$5.00
Prices postpaid to 4 th zone


DEUTZIA FORSYTHIA HONEYSUCKLE

## DECIDUOUS SHRUBS

Deliveries are made from November until May, orders are accepted at any time for delivery in season.
We use every precaution to deliver healthy, vigorous stock. but the measure of your success will depend upon the planting and care given, as carelcss or uninformed handling kills thousands of fine trees and plants every season. Avoid unnecessary exposure of roots to the air. In the case of evergreens that are "balled", do not remove the burlap. Plant as received, only cut the string around the top, then loosen burlap after tree is set. If you cannot plant immediately on receipt, always "heel" in so roots may be in contact with good soil.

If the soil is good and properly prepared, only a hole large enough to easily take the roots need be dug, but better results can always be obtained by digging out a large space and filling in with good top soil. In setting the trees, do not put deeper than they stood in the nursery, excepting some dwarfs, which go a little deeper. Be sure to Pack Earth Solidly Around Roots. Neglect of this is responsible for many failures.

## ALL PRICES ON SHRUBS F. O. B. PORTLAND <br> ALMOND (PRUNUS) <br> CHERRY (CERASUS)

PINK FLOWERING (P. Japonica) - Well known carly dwarf shrub. Double clear pink little roses festoon the gracefully bending hranches. Height at maturity 3 feet.

Each \$1.25

## ALTHAEA (ROSE OF SHARON)

Late Summer blooming, continues into the Fall when color is scarce, bearing flowers that closely resemble Hollyhocks in color and size. Colors pink, white or red. Maturity ht. 10 ft .

Each 75c

## AZALEA

A. MOLLIS-Low growing, in early Spring is covered with gorgeous flowers before the leaves appear. Excellent planted under trees or in groups. Cannot guarantee colors, mosty orange, yellow and almon-pink. Matur ity height 6 feet.

Each $\$ 2.50$

## BERBERRY

B. THUNBERG - (Japanese) - Low growing with clusters of wbite flowers in May. Foliage changes to a red in Autumn. Maturity height 4 feet.

Each 75c

## BOX LEAF ELDER

VARIEGATED-The finest variegated tree of the hardy kinds, leaves almost pure white. Nothing finer for specimen planting 4 to 6 ft. Also in silver and gold coloring. Maturity height 10 feet. Each $\$ \mathbf{\$ . 0 0}$ BUDDLEYA (MAGNIFICA LILAC)
Produces long straight slender hranches that terminate in long spikes of lilac-like flowers of a beautiful shade of lavender blue. Commences to hloom in June and continues until frost. Fine subject for lawn or tall hedge. Maturity height 6 feet. Two-year-old plants, each 75c

## BROOM (GENISTA)

ALBA-(White)-A fine hardy variety, attaining good size. Blooms in Spring. Maturity height 10 feet. Each 75 c JUNCEA-(Spanish Broom)-The most beautiful of all, stems almost leafless, of a vivid green. Blooms all Summer wben color is most desirable. Maturity height 10 feet.

Each \$1.00
SCARAPIUS-(Scotch)-Rapid growing, bear ing clusters of bright yellow flowers in Spring. Maturity height 10 ft. Each 756

## CALYCANTHUS

FLORIDUS-(Swcet Scented Shruh)-Double dark flowers, very fragrant and hlooms all season. Maturity height 5 ft . Each 75 c

JAPANESE WEEPING-Maturity height 6 ft . Single pink flowers. Each $\$ 4.00$

Double pink flowers, \$5.00

## CRAB

BECHTEL'S FLOWERING-Bears masses of double rose-like flowers of delicate pink color, and delightful fragrance tree shape Maturity height 10 ft . Each $\$ 1.50$

## DEUTZIA

DEUTZIA GRACILIS-One of our daintiest and most graceful flowering shrubs; low growing, slender branches, covered with a profusion of flowers, white with a blush of pink in the bud.

Each \$1.00
LEMOINE'S-(D. Lemoinei)-One of the har diest and most popular varieties, flowers in large clusters of pure white. Grows to feet high. PRIDE OF ROCHESTER-(Deutzia Crenata) -Pure white, tinged with blush. Flowers very double, blooming May and June. Maturity height 6 ft .

Each 75c
WATERI-(D. Crenata Flora Rosa Plena) Beautiful dainty double pink flowers. A fine lawn subject. Very showy. Grows to 6 ft


JAPANESE FLOWERING QUINCE


HYDKANGEA


TREE HYDRANGEA-PANICULATA GRANDIFLORA

## DECIDUOUS SHRUBS (Continued)-Prices f. o. b. Portland

## ELAEGNUS (JAPAN, CHINA)

Ornamental shrub of spreading habit. Branchlet ruddy brown, leaves silvery, Flowers small but numerous. Yellowish white and fragrant, followed by scarlet fruit in large clusters. Maturity height 4 ft , Note this
fruit is edible and makes delicious jelly or fruit is edible and makes delícious jelly or $11 / 2$ to 2 ft , each $\$ 1.00$ $21 / 2$ to 3 ft ., each $\$ 2.50$

## FORSYTHIA (GOLDEN BELL)

F. FORTUNEI - Blooms in dense masses of golden yellow flowers in early Spring. Beau-INTERMEDIA-One of the finest shrubs for early Spríng bloomíng. Yellow flowers appear before leaves. Height at maturity 4 ft .

## HONEYSUCKLE (BUSH)

WHITE TARTARIAN-Bushy upright growth, flowers freely. Red and orange berries stay on until Fall. Maturity height $8 \mathrm{ft} . \quad 75 \mathrm{c}$

## HYDRANGEA

JAPANESE OTAKSA-One of the most popular lawn plants. The flowers run in shades of pink, blue and white, mineral in soil often changing them to two or three shades in one. For shady places. Maturity heíght ${ }^{4}$
feet. Each 75 c to $\$ 1.50$ PANICULATA GRANDFFLORA-(Tree Hy-drangea)-Grows to six feet hígh. Flowers are in cone shape on ends of branches, pure white, afterwards changing to pink, remaín-
ing on tree until frost. Each $\$$ S. 00

## HYPERICUM

PATULUM HENRYI - One of the finest shrubs we have to offer, attaining a height of 4 ft . and covered during the Fall months with
masses of large yellow flowers. Each $\mathbf{7 5 c}$ KERRIA
A very graceful shrub that bears bright yellow rose-colored flowers in early Spring, vivid green branches, showy in Winter. Maturity
height 4 feet.

LILAC (SIRINGA VULGARIS) Maturity height about
ON-White or purple. COMMON-White or purple. Each $\mathbf{7 5 c}$ sky-blue enormous flowers. Grafted. \$1.25

HIPPOLYTE MARINGER - Purplish-mauve compact flowers, very free. Grafted. \$1.25. JEAN BART-Rosy-violet, buds carmine. Graf-
ted.
Each $\mathbf{\$ 1 . 2 5}$ MAXIMOWICZ-Violet-heliotrope, reverse sil very, enormous flowers. Grafted. \$1.25. MISS ELLEN WILLMOTT-Snow-white, ele gant spikes, large flowers. Grafted. $\$ 1.25$. purple, very fine and large. Grafted. 1,25 DR. BREITCHNEIDER-Purple in bud 1.25 ing white late. Grafted. Each \$1.25 NIGRICANS-Lilac. Grafted. Each $\$ 1.25$. PERLE VON STUTTGART-Pure white, graf ted.

Each \$1.25

## MOCK ORANGES (SYRINGA)

Large hardy shrub with a profusion of white creamy flowers, very fragrant. Maturity height 12 feet. Grafted. Each 75c PRUNUS (FLOWEIRING PRUNE)
P. BLIVANS-Same as Píssardí in growth but flowers double pink. Most beautíful of all and very rare. Mat. ht. 20 feet. \$2.00 P. PISSARDI-Foliage and fruit red, covered in Spring with clouds of white flowers. Maturity height 20 feet. Each \$8.00
P. VESUVIUS-Foliage comes out light green gradually getting darker until Fall, when it is blood red. Very showy fruit. Maturity
height 20 feet.
Each $\$ 1.50$

PUNICA (POMEGRANATE)
The flowering pomegranates are of very rare value. They are most attractíve, brilliant in foliage glossy and handsome. Growth dwarf. treenlike, height 3 to 4 ft . Each $\mathbf{\$ 1 . 5 0}$

QUINCE
JAPANESE FLOWERING-Covered with bright scarlet flowers very early in Spring before leaves appear. Maturity height 4 ft.

## RUSSIAN OLIVE

Large shrub with long narrow silvery foliage. Flowers yellow, appearing in May, followed by yellow berries. Maturity height 10 ft .

## SPIRAEA

BILLARDI'S-(S. Billardi)-Flowers red in dense spikes, blooms most of Summer. Maturity height 4 feet. Each 60c BLUE SPIRAEA-Beautiful Autumn blooming shrub. Flowers bright blue the entire length of stems. Maturity height 4 ft . Each GOc CRIMSON-Anthony Waterer-(S. Bumalda) -A desírable varíety, deep red flowers, blooming all Summer, fine for foreground plantíng. Maturity ht. 4 feet. Each 60c JAPANESE - (S. Callosa) - Purplísh foliage while young, flowers rosy pink in July. Ma-THUNBERGIL-Charming spiraea with grace-
ful form and abundant blooms. Maturity ful form
height $4 \mathrm{ft}$. abundant blooms. Maturity
Each 60s
VAN HOUETTIS BRIDAL WREATH-(S. Vanhouettí) -Very graceful; flowers white in clusters. May. Maturity ht. 6 tieet. GOc SNOWBALE
COMMON-Flowers globular, pure white, in May. Maturity height 12 feet, each 75 c SYMPMORICARPOS (SNOWWERRY) S. OCCIDENTALIS-Western snowberry. A native shrub of spreading habit, bearing of large clear white berries in Winter Maturity height 5 ft . Each 50c
S. VULGARIS-Indian Currant-Red fruited snowberry, habits similar to white, but loaded with dark red berries Fall and Winter.
Grows to 4 ft . TAMARIX
JUNIPERANA- (Africana)-Ornamental tree Maturity height 14 ft . Each \$1.00 WETGELIA
A most desirable free flowering shrub covered in the late Spring with a mass of trum-pet-shaped flowers, showing a profusion of bloom that is unequaled. Maturity height 12 feet.

Each 75c CANDIDA-Flowers white, bush tall. ROSEA-Flowers líght pínk, shrub compact. EVA RATHKE-Flowers red, one of the best. VARIEGATED-Leaves become silver white.




AZALEAS

## ABELIA

GRANDIFORA - Graceful evergreen shrub with small glossy leaves and tubular shaped flowers of a blush pink color. One of the few late Summer, early Fall blooming shrubs. The large ruddy sepals remain long after the flowers fall, having the appearance of blooms themselves. Does well in any location but does not like to be crowded as it is of a drooping nature and effect is spoiled if planted too close to buildings or other shrubs. Maturity height 4 to 5 ft .
12-18 in., ea. \$1.00; 18-30 in. ea. \$1.50.

## AUCUBA (Japanese Laurel)

Known as Japanese Laurel or Gold Dust Laurel. Japanese shrubs of moderate size, very beautiful and are covered with wonderful large red berries. It is necessary to have at least one green foliage plant to every three variegated if berries are desired as there are both male and female plants of this variety and planted alone they will often be barren. Do not expose to extreme hot sun as leaves are apt to burn. Maturity height 5 feet.
VARIEGATED-Yellow spotted leaves. GREEN-Dark glossy green leaves. 15-18 in., ea. $\$ 1.50 ; 18.24$ in., ea. $\$ 2.00$

## Evergreen Shrubs

Deliveries are made from November until May, orders are accepted at any time for delivery in season.

We use every precaution to deliver healthy, vigorous stock, but the measure of your success will depend upon the planting and care given, as careless uninformed handling kills thousands of fine trees and plants every season. Avoid unnecessary exposure or roots to the air. In the case of evergreens that are "balled", do not remove the burlap. Plant as received, only cut the string around the top, then loosen burlap after tree is set. If you cannot plant immediately on receipt, always "heel" in so roots may be in contact with good soil.
If the soil is good and properly prepared, only a hole large enough to easily take the roots need be dug, but better results can always be obtained by digging out a large space and filling in with good top soil. In setting the trees, do not put deeper than they stood in the nursery, excepting some dwarfs, which go a little deeper. Be sure to Pack Earth Solidly Around Roots. Neglect of this is responsible for many failures.

## ALL PRICES ON SHRUBS F. O. B. PORTLAND

## AZALEA (ASAHI)

CRIMSON - Evergreen variety from Japan, bright minute, waxy foliage that turns garnet in Winter. Loaded in early Spring with masses of scarlet flowers which almost cover the plant. Thrive best in cool, moist situation, do not plant in full sunlight. Excellent for massing or in front of other shrubs. Height 12 to 15 in . Maturity height 3 ft .

Choice plants, each $\$ \mathbf{2 . 0 0}$

## BARBERRY

B. DARWINI (Chile) - Shrub with slender branches, drooping toward tips. Leaves shaped like holly, flowers golden yellow, shaped like holly, flowers golden yellow, slow growth; maturity height 4 feet. 6 siow growth; maturity height, $75 \mathrm{c} ; 12-18$ in., ea. $\$ 1.25$ B. VERICULOSIS-Resembles Darwin, but is low growing; fine for rockeries and terrace work; brilliant foliage; maturity height 2 ft .

12 to 15 in., each $\$ 1.25$ B. WILSONI (China)-One of the most attractive winter shrubs, being covered with clusters of cone-shaped red berries that remain on all winter; foliage does not remain on all winter, but berries completely cover it. Do not plant too close to other shrubs, as it becomes bushy. Maturity height 4-5 ft. 12-15 in., ea. \$1.90; 18-24 in., ea. \$1.50.

## BOXWOOD (Buxus)

One of the longest lived shrubs known, small leaved, of dense compact growth; can be used in tubs or for low hedge work and trimmed into any form.
Pyramid form, trimmed 2-2 $1 / 2 \mathrm{ft}$. ea. $\$ 4$.
$21 / 2$ to $31 / 2 \mathrm{ft}$., each $\$ 5.00$ Globe form, 12 to 15 in . spread, 15 to 18 in, high, each $\$ 2.00$ to $\$ 4.00$.

For hedges (not trimmed); write for prices, mentioning quantity desired.


## CAMELLIA (China and Japan)

Small trees with shining waxy leaves and beautiful waxy flowers, very much resembling a small rose. Thrive best in partial shade and should never be allowed to get too dry. Grow very slowly, but begin blooming when extremely young. Should have protection in cold regions, as buds set in late Fall and blooms come very early in Spring. Maturity height 10 feet. In assorted colors only, mostly red and pink.

1 to $1 \frac{1}{2} \mathrm{ft}$. high, ea. $\mathbf{\$ 2 . 5 0}$

## COTONEASTER

A very desirable class of shrubs, becoming more known and rapidly attaing deserved popularity. Some are of upright growth; others are trailing.
C. FRANCHETTI (China)-Growth upright, distinguished by its very arching branches, which give it a most graceful habit. Pink flowers followed by red berries in the Fall. Maturity height 6 to 8 feet.
$1-11 / 2 \mathrm{ft}$., ea. $\mathbf{7 5 c}$; $2-3 \mathrm{ft} .$, ea. $\$ 1.50$
C. HORIZONTALIS (China)-Nearly deciduous; leaves very small and turn red during Winter; berries of the brightest red that stay on all Winter. Low growing with horizontal branches, excellent for terrace or embankment work. Very hardy. Maturity height 2 ft . Ea. $\mathbf{7 5} \mathrm{c}$ to $\mathbf{\$ 1 . 5 0}$
C. MICROPHYLLA (Himalayas) - Very much like C. Horizontalis, but differs in that it like C. Horizontalis, but differs in that it of purplish red, almost prostrate growth. Maturity height' 2 ft . Ea. 75 c to $\$ 1.50$.
C. MICROPHYLLA THYMIFOLIA - Like above, but foliage is very dense; tiny leaves and berries; very dainty ; maturity ht. 1 ft . Each $\mathbf{7 5}$ c to $\$ \mathbf{1 . 5 0}$.
C. SIMONS II-Growth very straight and upright; excellent to fill in background between shrubs when height is desired. Leaves do not remain all winter, but branches are covered with bright red berries the size of a cranberry. Of quick growth. Maturity height 10 to 12 feet.
$18-24$ in., ea. 75 c ; 3-4 ft., ea. $\$ 1.50$

## DWARF JUNIPER

DWARF JUNIPER-A low growing shrub of widespreading habit, beautiful green coloring. Plants as delivered spread 12 to 18 ing. Plants as increase to many feet; beautiful inches and increase to many feet;

Each \$2.50

## EVERGREEN SHRUBS-Continued

DAPHNE (China and Japan) D. ODORA MARGINATA (Pink Daphne)-A grand shrub, greatly admired everywhere; in dense clusters of pink at ends of branches; leaves are edged white; blooms very early in the Spring. Of slow substantial growth. Maturity height 4 feet
Maturity helgh. \$2.00; 18-24 in., ea.\$3.50

## EUONYMOUS (Japan)

A fine specimen evergreen plant with leathery glossy green leaves, one of the hardiest broad leaved evergreens. Very fine for foun-$12-18$ in., ea. $\$ 1.00 ; 18-30$ in., ea. $\$ 1.50$ E. VARIEGATED (Japan)-Similar to above, but leaves are of a gorgeous golden yellow edged with green; very greatly admired; maturity height 4 ft . 15-18 in. Ea. \$2.00

## ESCALLONIA (South America)

Dwarf growing evergreen with dark green foliage; spreading branches cover throughout summer, with tubular shaped pink flowers of much beauty. Very handsome species; not very hardy in cold climate; maturity ht. 3 ft .


HOLLY
HOLLY (Ilex)
ENGLISH (Aquifolia) - Prickly dark green foliage; grows moderately fast; covered during the winter months with bright red berries. We endeavor to furnish nothing but assured Berry bearing stock which has produced berries before being sent out. However, very often in transplanting they drop these berries and do not reset them until roots become established again. Holly trees, while they never should be allowed to remain dry too long, are often ruined by too much spraying with hose during summer months, causing flowers to drop and no berries. Maturity height 40 feet. Price $\mathbf{\$ 1 . 5 0}$ per foot of height.

LAURUSTINUS (Mediterranean region)
A well known evergreen shrub with dark green foliage. Bears a profusion of small white flowers in the open and pink in the bud, very early in the Spring. Attains considerable size and used a great deal in specimen planting or to fill a large corner or space. Fine for massing or hedge work. Very hardy. Maturity height 10 feet. $10-15$ in., ea. $75 \mathrm{c} ; 18-24 \mathrm{in}$., ea. \$1.25.

## LONICERA (Nitida)

EVERGREEN BUSH HONEYSUCKLE (China)-A fine variety for base or foundation planting, as well as for massing in large beds. Can be trimmed much the same as boxwoods for tub or porch decoration. Maturity height 5 feet.
$1 \mathrm{ft} .50 \mathrm{c} ; 11 / 2 \mathrm{ft} .75 \mathrm{c} ; 21 / 2 \mathrm{ft} . \$ 1.25$ Write for prices on hedge size.


## LAUREI

ENGLISH LAUREL (Cerasus)-One of the best known laurels; growth shrub-like witb broad dark green leaves of leathery texture, greatly used in landscape work. Attains a height of 12 feet if not topped. Being used a great deal now for evergreen hedge planting at a distance of 2 feet apart for dense hedge. Specimen plants, 18-24 in. $\$ 1.25$. Larger plants up to 5 feet priced on request. Hedge plants unballed from $\$ 15$ to $\$ 40$ per 100 , height 8 to 15 inches.
PORTUGAL LAUREL - A very beautiful slow growing laurel, dark green glossy leaves, small but very compact; can be trimmed to globe or pyramid shapes. Maturity height 8 feet.
$12-15$ in., ea. $\$ 1.50 ; 2 \mathrm{ft} .$, ea. $\$ 2.25$ $21 / 2 \mathrm{ft}$., ea. \$3.00.

## OREGON GRAPE

(MAHONIA AQUIFOLIA)-The holly-leaved berberry of Oregon, a native of this state, but our plants are nursery grown and especially fine. Dark evergreen foliage in summer, changing to purplish and variegated reds in the Fall. The official flower for the state of Oregon
$14 \mathrm{in} . \$ 1.00 ; 18 \mathrm{in}$. $\$ 1.25 ; 24 \mathrm{in} . \$ 1.75$

## PERNETTYA

A new evergreen novelty, of dense compact habit; does well in any location, but prefers a rich soil. The leaves are small. dark, glossy green, with white flowers in the Spring and a profusion of attractive berries in the Fall and Winter. Can be trimmed P. ROSEA-Pink berries.
$11 / 2 \mathrm{ft}$., ea. $\$ \mathbf{\$ 2} \mathbf{5 0} ; 21 / 2 \mathrm{ft}$., ea. $\$ 3.50$

## PRIVIT (Ligustrum)

CALIFORNIA PRIVIT (L. Ovalifolium)-Our best plant for hedges. Plant in double row 2 feet apart, 6 incnes between plants. Maturity height 10 feet.
$18-24$ in., 10 plants $\$ 1.00 ; 100, \$ 7.50$ $24-30$ in., 10 plants $\$ 1.25 ; 100, \$ 10.00$ ENGLISH PRIVIT (L. Vulgare) - A littlo hardier, for colder climate, leaves smaller Maturity height 10 feet
$18-24$ in., 10 plants $\$ 1.00 ; 100 \$ 7.50$ $24-30$ in., 10 plants $\$ 1.25 ; 100, \$ 10.00$ GOLDEN PRIVIT (L. Lucidum Variegatum) -A beautiful variegated shrub used to plant in among evergreens, giving a wonderful effect. Maturity height 10 to 12 feet 2 ft ., each $\$ \mathbf{1 . 0 0}$; 3 ft ., each $\$ \mathbf{1 . 5 0}$

PYRACANTHA (Crataegus)
A tall-growing shrub with long narrow green leaves, small white flowers, followed by berries that stay on all winter; especially fin for background. Maturity height 15 feet. P. LALANDI (From Europe)-Orange berries. 12.18 in., ea. $\$ 1.25 ; 18.24$ in., ea. $\$ 1.50$ P. CRENULATA (China)-Red berries.

18 to 24 in., each $\$ \mathbf{1 . 5 0}$


RHODODENDRON

## RHODODENDRON

Grafted varieties are still very scarce. These plants are from 3 to 4 feet high and are extra fine specimens. No color guarantee. $\$ 10.00$ Seedling stock, not grafted, $11 / 2 \mathrm{ft}$., ea. $\$ 2.50$ VERONICA
Shrubs of compact growth, forming well ounded specimens for use singly or in groups. V. BUXIFOLIA (Box Leaved Veronica) Small, upright growth, very compact; smal foliage. white flowers. Ea. 75 c to $\$ 1.25$ V. CYPRESSOIDES - Globular shaped with numerous slender branches clothed with scale-like leaves of appearance of cypress.

1 ft ., each 50c; 2 ft ., each $\$ 1.25$ V. TRAVERSI-Upright variety; one of hardiest, white flowers during early Summer $11 / 2 \mathrm{ft}$., each 75 c ; 2 ft ., each $\$ 1.26$

- THYMEFOLIA (A Distinct Dwarf Variety) Bright green foliage.


## CONIFEROUS EVERGREENS <br> In handling and planting evergreens never allow the roots to become



COLORADO BLUE SPRUCE dry for an instant. Their juices are resinous, and when once dry, water has no power to restore them; dip the roots in "grout" or very thin mud, and plant quickly; cover the roots with fresh soil and with a heavy piece of wood beat the earth solid over them. Fili up and pound again, and finish by bringing fresh loose earth about the tree with a hoe. No wind can now bend the tree about so as to break the tender rootlets as fast as formed.
Sizes given are the approximate sizes when sold. Prices $f, o . b$ Portland. Sizes up to 4 feet can be mailed. Postage extra.

> ARBOR VITAE (Thuya)

AMERICAN (T. Occidentalis) - Na-
tive, known as cedar. Foliage bright green; yellow-green underneath; bronze in Winter. \$1.50 PYRAMID ARBORVITAE-THUYA LOBBI-Bright green leaves above and dark glossy green leaves beneath. An excellent tree for pyra mid forms. 2 to $21 / 2 \mathrm{ft}$. Ea. $\$ 3.00$

## CEDAR

DEODAR or INDIAN CEDAR (Cedrus Deodara) - Very handsome; branches drooping; foliage silvery green. Very popular. Each \$2.50 RED CEDAR (Juniperus Virginiana) -Native with striking form and color. Each \$2.50.

## CYPRESS (Cupressus)

New Varieties
ALUMII-Handsome pyramid shaped conifer. Foliage greenish-blue 2 ft ., each $\$ \mathbf{3} .00 ; 3$ to 4 ft ., each $\mathbf{\$ 5 . 0 0 ;} 4$ to $5 \mathrm{ft} .$. each $\$ 7.00$.
LAWSON (Erecta Veridis)-Pyramid Lawson green. 3 to 4 feet, each \$5.00; 4 to 5 feet, each \$6.00.
CYPRESS LAWSON'S (Chamaecyparis Lawsoniana) - Graceful and conspicuous; branches horizontal, slightly pendulous, foliage dark green. Each $\$ 1.50$ to $\$ 5.00$.
ITALIAN--Bright green. Very com pact in growth, nothing finer in upright type. 2 to 3 feet, each $\$ \mathbf{2} .50$; 3 to 4 feet, each $\$ \mathbf{\$ 3} \mathbf{0 0}$.


LAWSON CYPRESS

CRYPTOMERIA ELEGANS (Japanese Cedar) A beautiful evergreen with delicate green foliage and graceful habit. Color changing
to redish brown. 2 to $21 / 2 \mathrm{ft}$., $\$ \mathbf{3} .50$ CRYPTOMERIA (J a ponica) --The open branched tree type of Cryptomeria, resembling somewhat the Sequoia Gigantea, but of slower growth. 2 to 3 ft ., each $\mathbf{\$ 2 . 5 0}$

## F1R (Abics)

NORMAN'S (A. Normanniana) - Lustrous. green foliage. Each \$3.00


## JUNIPER (Juniperus)

IRESH (J. Communis Hiberniea)-Pyra midal in form; foliage silvery gray 2 to 3 feet, each $\$ \mathbf{3 . 0 0}$.
COMMON (J. Communis) - Branches spreading. $21 / 2$ to 3 feet, each $\$ 3.00$ JUNIPER CHINENSIS - Compact growth, light green. $11 / 2$ feet, each \$2.00; 2 feet, each $\$ 4.00$.


## RERENOSPORA

PLUMOSA AUREA-Same as R. Plumosa but golden.

2 feet, each $\$ 3.00$ SQUARROSA-Dense, compact, feathery branches; bluish green. 2 ft ., each $\$ \mathbf{\$ . 5 0}$

## SPRUCE (Picae)

NORWAY (P. Excelsa) - A lofty, rapid grower; branches drooping. 2 to $3 \mathrm{ft} . \$ \mathbf{\$ 3 . 0 0}$ COLORADO BLUE SPRUCE-One of the hardiest evergreens of beautiful color and outline.
feet, each \$5.00


## DECIDUOUS TREES

When you are planning to purchase deciduous shade and ornamental trees, we strongly recommend that you write us, telling us the location of tree and height desired, as we can advise as to the best to plant and give you a better description of the trees as to habit, etc. All of the trees listed below can be furnished in much larger sizes than listed and we will be pleased to tell you what we can furnish and quote prices. In the list that follows the sizes given are the approximate heights when sold.

All Prices on Trees Are F. O. B. Portland. (Only Up to 4-Foot Sizes Can Be Mailed. Add Postage.)

AMERICAN WHITE-Broad, round
head and dense foliage. Very fine. Each \$1.50.

## BIRCH (Betula)

CUT LEAF (B. Alba)-Silvery white bark, slender drooping. branches. 5-6 feet, each $\$ 2.50$.

## CATALPA

Splendid trees, white flowers, bright foliage.
CATALPA WESTERN (Speciosa)Very rapid grower; a quick shade. ${ }_{5-6}$ feet, each $\$ \mathbf{1 . 5 0}$.

## DOGWOOD (Cornus Florida)

WHITE FLOWERING - Flowers white, 3 in . diameter, blooming before leaves come in Spring. 4-5 feet, each \$1.50; 10 feet, $\$ \mathbf{1 2 . 0 0}$.

## ELM

AMERICAN WHITE-A magnificent tree with drooping branches. 7-8 feet, each \$1.50.
ENGLISII ELM - A rapid grower, standing erect and compact, dark green. 6-8 feet, each \$1.50.

## HAWTHORNE

PAUL'S DOUBLE SCARLET (C. Monogyna Pauli)-A tree of fine habit; flowers bright scarlet, large, full and very double in heavy clusters on long sprays. Each \$2.50.
DOUBLE WHITE (C. Monogyna Alba Plena)-Flowers small. Leaves lustrous green. Each \$2.50.

## horse chestnut (Aesculus)

WHITE FLOWERING (Hippocasta-num)-Foliage showy, flowers stand in upright panicles. Each \$2.00. LABURNUM (Golden Chain)
LABURNUM (L. Vulgari)-A beautiful small growing tree, with long, drooping racemes of fragrant yellow flowers. Each $\$ 1.50$

## LINDEN (Tilia)

AMERICAN (T. Americana)-Shape. ly and handsome; foliage large. 6-7 feet, each \$1.50.
EUROPEAN (T. Europea) - Similar to American. Leaf smaller. 6-7 feet, each \$1.50.

LOCUST (Robinia)
BLACK (R. Pseudocacia)-Rapid grower; fine for street planting. 6-8 feet, each $\mathbf{\$ 1 . 5 0}$
HONEY LOCUST (Gledistria Triae-anthus)-Each \$1.50.

## MAPLE (Acer)

OREGON SOFT (A. Macrophyllum) -A rapid grower, fine for avenues. $6-8$ feet, each $\mathbf{\$ 1 . 5 0}$.
NORWAY (A. Platanoides) - Large, growth compact; foliage deep green. Handsome. 9-10 feet, $\$ \mathbf{1 . 5 0}$.
MAPLE (A. Platanoides Scliwedleri) -Purple Leaf Maple. Variety Norway Maple. Young leaves are deep purple. As Summer advances changes to green. 6-8 feet, \$3.00. MOUNTAIN ASH (Sorbus)
EUROPEAN (S. Aucuparia)-White flowers, then beautiful red berries. 5-6 feet, each \$1.50.

AMERICAN (S. Americana) - Very ornamental, handsome foliage turning orange red in Fall. Red berries remain on the tree most of the Winter. $5-6$ feet, each $\$ 1.50$.

## OAK (Quercus)

PIN OAK (Q. Palustris)-This Oak is by far the most largely planted of all the native Oaks. Graceful in form, glossy deeply pinnacled foliage. 6-8 feet, each \$2.00.
RED OAK (Q. Rubra) - Ideal for lawn or street. 6-8 feet, \$2.00.

## POPLAR (Populus)

6-8 feet, $\mathbf{\$ 1 . 5 0} ; 8$ - 10 feet, $\$ 2.00$ BOLLE'S SILVER (P. Alba Bolle-ana)-A compact upright grower, foliage glossy.
LOMBARDY (P. Nigra Fastigiata)An erect rapid grower.
SYCAMORE or PLANE (Platanus) Erect growing tree with mottled trunk. Foliage bright green. 5-6 ft., each $\$ 1.50$.
VARIEGATED BOX LEAF ELDER The finest variegated tree of the hardy kinds, leaves almost pure white. 4-6 feet, each \$3.00.

## WEEPING WILLOW (Salix)

WISCONSIN (S. Babylonica Dolorosa) - Large glossy leaves, pendulous habit. 5-6 feet, each \$2.00. AMERICAN (S. Babylonica) - The well known common weeping willow. Each \$2.00.

## NUT TREES

Walnuts are a sure and profitable crop on the Pacific Coast, and we also urge their planting for shade and ornamental purposes. They grow rapidly, are free from pests, and are handsome and lasting. Only grafted trees should be planted as they yield heavier, the nuts are of better quality and most uniform.

## Prices are F. O. B. Portland

ALMOND (Nut Bcaring)
Almonds can be grown successfully in many sections of Oregon and Washington. We can supply most of the leading varieties at price list. ed. Special prices on large orders. 3 to 5 ft ., each $\$ 1 ; 10, \$ 9 ; 100, \$ 75$. 1. $\mathbf{X}$. L.-A vigorous grower and sure cropper, producing nuts of large size and handsome appear. ance; shell thin; most popular commercial sort.
NONPAREIL - Tree beautiful slightly weeping; nut sweet and shell very thin. Best for the home.

## BUTTERNUT

A beautifully formed tree bearing a rough coated nut of most attractive flavor, well known to the Middle West. Succeeds fairly well in the Pacific states. 2 to 3 ft ., each 75 c .

## FILIBERTS

3 to 5 ft ., each $\$ \mathbf{1 . 0 0} ; 10, \$ \mathbf{8 . 5 0}$;
$00, \$ 70.00$ $100, \$ 70.00$.
BARCELONA - Magnificent large nut from Spain, first quality; can be grown as low standard tree or bush.
DU CHILLY-The largest Filbert on Pacific Coast. Nuts are broad, 1 inch by $\$ / 4$ inch; full fleshed and sweet; best grown as low standard. Special prices on large orders. Du Chilly is a good pollenizer for Barcelona.
WHITE AVELINE-This used with the Du Chilly considered best varieties for planting with Barcelona for pollenizer.

## Grafted Walnuts

FRANQUETTES-We offer a splen. did strain grafted on four-year California Black Walnuts. Sturdy, thrifty trees with big fibrous roots. The best to plant. Comes to bearing much younger than seedling walnut. $3-4 \mathrm{ft}$., each $\$ 1.50 ; 4-5 \mathrm{ft}$., each \$2.00; 5-6 ft., each \$2.50; f. o. b. Portland.

PAYNES-It is one of the best bearers of all the different varieties. The description is similar to the Franquette. This variety must be kept heavily pruned or it will overbear and the tree will become stunted. 6 ft . up, each $\mathbf{\$ 2 . 5 0}$, f. o. b. Portland.

## SEEDLING WALNUTS

FRANQUETTE and MAYETTE Second generation, soft shell, selected stock. Trees hardy and prolific bearers. Nuts are rich and meaty. Ea. \$1.00, f.o.b. Portland.
CALIFORNIA BLACK - A rapid grower and very desirable; nut medium size, with hard, smooth shell. Adapts itself easily to different climates. $7-8 \mathrm{ft}$. , each $\$ 1.50 ; 6-8$ ft ., each $\$ 1.25 ; 4-6 \mathrm{ft}$., each $\$ 1$.

## GRAPES

CAMPBELL'S EARLY - Nearly round, black, with light purple bloom; flesh rather firm but tender; quality rich, sweet, slightly vinous, a strong, vigorous grower. August.
CONCORD-Large, black grape; bunches compact; berries round, sweet, pleasant. August.
DELAWARE-One of the finest of our native grapes; grows freely ; perfectly hardy; ripens early; berries small, bright red. August.
LUCILE-Good medium large red grape hardy.
MOORE'S EARLY-Berry large, resembling Concord, but more pulp and earlier.
NIAGARA - Bunch medium; berry large roundish, uniform; skin thin but rough pale yellow flesh tender and sweet; vine vigorous and productive; one of the best white. September.
WORDEN - Bunch large and compact; berry large, black; imporved Concord. Late August.
2-yr. plants, each 20c; 10, \$1.75; $100, \$ 15.00$. 1 -yr. plants, each 15 c $10, \$ 1.25 ; 100, \$ 10.00 ;$ f.o.b. Port land, postage extra.

## CURRANTS

CHERRY-Very large; deep red; fine for preserving; valuable market variety. PERFECTION - Largest, most prolific ; bright red, rich flavor, mild sub-acid.
FAY'S PROLIFIC-Bright red, very sweet, fruit hangs on better than most kinds.
WHITE TRANSPARENT-The best white currant known; rich flavor: mild subacid.
Ea. 20c; 10, \$1.75; 100, \$12.50;
f. o. b. Portland, postage extra.

## FRUIT TREES

IN THE PURCHASE of fruit stocks great care should be given to - the selection of varieties that will meet your conditions and requirements, as many that thrive and bear abundantly in one section often prove disappointing under variable conditions. Also many splendid sorts for home use are totally unsuited for profitable marketing. For this reason we offer a large assortment of improved varieties carefully tested and selected for their special merits and their adaptability to varying conditions, and if you will state whether you intend growing for distant or local market or for home use, giving location and general conditions, we can recommend or assist in the selection of those varieties that will give you the best results.
If trees are frozen in transit, do not unpack, but set away in a cool cellar and allow them to thaw gradually. Trees or roses that are dried out and shriveled should be buried, tops and all, in moist earth for a few days. This will restore them
accepted at any time for delivery in Nover until May, but orders are accepted at any time for delivery in season.

## APPLES

| First Grade | Each | Per 10 | Per 100 |
| :---: | :---: | :---: | :---: |
| Two Year, | ........................ $\$ 0.65$ | $\$ 5.00$ | $\$ 40.00$ |
| One Year, 4 to 5 | Feet... $\$ 0.50$ | $\$ 3.50$ | $\mathbf{6 3 0 . 0 0}$ |
| One Year, 3 to 4 | Feet... $\$ 0.35$ | $\$ 3.00$ | $\$ 25.00$ |

## SUMMER VARIETIES

EARLY HARVEST - Medium size; bright straw color; tender and fine; for table and cooking: July.
GRAVENSTEIN - Large, beautifully dashed with deep red and orange, aromatic flavor; tree very vigorous. August.
RED ASTRACHAN-Large, deep crimson, flesh white, moderately juicy, agreeable rich acid flavor: very productive. Aug. YELLOW TRANSPARENT-Medium size, roundish, slightly conical ; skin pale yellow; flesh tender, juicy, sub-acid; good: bears at an early age. July.
AUTUMN and WINTER

## VARIETIES

BALDWIN - Large, rounded; deep, bright red; very productive; crisp, fine flavor; one of the best and most popular winter apples. Nov. to Feb.
DELICIOUS-Fruit equals name in every respect. Fine for market and home, especially adapted to Eastern Oregon and Washington. Keeps till April. GRIMES GOLDEN - Very popular: rich golden yellow: flesh tender, juicy and rich. Tree tender, juicy and rich. Tree hardy and vigorous, bearing young. November to December. JONATHAN-Tree vigorous, long lived and an early bearer. Fruit beautiful red and oblong; fine quality. Valuable as a pollen. izer with Spitzenberg and Newtown. October to January.

MULTNOMAH (New)-A hybrid between the American Pippin and Rome Beauty. Red striped yellow; flesh white and fine: sub-acid extra long keeper in its prime from Feb. to June. NORTHERN SPY-Large, round, greenish yellow, stripes of purplish-red; flesh white, juicy, brisk subacid; valuable for "top work." Requires good soil. Dec. soil. December.
ORTLEY or WHITE BELL FLOWER-White fleshed, fine grained conical fruit of superior flavor. December to April.
SPITZENBERG - Large, oblong ; yellowish with broken stripes of bright red flesh yellowish, juicy. November to March.
WEALTHY-Medium, whitish yellow, shaded with deep red; flesh white, tender and juicy. Oct. WINTER BANANA-Fancy market fruit; pale yellow with pink blush. November.
YELLOW BELLFLOWER-Large, oblong, yellow; flesh firm, crisp, juicy, sub-acid. oct.-Jan. YELLOW NEWTOWN PIPPINLarge; skin smooth, golden
yellow; firm, juicy. Dec.-May. CRAB VARIETIES
FLORENCE-Red striped; early, juicy and crisp: fine for home gardens. September 1.
RED SIBERIAN - Yellow with scarlet cheek. Bears young and abundantly. September.
TRANSCENDENT - Very large, good for cider; yellow striped red. Adapted to Montana. Sept.

## APRICOTS

Two Year, 4 to 6 feet, each 75c; 10, \$6.50; 100, \$50.00 One Year, 3 to 4 feet, each $60 \mathrm{c} ; 10, \$ 5.50 ; 100, \$ 45.00$ F. O. B. Portland; if mailed, postage extra.

BLENHEIM-Deep orange, sometimes blushed, tender, rich and juicy. Tree vigorous. Good for Pacific Coast. Last of June.
MOOSPARK - Large, yellowish, green, flesh bright orange; for canning and drying; freestone. July, August.

## CHERRIES

Two Year, 4 to 6 feet, each $\$ 1.00 ; 10, \$ 9.00 ; 100, \$ 75.00$ One Year, 4 to 6 feet, each $90 c ; 10, \$ 8.00 ; 100, \$ 70.00$ One Year, 3 to 4 feet, each 60c; 10, $\$ 5.50 ; 100, \$ 50.00$ F. O. B. Portland; if

BING - Large, dark brown or black: very fine; late: good shipping. July.
BLACK REPUBLICAN (Lewel-ling)-Large, black, sweet, purplish flesh; good shipper. June.
KENTISH (Early Richmond)Dark, red, juicy; sour, for cooking purposes. Mid-May.
LATE DUKE-Large, light red, excellent, sub-acid. Late July.

ROYAL - Above medium size: sweet, rich, juicy; good dryer and canner. July.
THE LEWIS-Best flavored, perfectly hardy. Grown extensively in the Goodnoe Hills. July-Aug. TILTON-Large; rich color, high flavor: very productive: similar to Royal: later. July.
mailed, postage extra.
LAMBERT-Largest size; deep rich red; flesh firm; fine flavor. July.
MAY DUKE-Large, rich, dark red; sub-acid. May.
ROYAL ANN (Napoleon Bigar-reau)-A magnificent cherry of the largest size; pale yellow, with a bright red cheek; flesh firm, juicy, sweet; tree a rapid grower and immense bearer. July 1.

## NECTARINES

One Year, 4 feet and up, each $\$ 1.00 ; 10, \$ 9.00 ; 100, \$ 75.00$ F. O. B. Portland; if mailed, postage extra.

BOSTON - Large, deep yellow, EARLY VIOLET-Medium; skin bright blush; flesh yellow. Best pale, shaded violet; flesh white;
for Oregon. August 1.

## PEACHES

## 4 to 6 feet, each $75 \mathrm{c} ; 10, \$ 6.50 ; 100, \$ 50.00$

F. O. B. Portland; if mailed, postage extra.

EARLY ALEXANDER-One of the largest early varieties. Almost freestone. July.
EARLY CRAWFORD - Large, yellow, red cheek; freestone. August.
ELBERTA-Large bright yellow, red cheek; juicy, sweet; freestone. Late July.
LATE CRAWFORD-Large, yellow, dark red, juicy; freestone; canning, drying. Sept.

## PEARS

First Grade
Two Year, 4 to 6 feet, each $75 \mathrm{c} ; 10, \$ 6.50 ; 100, \$ 55.00$ One Year, 4 to 6 feet, each 60c; 10, $\$ 5.50 ; 100, \$ 45.00$ One Year, 3 to 4 feet, each $50 c ; 10, \$ 4.50 ; 100, \$ 35.00$ F. O. B. Portland; if mailed, postage extra.

## AUTUMN VARIETIES

BARTLETT - Large; skin thin,
clear, lemon yellow, with soft blush; flesh white, buttery, juicy and highly flavored; best summer pear in existence. August, September.
BEURRE BOSC-Large, beautiful, russety; highly flavored; ful, russety; highly flavored; BEURRE D'ANJOU Line Large, fine EURRE D'ANJOU-Large, fine
flavor; keeps till Christmas. September.
COMICE-A splendid commercial
variety: ships well. October.
FALL BUTTER-Yellow, sweet and juicy. September.

FLEMISH BEAUTY-Large, rich and sweet; pale yellow with slight russet. Adapted to Montana and the Northwest.
SECKEL-Rich highly flavored: skin brownish green, russet brown cheek. Sept.-Oct.
P. BARRY-Fine keeper. Large, yellow. December, March.
WINTER BARTLETT-Undoubtedly one of the few pears of recent introduction of real merit. WINTER NELLIS-Medium; skin yellowish green; flesh yellowsh white: fine grained. Dec.
HALE'S EARLY - Early, free; MAYFLOWER-
tremely early; freestone. Late June. MUIR-Large, pale yellow; firm and sweet; best for drying; SALWAYe. August.
SALAY - Creamy yellow, red TUSCAN freestone. Late Sept. yellow, blushed red. July-Aug.

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## WINTER VARIETIES

p BARPY Fine
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## PLUMS

Two Year, 4 to 6 feet, each 75c; 10, \$6.00; 100, \$55.00 One Year, 6 to 8 feet, each $60 c ; 10, \$ 5.00 ; 100, \$ 40.00$ One Year, 4 to 6 feet, each $45 \mathrm{c} ; 10, \$ 3.50 ; 100, \$ 30.00$ F. O. B. Portland; if mailed, postage extra.

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BRADSHAW -- Reddish purple: adheres partially to stone. July. COLUMBIA-Largest size, brownish purple; freestone. August. PEACH-Very large: skin brownish red; freestone. July.
DAMSON SHROPSHIRE-Dark purple; very firm; flesh greenish. Late September.
GREEN GAGE-Freestone.Mid-Jul MAYNARD-Dull red, rich and sweet: sturdy, quick-growing, heavy-yielding; ripens in July. COE'S GOLDEN DROP-Large: light yellow. Late September.

## PRUNES

## First Grade

| Two Year, 4 to 6 feet....... $\mathbf{\$ 0 . 7 5}$ | $\mathbf{\$ 6 . 0 0}$ | $\$ 55.00$ |
| :---: | :---: | :---: | :---: | :---: |
| One Year, 6 to 8 feet..... $\$ 0.50$ | $\$ 4.00$ | $\$ 35.00$ |
| One Year, 4 to 6 feet..... $\$ 0.40$ | $\$ 3.00$ | $\$ 25.00$ |
| One Year, 3 to 4 feet..... $\$ 0.30$ | $\$ 2.50$ | $\$ 20.00$ |

GIANT - Largest prune known : averaging $17^{\frac{1}{2}}$ to 2 oz . each.
HUNGARIAN-Very large: dark red, juicy and sweet: good shipper. August.

ITALIAN (Fellenberg) - Large, oval, tapering at both ends; dark purple; flesh greenish yellow; separates freely from stone; best for drying. Aug.

DAMSON-Small, bluish purple: rather tart. Trees fruitfuI and hardy. August.
YELLOW EGG-Very large ; deep golden, rather acid; excellent for cooking; very showy. Aug. PRINLEW PLUM - Best large Plum for market. Good shipper. SATSUMA (Blood Plum)-Large, dark red from skin to pit, tree productive. Early July. WASHINGTON-Large, skin dull yellow, crimson blush; flesh stone. Early August.
: Two Year, 4 to 6 feet $\$ 0.75$ One Year, 6 to 8 feet....... \$0.50 One Year, 3 to 4 fcet...... $\$ 0.30$
F. O. B. Portland; if mailed, - TI

## QUINCE

First Grade, 2 Fears, each $\$ 1.00 ; 10, \$ 9.00$
Postage Extra if Mailed
APPLE OR ORANGE - Well known standard variety; early ; large, golden yellow; good for preserving or flavoring. Sept. CHAMPION - Large, yellow: cooks very tender; delicious. Oct.

NEW STANDARD (Burbank Production)-Trees large; enormous yield; sweet, fine grained and delicious: perfect free stone: skin purple.
PACIFIC-Large, sweet; same color as Italian. Good canner or to eat raw. Early August. PETITE (French)-Medium, egg shaped; violet purple; sweet, rich, sugary; very productive standard for drying. August.

PINEAPPLE-Flavor is suggest. ive of pineapple; resembles the orange quince; making superior jelly : can be eaten raw and has a most exquisite and delicious flavor. September.

$\underset{\text { Strawberry }}{\text { DIAMOND }} \underset{\text { Plants }}{\text { Quality }}$ Strawberry Plants are healthy. They are heavi ly rooted, have large, full crowns; have been carefully grown and are free from disease and pests. from disease and pests. wack for shipment in venpack for shipment in ven-
tilated crates of 1,000 plants each. They are grown. from our select strains and are always true to name; no substitution is ever allowed without instructions from the purchaser. All our plants are officially inspected in the field by the State Horticultural officers and by our own inspectors. NEW OREGON - Best, most uniform and heaviest yielding main crop strawberry. Large, firm, of fine form, average 15 to qt. box; brilliant deep rich red, with glossy varnished appearance when fully ripe. Color extends through to very center and they are never hollow, no matter how large. Flavor is suggestive of the wild berry. It is crisp and delicious, and will remain on the vine for three days without injury, keeping perfectly for many days after picking; stands handling and long shipments and will hold its color, shape and flavor when canned. An early bearer, being ready for marketing the first half of May in the Willamette Valley and holds up in size and quality throughout the season, extending until frost.
GOLD DOLLAR (Extra Early)-Large size, dark red all through, fine flavor. Foliage, heavy, large and spreading, which protects blooms from early frosts. Standard early berry in the big markets of the Northwest. PRICES-All varieties except Fall Bearing:
Prepaid, $12,30 \mathrm{c} ; \mathbf{2 5}, 50 \mathrm{c} ; 100, \$ 1.50$. Not prepaid, 25, $40 \mathrm{c} ; 100, \$ 1.00 ; 1000$,

## $\$ 8.00$.

Lots of 5000 of more, $\$ \mathbf{\$ . 0 0}$ per 1000 . Not less than 500 of a kind at 1000 rate.
EVERBEARING, PROGRESSIVEEVERBEARING, PROGRESSIVE-Fall bearing Strawberries, are satisfactory for home gardens and under some conditions prove profitable commercially, but require special care and attention, as the late fruit will be small and yield less if blossoms are not removed and plants are allowed to fruit early and continuously. When properly grown they are of splendid quality and yield heavily until frost. Rich, red color, firm and of delicious flavor. Good keepers and shippers. Blossoms should be cut back about 4 weeks before the berries are wanted. The best of its class. Post paid, 12, 60c; 25, $\mathbf{7 5 c} \mathbf{5} \mathbf{1 0 0}, \$ 2.00$. Not prepd., 12, 35c; 25, 55c; 100, \$1.75; 1000 plants, $\$ 15.00 ;$ F. O. B. Portland.

## BLACKBERRIES

ELDORADO-Large, jet black, melting, sweet and rich ; hardy, productive; fine for Oregon. HIMALAYA GIANT (Evergreen)-Strong rampant grower: everbearing, enormous yielder; berries large, juicy, coreless, sweet and firm, aromatic flavor. Its deep-rooting qualities enable it to produce a large, firm berry even in a very dry season.
LAWTON-Fruit large; very productive; well known; Oregon's most popular kind.
1-yr., ea. $15 \mathrm{c} ; 10$, $\$ 1.25 ; 100$, $\$ 10.00$.
F. O. B. Portland, Postage Extra

THORNLESS MAMMOTH BLACKBERRY (Cory)-Strong, vigorous grower; bears prolific; canes grow thick and stout until 5 or 6 feet, when they take trailing habit; should be trellised. Delicious flavor of its own, resembling the wild berry. Self-fertilizingnever been known to fail to bear. Almost seedless.
Tips-Spring del. only, each 20c; $100 \$ 12.00$. 1 -year transplanted, each $25 \mathrm{c} ; 100 \$ 20.00$.

## RASPBERRIES

## BLACK CAPS

GREGG-Fine quality: productive and hardy. PLUM FARMER-Large, black, hardy; proyear, ea. 25 c; 10, \$2.25; 100, \$20.00. 1 -year, ea. 20c; 10, \$1.75; 100, \$15.00.
F. O. B. Portland, Postage Extra

## RED CAPS

CUTHBERT-Deep rich red, large and firm: one of the best. Ripens medium to late. MARLBORO-Standard, light crimson, large, firm ; good commercial variety; ripens early. 1-year, ea. $10 \mathrm{c} ; 10,75 \mathrm{c} ; 100, \$ 3.00$.
F. O. B. Portland, Postage Extra Each 20c; 10, \$1.75; 100, \$15.0.0

## LOGANBERRIES

DARK RED, IMMENSE CLUSTERS, JUNE2.year plants, ea. 20c; 10, \$1.75; 100, \$15.00.

1-year plants, ea. 15c; 10, \$1.25; $100, \$ 10.00$.
F. O. B. Portland ; Postage Extra

## GOOSEBERRIES

OREGON CHAMPION - Very large; pale green; sweet, fine, bush strong, prolific
Each 20c; 10, \$1.75; 100, \$12.50. F. O. B. Portland, Postage Extra

## HOP ROOTS

Oregon's Famous English Cluster Hops. Regular Root Cuttings, 10c each; 3 for 25 c ; 75 c doz.; $\$ 4.00$ per 100 , postpaid.

## HORSERADISH ROOTS

Plant in the spring 18 by 24 inches apart. Set the whole root small end down.
Prices: 2 for $15 \mathrm{c} ; 50 \mathrm{c}$ per doz.; $\$ 2.00$ per 100. Low prices by the 1000 .

## RHUBARB

PANAMA RHUBARB
Everbearing, growing continuously throughout year, summer and winter. Frost will not kill it, and in the absence of frost makes its best and most profitable growth during the winter. More than twice the size, stalks much heavier and larger, full grown stems often 3 feet long, weighing 2 pounds. The flavor is of the plum type. Comparatively free from acid, requires less than half the amount of sugar ordinarily used, should not be peeled. All the roots are what is known as sub-divisions.
Culture-Plant crown even with surface of ground 3 to 4 ft . apart in row and rows 4 to 5 ft. apart: water immediately; keep well cultivated close to plant for 2 ft . distance. Irrigate each week for 2 months, cultivate after each irrigation.
Postpaid, each 35c; doz. \$3.75; 100, f. o. b. Portland, $\$ 30.00$.

RIVERSIDE GIANT RHUBARB-Has stood the test of time; crisp, tender, free from stringiness, good color, delicious, distinctive flavor. The skin is so thin it disappears in cooking. Has every good quality of a commercial rhubarb and is so vigorous and productive that over 35 tons per acre is a conservative estimate for the season. Cuttings begin in March and usually four are made, the last one in July.
Each 15c; doz. \$1.50; 100, \$7.50.
F.O.B. Portland. Special Prices on Large Lots Don't plant rhubarb along a fence, near trees or other crops. Give plenty of room. Write for cultural directions.

## ASPARAGUS

GROW GIANT WASHINGTON PEDIGREED ASPARAGUS

The Best in the World
The U. S. Government in its experiments developed the varieties of Washington, Mary Washington and Martha Washington Asparagus as showing the best results. Our grower of Giant Washington Asparagus seed under the supervision of the U.S. Government has produced the superior asparagus we list under the name "Giant Washington", by breeding the female plants, Martha and Mary, to the male plant Washington, resulting in the "Giant Washington", which combines all the best characteristics of the three. This seed is grown especially for us, and our plants are all grown from this seed by one of our best growers. Be sure to get the genuine.
PRICE: No. 1 (formerly listed 2 -year) plants, postpaid, doz., $50 \mathrm{c} ; 50, \$ 1.00 ; 100, \$ 1.50$. Not prepaid, $50,90 \mathrm{c} ; 100, \$ 1.25 ; 1000, \$ 8.00$.
PRICE: No. 2 (formerly listed 1-year) plants, postpaid, doz., 40c; 50, 75c; 100, \$1.25. Not prepaid, $50,60 \mathrm{c} ; 100, \$ 1.00 ; 1000, \$ 6.00$. Write for quantity prices.

## VEGETABLE PLANTS

## BROCCOLI

Our famous "St. Valentine" Broccoli, a Winter Cauliflower. Plants can be set after June and are ready to use in March. Postpaid, doz. 30c; 100, \$1.50. Not prepd., $100, \$ 1.25 ; 1000, \$ 12$. Write for prices on large lots.

## CABBAGE

Transplanted and "pulled" plants in all standard varieties. Early and late at seasonable times. First transplanted ready about March 10 th.

## TRANSPLANTED-

Postpaid, doz. 25c; 100, \$1.25.
Not prepd., 100, \$1.00; 1000, \$8.00

## NOT TRANSPLANTED-

Postpaid, doz., $15 \mathrm{c} ; 100, \$ 1.00$
Not prepaid, $100,75 \mathrm{c} ; 1000, \$ 6.00$.

## CAULIFLOWER

Cauliflower seed is scarce and high in some varieties and plant prices subject to change. Early varieties; prices not prepaid.

Transplanted, dozen, 30c; 100, \$1.75; 1000, \$12.00. Not Trans. planted, 100, \$1.25; 1000, \$10.00.

## CELERY

Fine, healthy plants in early Winter; varieties furnished in season or grown to order. Transplanted.
Postpaid, doz., 30c; 100, \$1.25.
Not prepd., 100, \$1.00; 1000, \$8.50.

## TOMATOTHANTS

Tomato plants should not be set out before the weather is settled and ground arm, unless they are protected from frost. TRANSPLANTED-
Postpaid, doz., 30c; 100, \$1.50.
Not prepaid, 100, \$1.25; 1000; \$10.

## SWEET POTATO PLANTS

Plants should be set after ground is warm. Rich. sandy bottom is best, but any good garden soil.

Prices for seasonable delivery: Postpaid, doz., 35c; 100, \$1.50. Not prepaid, doz., 25c; 100, \$1.25; $1000, \$ 10.00$.

## KALE

When you order be sure to state whether you want Garden Kale or "Cow" Kale. Thousand Head or "Cow" Kale-
Postpaid, doz., 20c; $100, \$ 1.25$. Not posipd., 100, \$1.00; 1000, \$6.00.
Garden or Curly Kale-
Postpaid, doz., 25 c ; 100, $\$ 1.50$. Not postpd., 100, $\$ 1.25 ; 1000, \$ 10$.

# Use DIAMOND 

## Fertilizers

DIAMOND QUALITY Fertizers are complete fertilizers of the highest grade and concentration. No inferior ingredients or cheap fillers are used in their preparation, Bone Meal and Tankage forming the base, to which is added the necessary Potash, Nitrogen and Phosphoric Acid. Each package is marked plainly, showing the percentages of available plant foods so you can know exactly what you are getting.

Based on these tests, our Diamond Quality Mized Fertilizers have been developed and have consistently been perfected. Full descriptions of each Fertilizer are given below. The first figure in the formula is the per cent of nitrogen, the second figure the per cent of phosphorous and third figure the per cent of potash.

## "DIAMOND A" <br> GENERAL VEGETABLE <br> FERTILIZER <br> 2-10-2

Our all-purpose fertilizer for use on any crop, especially prepared for grain and general farm crops. The base is bone meal and bone tankage with the necessary chemical elements to make the formula.

 Ton F.O.B. Portland

## "DIAMOND B"

HEAVY CROPPER
FERTILIZER
3-7-10
This fertilizer is mixed to give the best possible ratio of nitrogen, phosphorus and potash for heavy root crops and general garden truck. Especially fine for onions. A big favorite among the market gardeners.

|  |  |
| :---: | :---: |
|  |  |

Ton
F.O.B. Portlan

## For <br> Better Crops

 each fertilizing ingredient. In our own laboratory, scientific tests are being made continuously to prove the results of the practical experiments and investigations under regular farming conditions.For over thirty years the Portland Seed Company has been working in co-operation with the farmers of the Pacific Northwest in studying, exPacific Northwest in studying, ex-
perimenting and demonstrating by perimenting and demonstrating by

## "DIAMOND" <br> FRUIT and BERRY <br> FERTILIZER 4-6-8

Experience has proved this to be the best formula for all-around use with fruit trees and berries of all kinds, and especially in. cluding strawberries, on account of its high nitrogen content.
10 lbs. $\qquad$ $\$ 0.50$
$\$ 3.25$
$\$ 82.00$

Ton 1 -
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## "DIAMOND" <br> GARDEN and LAWN GROWER 4-7-3

Promotes a vigorous, healthy growth of the lawn, roses, shrubs, flowers and the home garden. Contains no weed seeds to cause trouble as is the case with manure. 100 lbs is suffic-


#### Abstract

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100 liss.
S 0.50
Ton... $\qquad$
F.O.B. Portland
F.O.B. Portland

ASK FOR SPECIAL FERTHLIZER BOOK $\quad \begin{aligned} & \text { Giving complete information about all types of crop requirements, what to use, } \\ & \text { how to use it. Instructive, reliable; of great value to all interested in fertilizers }\end{aligned}$

## SHEEP GUANO

The best natural manure, dried and ground to a fine powder. Soluble, quick in action and practically free from weed seed. Especially fine for lawns, as there is no trash to bother mowers or tools. A complete odorless fertilizer, containing nitrogen, phosphorus and potash; combined nature's own way and recommended for vegetables, flowers, roses, shrubs, plants, florists; use, etc.
100 Hb . sack \$1.50, f.o.d. Portland.
(On larger quantities write for price)

## BONE MEAL

One of the best fertilizers; a valuable enricher of the soil ; containing most of the elements needed. Finely ground.
10 lbs. $50 \mathrm{c} ; 100 \mathrm{lbs} . \$ 2.50$; ton \$48.00; f.o.b. Portland.

## TANKAGE

Ground meat scraps and bone, dessicated in a vacuum. Very rich in phosphoric acid and nitrogen.
100 lbs. $\$ 2.80$; ton $\$ 54.00$; f.o.b. Portland.

## FISH GUANO

This is the fish cooked, dried and ground; a strong fertilizer, rich in nitrogen and phosphorous and largely used by vegetable growers. Not recommended for city use as odor is objectionable. Write for price.

Diamond Plant Food
FOR HOUSE PLANTS AND FERNS Everyone should have a package of this blant food in the house for use on ferns, plant food in the house for use on ferns, palms and indoor plants of all kinds. A complete highly concentrated powerful fertilizer, clean, odorless, wonderfully invig
orating to all plants, producing luxuriant orating to all plants, producing luxuriant
foliage and larger and more brilliant flowers. A pound package will feed a dozen large plants for a whole year.
$1 / 2$ lo. plig. 25 c , postpaid 35c; 1 lb. plig. 40 c, postpaid 50 c .

## SUPERPHOSPHATE

A concentrated form of phosphoric acid, the cheapest and best form in which to get phosphoric acid. Contains 17 to $18 \%$ available phoric acid. Cosphoric acid.

10 lbs. $50 \mathrm{c} ; 100$ lbs. $\$ 1.75 ;$ ton \$33.00; f.o.b. Portland.

## NITRATE OF SODA

The very best for immediate results in stimulating and forcing the growth of any crops or plants.
10 lbs. $85 c ; 100$ lbs. $\$ 3.35 ;$ ton \$\$5.00; f.o.b. Portland

## MIRIATE OF POTASHI

The best form of securing potash. Carries upward of $50 \%$ of potash.
100 lbs. \$2.60; ton $\$ 50.00 ;$ f. o. b. Portland.

## Diamond Brand Granulated Peat Moss

Especially recommended for use about roses, the garden, greenhouse, pot plants, window boxes and for growing bulbs, etc. It is excellent for clayey soils, light, sandy or gravelly soils and as a mulch on strawberry beds, perennial beds, and as a top dressing for evergreens. The best rose growers recommend it.

Adds humus to the soil, increasing its fertility and its ability to absorb and hold water and other plant foods. Increases the luxuriancy of lawns. Should be used in all landscape gardening mixed with the soil and in all bulb beds. Comes in bales containing about 13 cubic feet ing mixed with the soil and in all bulb beds. Comes in bales containing about 13 cubic feet and is used at the rate of a bale to 250 square feet. The use of peat moss is
in the U.S. A., but its increasing use will add much to value of gardens.

Price per bale $\$ 3.50$; also in sacks of about 30 lbs ., reground, price per sack $\$ 1.25$, f.o.b. Portland.

## H. O. LIME

Superior to fertilime. A blended mixture of raw ground limestone and hydrated lime. More effective than raw ground lime-rock and goes about twice as far. Especially recommended for sour soils and poultry floor coverings.

100 lbs . $\$ 1.35$; ton $\$ 23.00$; f.o.b. Portland.

## LAND PLASTER OR GYPSUM

Made from pure gypsum, free from clay or other foreign matter, used particularly for clover crops.
$10 \mathrm{lbs} .25 \mathrm{c} ; 100 \mathrm{lbs} . \$ 1.00$; ton \$17.00; f.o.b. Portland.

## SULPHUR

DIAMOND "S" REFINED F L O UR SULPHUR, 110 lb . sack $\$ 3.30$, f. o. b. Portland.

TORO RRAND PREPARED SULPHUR, 110 lb . sack $\$ 3.75$, f. o. b. Portland.
ANCHOR VELVET FLOWERS OF SULPHUR, 110 lb . sack $\$ 5.75$, f. o. b. Portland.

Write for prices on large quantities.

## 䁌 (1) AND <br> UREA (BASF)

92 times stronger than manure. For flowers, vegetables, berries, shrubs, lawns and trees. Highly concentrated, containing $46 \%$ available nitrogen (equivalent to $551 / 2 \%$ ammonia). Nitrogen is one of the principal constituents of plant food, the first to affect plants, producing quick, vigorous growth. Nearly all soils are deficient in nitrogen. Use 1 oz . to square yard worked into the surface soil after planting.
$1 / 2 \mathrm{lb}$. tin 40 c , postpaid 50c; 1 lb . tin 75 c , postpaid $85 \mathrm{c} ; 50 \mathrm{lb}$. bag $\$ 12.00$, f.o.b. Portland.

# USE NIIRACIN 

 THE ORIGINAL SOIL INOCULATORAlfalfa, clovers, soybeans, vetches, peas, beans, cowpeas and other legumes should always be inoculated with Nitragin. The lack of necessary bacteria in the soil is often the cause of a poor legume crop-a weak startor a total failure.

## BENEFITS OF INOCULATION

The principal reasons for inoculation can be stated in five short paragraphs, viz:

First - Inoculated legumes take nitrogen from the air to supply the plant, resulting in faster growth, earlier maturity and larger crops.

Second-Inoculated legumes take up more nitrogen than the plant itself requires, the surplus remaining to the benefit of future srops.

Third - Inoculated legumes develop larger root systems than when not inoculated and therefore reach the immense stores of potash and phosphorus in the sub-soil, bringing them up to supply the plant. When the roots and stubble decay these elements are also returned to the soil in a form available for future crops.

Fourth-Inoculated legumes, by taking their nitrogen from the air, save the soil. When not inoculated they drain the soil of its nitrogen just the same as wheat or timothy or other leguminous plants.

Inoculated legumes contain more protein matter than when not inoculated, greatly increasing their feeding value.

Summary-Inoculation hastens maturity, increases the crop, improves its quality, enriches the soil and saves fertilizer bills.
Sold on the BUSHEL basis-not acre sizes. The one bushel size will inoculate one bushel of any legume seed, price $\$ 1.00$, other sizes in proportion. If you sow 15 pounds seed per acre, you pay $\$ .25$ per acre inoculating with NITRAGIN-not $\$ 1.00$ or more.


Sold in tins packed in a rich, soil-like granular medium, easy to mix with seed. Contents always fresh and bacteria active and vigorous.
The Original Soil Inoculator-registered in the U. S. Dec. 6, 1898 -over 30 years ago.

Prices for Field Nitragin $1 / 4 \mathrm{bu}$. size inoculates 15 lbs . seed $\$ 0.40$ $1 / 2$ bu. size inoculates 30 lbs . seed . 60 1 bu. size inoculates 60 lbs . seed 1.00 5 bu. size inoculates 5 bu. seed 4.75 F. 0. B. Portland; Postage Extra

## NITRAGIN FOR GARDEN USES

Every garden needs Nitragin; garden size is for Peas, Sweet Peas and Beans, including Lima (3 in 1 Inoculant). 20c

## IMPORTANT

PROTECT YOURSELF: Don't huy legume cultures without a date on labels. Date, same year seed is sown. They may be several seasons old and worthless. Agricultural colleges recommend this protection. Every NITRAGIN label is dated.

# ๔upowi Semesan SEED DISINFECTANT Makes Seeds Healthy 

Controls Diseases, Hastens Germination, Invigorates Seedling Growth, Produces Sturdier Plants, Increase Yield and Quality

Seed, plant and soil dis. eases rob you of from 10 to $90 \%$ of the fruits of your land and labor-and need. lessly. You can change this loss into a gain by stopping disease before it gets a start through disinfecting your seeds, seed pieces and soil with Du Pont Semesan.

Semesan is the only organic mercury disinfectant which can be applied in either the liquid or convenient dust form. It prevents or controls a most diversified variety of diseases borne by seeds, seed pieces, bulbs, plants and grafts, as well as many of those which infest the soil.

Harmless to seed and plant life but deadly to disease organisms. It generally hastens germination, produces sturdier plants and increases both the quantity and quality of crop yields.

Semesan treatments cost only from $1 / 4 \mathrm{c}$ to 1 c per pound of seed. Easily and quickly applied. Recom. mended by agricultural colleges, county agents and large growers in every sec. tion of the country.


## SEND FOR FREE CROP BOOKLETS

These booklets contain information that will enable you to get more out of the seed you plant and that means greater profits. They're free!

They contain the latest information on the subject of preventing and controlling the seed, plant and soil diseases that ravage crops, reduce yields and profits. In them you will also find the story of Semesan Disinfectants and how easily they can be applied to effectively prevent and control these diseases.

## Semesan Controls "Damping-Off" <br> Semesan provides the one effective method of controlling the various damping-off

 diseases. It is being used with wonderful results in all sections of the country on grains, field crops, vegetables, flowers and ornamentals. Semesan is recommended hy American Rose Society for treatment of brown canker and other diseases of rose bushes.
## PREVENTS AND CONTROLS BROWN PATCH

Brown Patch of grasses, a disease which swiftly destroys the expensive turf of golf greens, lawns, courts, can be prevented, and, if treated soon enough, cured with Semesan.

## ASSURES DISEAST-FREE POTATOES

Semesan Bel, prepared especially for the seed disinfection of potatoes, in addition to its advantages of dust application, is the only disinfectant which can be applied as an instantaneous dip. Semesan Bel in. astantaneous dip is sweeping the country and rapidly displacing the formaldehyde
and bichloride treatments.
Semesan Bel, by controlling diseases which sap the vitality of seed potatoes, gives the seeds a chance to germinate quickly, producing sprouts of healthy vigor from which grow increased yields of clean, healthy plants and tubers.



All prices f. o. b. Portland

## SPRAY MA <br> DRY POWDERED-LUCAS BRAND

 Contains only Arsenic and Lead Oxides. No Fillers. Mixes Quickly and Easily-Stays Mixed Longer and Sticks Better to leaves, branches and fruit than Any Other Arsenate.A light, fluffy powder that cannot freeze, dry out, cake or lose its strength -carries the highest possible percentage of arsenic oxide, 33 per cent-is always uniform and requires only 1 lb . to 50 gallons of water. Efficient, economical and convenient. Highest percentage of killing power. Prices, $1 / 2 \mathrm{lb}$. 25c; $1 \mathrm{lb} .45 \mathrm{c} ; 4 \mathrm{lbs} . \$ 1.25 ; 25 \mathrm{lbs}$. $\$ 5.50$; 1 case 12.4 lb . pligs. $\$ 10.00$; f. o. b. Portland. Write for quantity prices. POISON-CANNOT BE MAILED


## Volck

Effective against practically all of the 400 or more species of scale insects found on plants. An oil emulsion, perfectly safe on tender plants. For all kinds of plants, flowers, vegetables, berries, shrubs, trees and fruit trees. Prevents rose mildew. Easy to handle, no disagreeable odor, no smarting of eyes or harsh skin. Simple and safe. Use one part to 50 parts of water. Can be used with Bordeaux. $1 / 2$ pint 500 ; 1 pint $75 c ; q u a r t$ \$1.09; 5 gallon can $\$ 12.00$; f.o.b. Portland.
WHALE OIL SOAP
For aphis, plant lice, etc. Per bar, 20c; f. o. b. Portland.

## DORMOIL

As a SUMMER SPRAY - Very efficient for young San Jose Scale and certain Aphis, when diluted with 50 to 100 gallons of water to 1 gallon of oil-depending on the foliage, which, if very tender, should be sprayed with a weaker solution than 1 to 50 .
As a WINTER SPRAY-For San Jose Scale, Pear Scylla, Leaf Roller, Woolly Aphis use gallon of oil to 15 or 16 gallons of water. Price: qt. 40c; gal. 95c; 5 gal. \$3.50; 10 gal. $\$ 6.50$; bbl. $\$ 22.00$; f.o.b. Port. land.

## FORMALDEHYDE

Will Prevent Oats Smut, Stinking Smut of Wheat, Barley Smut and Leaf Stripe.

Use 1 pint of formaldehyde in 40 gallons of water for wheat and barley. Dip oats with one pint formaldehyde in 30 gallons of water. For potato scab soak potatoes for 2 minutes in a warm solution of 1 pint formaldehyde in 15 gallons of water.

Pts., 60c; Qts., $\$ 1.00 ;$ Gal., \$3.25; F. O. B. Portland.

BLUESTONE-(Vitriol)—Lb. 20c; per 100 liss., market price. Not mailable.
PARIS GREEN - (Lion Brand) - The standard of purity. Guaranteed superior to other makes. Price: $1 / 4 \mathrm{lb} .25 \mathrm{c}$; $1 / 2 \mathrm{ll} .40 \mathrm{c} ; 1 \mathrm{lb} .75 \mathrm{c}$. Not mailable.

## Napthalene

For Treating Soil for Insect Pests Used by truck gardeners, bulb growers and for field crops to drive away grubs, wire worms, slugs, centipedes, aphis, etc. Safest, most powerful insect repellent that can be used in quantities at low price. In granulated form, with strong odor like moth balls. Has been used in Europe for years. Drives off caterpillars, stupifies insects.
Prices: 1 lb. can 25c; 5 lbs $75 \mathrm{c} ; 10$ Ilbs. $\$ 1.25 ; 25$ lbs. $\$ 2.25 ; 50 \mathrm{lbs} . \$ 4.00$; 100 Ibs. $\$ 7.50 ;$ F. O. B. Portland.

DRY BORDEAUX MIXTURE-When mixed with cold water in the propor. tion of 9 lbs . to 50 gallons, gives a standard Bordeaux Mixture. Keep in a tightly closed package. Price, $1 \mathrm{lb} . \mathbf{3 0 c}$; 5 lbs. $\$ 1.50 ; 10$ lbs. $\$ 2.50 ; 25$ lbs. $\$ 4.50 ; 50 \mathrm{lbs} . \$ 8.50 ; 100 \mathrm{lbs} . \$ 15.00 ;$ 200 lbs. $\$ 27.50$; f. o. b. Portland. Poison, cannot be mailed.

## Dry Lime SULPHUR

Controls all scale and fungus diseases for which Lime-Sulphur Solution is recommended. More convenient to handle and saves freight on water. Put up in air-tight packages which should be used when opened. For Winter spray use 10 to 14 lbs . to 50 gallons of water. For Summer in combination with Arsenate of Lead use 2 to 3 lbs. to 50 gallons of water.

Price: 1 lb. 35 c ; 5 lbs. $\$ 1.00$; 10 lbs. $\$ 1.75$; 25 lbs. $\$ 3.00 ; 100$ lbs. $\$ 9.50$. F. O. B. Portland.

## Diamond Lime and Sulphur Solution

Always uniform and of the highest efficiency, tests 30 Baume Scale, made of the purest and best quality of Sublimed Sulphur and of Lime, free from sediment, and ready to mix just as you get it. Add 11 gallons of water with each gallon of Lime and Sulphur Solution. 1 qt. 30c; 1 gal. ${ }^{4} 50$; 5 gals. $\$ 2.40$; no-gal. bbl. \$11.00; F. O. B. Portland.

## Corona Coppercarb

For dusting the grain with copper carbonate. It will supplant the commonly known and very distasteful formaldehyde method because the copper dust gives successful results in the control of the diseases, but does not in the slightest degree hurt germination.
Treating the grain with Corona Coppercarb can be carried out by a shoveling over process. The operation is very simple and does not require much time. A common barrel churn will dust a large quantity of seed.

Use 2 to 4 ounces per bushel of Seed.
Price, 5 lbs. $\$ 1.50 ; 25 \mathrm{lb}$. cans only \$5.50; F. O. R. Portland.
HAMMOND'S SLUG SHOT - For de stroying slugs, cabbage and turnip flea, currant worms, etc. 5-lb. pkg 75c, postpaid 90c.
HAMMOND'S GRAPE DUST-To pre vent mildew on roses, grapes and gooseberries. 5 -lb. pkg. $\$ 1.00$, post paid \$1.15.
BUHACH-Oz. 30c; 1/4 lb. \$1.00; 1 lb \$1.75; F. O. B. Portland.
TREE TANGLEFOOT - For caterpı lars, moths and worms. Protects agains? all climbing insects. One lb. makes a band 9 feet long. Price: 1 lb. 60c; 5 lbs. $\$ 2.75$; 10 lbs. $\$ 5.25$; 25 liss $\$ 11.100$ F. O. B. Portland.
LEE'S GARDEN INSECTICIDE-(Non poisonous)-One that is suited to the needs of the average gardener, and is guaranteed to give satisfaction. ] lb. sprinkler top can, 30c;2 lb, sprink ler top can, 50c. Postage extra.
P. S. CO. APHISCIDE

Our Best Summer Spray for Roses
A clean, efficient spray for aphis thrip and kindred insects on plants of any kind. Specially fine for house plants. as it has no offensive odor and will not injure or stain the plants. Price, at 35c: gal. 65c: postage extra.

## EVERGREEN

## A NON-POISONOUS INSECTICIDE

A sure killer of most plant insects and yet is absolutely non-poisonous to human beings, live stock or birds-it is positively not a poison. It is easy to use and will not injure or discolor the tenderest shoots, does not deteriorate, does not form a sediment or clog sprayers, will not corrode metal. The dilution ranges from 1 part to 100 for cutworms up to 1 part to 800 of water for aphis. A little goes a long $11 / 2$
oz. bottle $35 \mathrm{c} ; 6 \mathrm{oz}$. bottle $\$ 1.00$ oz. bottle \$2.00; 32 oz. bottle \$3.85: 1 gal. boitle $\$ 13.00 ;$ f. o. b. Portland.

## CLENSEL

## (Patterson's Concentrated)

A highly concentrated spray (one gal lon will make from 25 to 50 gallons of spray) used on ROSES, SWEET PEAS BEANS and other plants as a preventa tive against Aphis, Red Spider, Mildew and many other forms of diseases. It is also very beneficial to the foliage on plants. Being non-poisonous it can be used safely. $1 / 2$ pints 60c; pints. $\$ 1.00 ;$ quarts, $\$ 1.75$; gallons $\$ 5.50$ Postage extra.

##  <br> YEGETABLE SPRAT

For destroying and preventing mag gots, grubs and worms that infest tur nips, radishes, beets, rutabagas, cab bage and cauliflower, etc., also recom mended for combating crown borers in strawberries. $1 / 2$ pt. 50c; pt. $75 c ;$ qt \$1.25; gal. $\$ 2.75$; postage extra.

## BLACK LEAF 40

Destroys Aphis, Thrips, Leaf Hoppers on all tree, bush and vine fruits, vegetables, field crops, flowers, shrubs also Apple Red Bug. Pear Pscylla and similar soft-shelled sucking insects-all without injury to foliage. Combines readily with other sprays. $40 \%$ Nicotine 1 oz., 6 gals. spray .-.............................. 35 c $1 / 2 \mathrm{lb} ., 40$ to 120 gals. spray........ $\$ 1.25$ 2 lbs., 160 to 500 gals. spray........ 3.50 10 lbs., 800 to 2500 gals. spray.... 13.50

Not mailable. F. O. B. Portland

[^2]
## "NICO.FUME" LIQUID

For fumigating and spray for greenhouse work. Kills Aphis, Red Spider, Mealy Bug, Thrip, etc. 1 lb . can $\$ 2.25: 4$ lb. can $\$ 8.00$ : 8 lb . can $\$ 15.00$ : f.o.b. Portland. Not mailable.

# COMPRESSED AIR SPRAYERS 



## FAVORITE HUDSON

4 gallon approximate capacity. Size $20 \times 71 / 2$ inches. Pump is $13 / 4 \times 15$ inches, made of brass tubing; brass valve. Malleable handle and fittings will not break. Ship. wt. 10 lbs With galvanized tank, \$6.00. With brass tank, $\$ 9.20$.

## JUNIOR HUDSON

$21 / 2$ gallon approximate capacity. Size $16 \times 6$ inches. Same as Favorite except smaller, lighter to carry. Ship. wt. 9 lbs. With galvanized tank, \$5.50. With brass tank, \$8.25.

## ACME JUNIOR

1 gallon capacity. Size $12 \times 5 \frac{1}{2}$ inches. Ship. wt. 6 lb . With brass tank, \$6.50.

All prices f. o. b. Portland



CONTINUOUS HAND SPRAYER - Delivers a inely divided atomized mist continuously. Brass

DOUBLE CYLINDER BUCKET SPRAY PUMP
All operation is on the down stroke which tends to steady and hold pump down. Continuous spray. Solid bronze ball valves, all working parts brass, non - corroding. With hose and nozzle. For fine or coarse spray. Weight $71 / 2 \mathrm{lbs}$. Price cach $\$ 4.75$.
F. O. B. Portland

CADET DUSTERCovers every surface with a cloud of dust hunts every crack, no thing escapes treat-

LEVER HANDLE

The lever handle and large air chamber make this the most powerful bucket pump and the easiest one to operate. All working parts are solid brass with brass ball valves and patent agitator. Graduating nozzle to throw a fine or coarse spray or a solid stream. Weight 8 lbs. Price $\$ \mathbf{6 . 0 0}$.
F. O. B. Portland


## BUCKET SPRAY PUMP

aozzle, adjustable fine or coarse spray, brass ball ralve, capacity 1 quart, weight $11 / 2$ lbs.
Heavy tin tank and pump, price 75 c , postpaid 85 c . Galvanized tank, tin pump, 85 c , postpaid 95 c Brass tank, brass pump, $\$ 1.25$, postpaid $\$ 1.35$,


ASPINWALL SPRAYER, No. 30 - Strong tin tank, holds about 1 quart. Weight $11 / 2$ lbs. Price 40c (50c postpaid).


FOG SPRAYER-Especially designed for vaporizing fly oils and household insecticides so fine as to remain in suspension in the air. Heavy tin, size 1 pint; price 40 C (50c postpaid).


GLASS JAR SPRAYER-HaS quart Mason jar for tank. Easy to change from one sproy to another by simply cºnging jars. Has wide fan-shape spray. Wt, 3 lbs . Price $\mathrm{E}_{\mathrm{ob}} \mathrm{c}$ (postpaid $\mathbf{7 5} \mathrm{c}$ ).


See page 84 for Spray Hose

## SPRAY NOZZLES AND FITTINGS

NON-CLOG NOZZLE-The best hop nozzle, SENECA NOZZLE-Gives a very wide spray, perfect spray, produecs a fog in great volume at a light pressure. Price 75 c . NON-CLOG ANGLE-Weight 9 oz . Price 85 c . VERMOREL NOZZLE, with degorger; gives a conical discharge. Wt. 4 oz. Price $\$ 1$. NOZZLE ELL-Weight 2 oz . Price 25 c . HOSE CONNECTION-For nozzle or exten sion. Weight $1 / 4 \mathrm{lb}$. Price 35 c . CALDWELL BANDS $1 / 2$ or $3 / 1 \mathrm{in}$. Doz. 35 c . DOUBLE CUT-OFF-Wt. 2 lbs. Price $\$ 2.50$. BAMBOO EXTENSION-Has iron pipe inside of bamboo, threaded for nozzles and cock.
$\begin{array}{lccccc}\text { Lgth, ft. } & 2 \text { to } 4 & 6 & 8 & 10 & 12 \\ \text { Price } & \$ 1.15 & \$ 1.45 & \$ 1.75 & \$ 2.00 & \$ 2.25\end{array}$ With Stopcock, add $\$ 1.00$
discharge easily graduated. Excellent for whitewashing. Weight 5 oz . Price $\$ 1.25$. BRASS Y- $1 / 4$-inch, for nozzle only. 50 c . HOSE REDUCER-For nozzle or extension. Weight 3 oz . Price 45 c .
BRASS YERDON'S BANDS- $1 / 2$ inch. Each 10 c ; doz. 75 c ; postpaid 85 c .
STOPCOCK-Weight $1 / 2 \mathrm{Ib}$. Price $\$ 1.00$. SPRAY HOSE COUPLINGS-21/2-in. shank, for heavy pressure spraying. For $1 / 2$ or $3 / 4$ inch hose, price pair 75c, postpaid.
HOSE COUPLINGS-For garden hose 1/ainch or $3 / 4$-inch, complete. Pair 40 c ; postpaid 45 c .
HOSE WASHERS—1/2-in., rubber. Doz. 10 c .

## Close-out Prices on SPRAY PUMPS

We are discontinuing the handling of these larger pumps and are offering these special prices as long as our stock lasts. If you are in the market you can save money now.


GOULD'S MONARCH TWO-CYLINDER SPRAY PUMP NO. 1640-One of the best of the larger pumps. Has long lever which can be shifted to pull or push, lift or drop at any time operator desires a relief; pump is outside of barrel, easy to care for; cylinders are perpendicular: no valves in plungers ; packing is outside and can be tightened in a minute, valves are each reached by simply unserewing its cap; 2-inch cylinder.

OUTFIT A - Pump only with strainer and hose connection. Regular price $\$ 40.00$
Sale price $\qquad$ $\$ 32.00$
OUTFIT B-Pump with 6 ft . $3 / 4$ in. suction hose. Regular price...................... $\$ 42.00$ Special price ............................................. $\$ 34.00$
OUTFIT C-Pump with suction hose, 25 ft . best spray hose, 8 ft . bamboo extension. Globe valve and nozzle. Reg. price $\$ 50.00$ Globe valve and nozzle. Reg. price $\$ 50.0 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ ALL PRICES ON SPRAY PUMPS F. O. B. PORTLAND


FRUITALL BARREL SPRAY PUMP NO. 1188-Working parts are all made of bronze, valves are easy to reach automatic agitator, thoroughly mixes liquids and keeps all solids in suspension. For mounting on end of barrel only. This is a well known standard pump.
OUTFIT A-Pump only.
Regular price $\$ 16.50$
Special price $\qquad$ $\$ 12.75$
OUTFIT B-Pump with 15 ft . of spray hose and Vermorel nozzle. Regular price \$21.00. Special price ............................ $\$ 16.95$
OUTFIT C-Pump mounted in barrel, 15 ft . hose, 8 ft . bamboo extension and Vermorel nozzle and cut-off complete. Regu lar price $\$ 26.50$. Special price.......... $\$ 21.75$


POMONA BARREL SPRAY PUMP NO. 1100 -The best orchard spray pump for mounting on a barrel. All working parts bronze including valves and seats. Plunger is outside packed. Valves easy to reach. Adjustable stroke. Long lever. Double paddle automatic agitator thoroughly mixes liquids.

OUTFIT A-Pump only. $\$ 2250$
Price
OUTFIT B-................................ ft . hose, 8 ft . bamboo extension with cut-off, one Vermorel nozzle (no barrel). Price....... $\$ 28.50$ OUTFIT C - Same as outfit B, and mounted in barrel. Price ................... $\$ 31.00$ OUTFIT D-Pump with two $121 / 2 \mathrm{ft}$. leads spray hose, two Vermorel or Seneca nozzles, two 8 ft . bamboo extensions witb cut-off; pump mounted in barrel...... $\$ 36.50$

## SPRAY HOSE

Spray Hose can be cut in any length desired. When less than 50 ft . length is ordered, add 75 c for couplings on each length
MONARCH SPRAY HOSE-Absolutely the best we can buy; the rub-
ber is of exceptionally high quality and we strongly recommend it to orcbardists. $1 / 2$-inch size, per foot 24 c .
AJAX SPRAY HOSE-A splendid moulded hose, stands high pressure. $3 / 8$-inch size, per foot 16 c .

PRICES F. O. B. PORTLAND

## GARDEN HOSE

Furnished in 50 -foot lengths, coupled ready for use.
CORLUGATEID NON-KINKABLE GARDEN HOSE-Especially recommended for florists and gardeners for hard service. 5/ inch, per foot 14c; f. o. b. Portland.


SCHROETER'S IM. PROVED SELF-SET TING MOLE TRAPSets automatically, no danger to operator. Moles cannot get past alive. Operates easily, has 8 steel prongs. Height $11 \frac{1}{4}$ in. Width 4 in., wt. 3 lbs. Each \$2.25. Postage extra.

## POISON CARTRIDGES

FOR GOPHERS, MOLES, ETC.
For the extermination of Moles, Ground Squirrels, Gophers and Prairie Dogs.

SAFE-SURE—ECONOMICAL
Will not explode. Do not deteriorate. No danger to Live Stock, Domestic Fowls or Wild Game.
Hold in mouth of squirrel's burrow, light fuse with match; after it is ignited and burning freely, place as far as possible into the burrow. Cover bole with clod of dirt, enough fine dirt to seal tightly so that no gas fumes can escape.

Doz. 60s; f. o. b. Portland.


Out O'Sight Mole Trap
One of the best. Sure to "get them." Weight, 2 los. Price $\$ 1.00$; postage extra.
"WOOD-LARK" SQUIRREL \& GOPHER POISON
Quick, Certain, Deadly
Exterminates Squir rels, Sage Rats, Field Mice, Pocket Gophers, Prairie Dogs, Crows. Use early when green lood is scarce. Price: 1 lb. plyg. 60c. (Unmailable.)


Fits the hole, a sure killer and the most satis. factory trap. Weight 1 lb . Price 75 c ; postage extra.


THE NEVER-FAIL GOPHER GUN AND BURGLAR ALARM
For the Positive Destruction of Gophers, Moles, Squirrels, Rats and Other Burrowing Pests. Use .38 blank cartridge. Iost paid \$2.00.

## OFFICIAL RAT TRAP

The Government selected this trap from among thousands of models submitted. Spring releases with either upward or downward pressure.

Official Rat Trap, weight 1 lb., Each $20 c$.
Official Mouse Trap, weight 4 oz., Each 5 c. Postage Extra

## Rams PlanetJr. Garden Tools (rarats)



No. 4 PLANET JR. COMBINED HILL AND DRILL SEEDER, WHEEL HOE, CULTIVATOR AND PLOW-Soon pays for itself in the family garden as well as in the larger acreage. Sows all garden seeds (in drills or in hills), plows, opens furrows and covers them, hoes and cultivates quickly and easily. Wt. 50 lbs. Holds 2 qts. Complete, price $\$ 19.00$; Seeder only, price $\$ 15.25$.


No. 25 PLAN 25 JR. HILL AND DRILL SEEDEIR, DOUBLE AND SINGLE WHEEL HOE-A splendid combination for the family garden, onion grower, or large gardener. Weight 60 los. Price $\$ 22.50$.


No. 3 PLANET JR. HILL \& DRILL SEEDER - A favorite among onion growers, market gardeners and seedsmen. Index and seed cut off rod is conveniently placed at top of handle. Holds 3 qts . Wt. 43 lbs . Price $\$ \mathbf{1 8 . 5 0}$.


No. 12 PLANET JR. DOUBLE WHEEL HOE, CULTIVATOR AND PLOWS - A single and double wheel hoe in one. Straddles crops till 20 in. high, then works between. Has steel Irames and 14 -inch steel wheels. Wt. 33 lbs. Price $\$ 11.50$.
No. 13 DOUBLE AND SINGLE WHEEL $\mathrm{HOE}-\mathrm{This}$ is the No. 12, with 6 -inch hoes only, these being the tools that are most needed. Wt. 2 lbs. $\$ 8.75$.


No. 31 PLANE'L JR. COMBINED DRILL SEEDER AND WHEEL HOE-Ideal for the home garden; plants any amount, even a small packet, accurately and evenly from $1 / 4$ to 2 in . deep. Holds 1 qt. Weight 32 lb .

Special
$\$ 8.50$

ATTACHMENTS AND RENEWAL PARTS FOR PLANET


No. 16 - SINGLE WHEEL HOE, CULTIVATOR, RAKE AND PLOWUsed mostly between the rows, yet by mounting wheel on other side of arm, can be used to hoe both sides at once while plants are small. Weight 26 lbs . Price $\mathbf{\$ 9 . 5 0}$.


No. 17-SINGLE WHEEL HOE-Has a most useful set of attachments. Wt. 24 lbs. Price $\$ 8.25$.

No. $171 / 2$-Same type as No. 17 -One pair of 6 -inch hoes and three cultivator teeth. Price \$7.25.

No. 18-Same type as No. 1\%-Has one pair of 6 -inch hoes only. Pr. $\$ 6.25$.


Plows for Double Wheel Hoes. Pair $\$ 1.50$. Plow for Single Wheel Hoes. Each 81.50.


Double Mouldboard Plow for Single Wheel Hoe. Each \$3.00.


Thret Prong Cultivator Teeth. Pair \$2.25.

Cultivator Teeth Each 40c.


## RAKES

3-tooth, pair. $\$ 1.50$ 5-tooth, pair. 2.00 7-tooth, pair. 3.00


Peat Land Hoes, 6 in. Pair $\$ 2.60$.


S100-S101

Iron King Seed Drill


FOR ONION GROWERS - A well-made, durable, easy running machine, accurate and reliable, will save the price of the machine in sowing a few acres. If you are growing onions you cannot afford to be without one. Also for lettuce, spinach, beet, cabbage and will sow anything from turnips to peas. Weight packed 45 pounds. Price $\$ 15.00$. (With Fertilizer Attachment, Price \$17.50.)


No. 13 STANDARD DOUBLE \& SINGLE WHEEL CULTIVATOR, with cultivator teeth, double plow and hoes. Wheels 16 inches high; adjustable gauge for depth. Wt. 30 lbs . Special Price $\$ 0.75$
as long as stock lasts $\$ 0$.

GARDEN PLOW and CULTIVATOR


No. 20 Standard. Price without seeder, $\$ 3.65$. Complete with Midget Drill Seeder Attached, $\$ 7.90$.

NORCROSS
ADJUSTABLE

## CULTIVATOR

 HOESKeeps down weeds, saves moisture, leaves the ground level. $4-\mathrm{ft}$. handle.
FIVE PRONG for regular garden work; weight 4 lbs. Price $\$ 1.00$
THREE PRONG for narrower rows and close work; weight 3 lbs . Price 75c.


No. 82-ALL STEEL WEEDER, one-piece pressed steel, finished in blue enamel, easy to handle, unbreakable, length $91 / 2$ in., wt. 1 lb . Price 20c.


MAGIC WEEDER, spring steel, 3 tines, wt. 1 lb . Price 15 c .


No. 21, LANG'S W E E D ER , spring steel blade, wt. 1 lb . Price 20c.


No. 23, HAZELTINE'S WEEDER, spring steel blade, wt. 1 lb. Price 30c.


No. 25 -NOYE'S WEEDER, spring steel blade, wt. 1 lb . Price 25 c .


No. 30-SPADING FORK, forged steel, 3 tine, 11 in., wt. 1 lb. Each 50c.

No. 830-WEEDER, Village Blacksmith brand, wt. 1 lb . Price 50 c .


MAYNARD GARDEN TROWEL, steel socket shank, extra heavy, wt. 1 lb . Price $\$ 1.00$. and socket, wt. 1 lb. Price 50c.


No. T25-TRANSPLANTING TROWEL, wood handle, wt. 1 lb . Price 20c.


No. 39-ALL STEEL TROWEL, blade and handle one-piece heavy pressed steel, unbreakable, blue lacquered, sharpened blade, wt. 1 lb. Price 25 c .
No. 38-GALVANIZED STEEL TROWEL, onepiece blade and handle, wt. 1 lb . Price 10 c .


No. 40 - ALL STEEL TRANSPLANTING TROWEL, $15 / 8 \times 61 / 4$ blade, one-piece steel throughout, blue lacquered, wt. 1 lb .25 c .


VILLAGE BLACKSMITH BRAND GRASS SHEARS, full polished 6 -inch hollow ground tempered steel blades, clean cutting, wt. 1 lb. No. V51-With trowel shank, price $\$ 1.00$.
No. V1-Without trowel shank, price 75c.

steel blades, malleable handles.
Blue Handles, very best, $\$ 1.50$.
Red Handles, polished finish, \$1.25
Green Handles, medium finish, $\$ 1.00$.

Pruning Tools


No. 2-PRUNING KNIFE, wood handle, stationary blade of high quality tempered steel. Postpaid 70c.
No. 4-PRUNING KNIFE, polished wood handle, highest quality blade, strong spring. Postpaid $\$ 1.25$.
No. 6-GRAFTING KNIFE, wood handle, stationary blade of highest grade steel. Postpaid 60 c
No. 8-BUDDING KNIFE, ebony handle, ivory opener, best quality steel blade. Postpaid $\$ 1.40$.
No. 13-BUDDING KNIFE, wood handle, stationary blade. Postpaid 50c.

LETTUCE OR
VEGETABLE
KNIFE, 3-in.
blade, riveted
wood handle. Postpaid 35 c


No. $40-\mathrm{P}$ R UNING SHEARS, 9 -in., highest grade, bright finish, polished blade, spiral spring; without ratchet wt. 1 lb. Price \$1.60.
No. 41-Same as No. 40, with ratchet. Wt. 1 lb, Price $\$ 1.75$.
No. 31 - With ratchet, same as No. 41, but unpolished finish. Wt. 1 lb . Price $\$ 1.25$.


No. 3-VILLAGE BLACKSMITH GRASS HOOK, with offset handle. Forged cutlery steel, tempered, ground sharp and whetted, wt. 1 lb . Each 65 c .


PLANET JR. GRASS EDGER--You can edge either straight or curved walks of cement, stone or brick, rapidly and easily. Weight 4 lbs. Price $\$ 1.75$.

ALL PURPOSE RAKE-Unequaled or removing dandelions. Cleans the grass of acorns, twigs, dead leaves and trash better than with any other rake. Teeth are self-cleaning by a backward stroke. $\mathbf{9 5 c}$.


The powerful lever enables you to do the same work in half the time that would be required with old style pruners. Damascus steel blades, very strong, hold their cutting edge. Light, strong and durable. 16


GRAFT-

## ING WAX

P. S. CO.

BRAND
1/4 lb. .......... 20c
$1 / 2 \mathrm{lb} . . . . . . . . . .35 \mathrm{c}$
$1 \mathrm{lb} . . . . . . . . . . .60 \mathrm{c}$

ASPARAGUS KNIFE, has long shank and blade for cutting the tips below the surface. Each 50c, postpaid 60c.


CORN OR SLASHING KNIFE, $221 / 2$-in. long, CORN OR SLASHING KNIFE, $221 / 2$-in. long.
strong heavy blade. wt. 2 lbs Price 85 c .

No. 1-REGULAR PRUNING SAW, best silver tool steel, regular tooth. Ship. wt. 1 lb if in. $\$ 1.35$ : 18 in. $\$ 1.50$.

No. 13-CALIFORNIA PRUNING SAW, crescent shape, best silver steel, regular tooth. Ship. wt. 1 lb . 14 in. $\$ 1.75$


## CORN PLANTERS

ACME AUTOMATIC-One Hand (Fig. 20)-Puts the right number of kernels just where you want them and at the proper depth, requiring only one hand, either right or left. Weight packed 6 lbs Price $\$ 2.50$.
ACME-(Fig. 22)-A two-handed planter. Light, well made, and especially adapled to heavy, cloddy or stony soils. Adjustable-from popcorn to large kidney beans. Weight packed 4 lbs. Price $\$ 1.35$.

## POTATO PLANTERS

EVERLASTING-(Fig, 16)-This light tubular planter locks itself as it is lifted out of the ground and the next potato may be dropped in at once. Opens automatically by forward movement. Weight packed 5 lbs. Price $\$ 1.95$. PINGREE or ACME-(Fig. 14)-Similar in action to the tubular. You lift the planter up to drop in the potato. Weight packed 4 lbs . Price $\$ 1.35$.


Illustration shows small base and large base, also each base with an extra section added
SMALL BASE-Holds $1 / 4$ bushel, 2 trays, 25 to 35 hens, size $18 \times 14$ in., 28 in. high, wt. 30 lbs. Price $\$ 9.00$.
SMALL SECTION-Holds 1/4 bushel, 2 trays, wt. 18 lbs.
Price for extra section $\$ 3.50$, F. O. B. Portland.

BROADCAST SEED SOWERS


CAHOON SEEDER-Made of steel, iron and brass; the most popular and best; force feed; does excellent work. Sows all grains and grass seeds. Weight 9 lbs. Instructions included. Price $\$ 5.00$.


## Tin Horn Seeder

A good serviceable seeder at a low price. Adjustable. Wt. 1 lb, Price $\$ 1$.

## Master's Plant Setter

With a "Master's" you can set, water and fertilize 10,000 plants a day and do better work than if set by hand. Works as fast as you walk. Sets cabbage, kale, celery, tomatoes and vegetable plants of all kinds. Wt. nacked 5 lbs. Price \$6.00.

## All metal sectional Grain Sprouters

A bushel of oats sprouts into three bushels of nutritious green feed. Hens lay more eggs, young chicks grow faster and are more healthy on green feed. Oats, rye and wheat can be easily and quickly sprouted and make the most economical and profitable food for Winter.
Outside wall lined with asbestos-inside wall metal grain chamber. heat passing between the walls. One of the principal advantages of the Metal Sprouter is the very small floor space occupied. If an additional quantity of sprouted grain is needed, owing to an increase in the size of the flock, one or more addition sections may be added, greatly increasing the capacity without in the least enlarging the space occupied.
LARGE BASE-Holds 1 bushel, 2 trays, $100-150$ hens, size $28 \times 26$ in., 26 in. high, wt. 60 lbs. Price $\$ 17.50$.
LARGE SECTION-Holds 1 bushel, 2 trays, wt. 30 lbs. Price for extra section $\$ \mathbf{\$ 7} 50, \mathrm{~F}$. 0 . B. Portland.

## THE CLIPPER GRAIN AND SEED CLEANER

 USED BY ALL AGRICULTURAL COLLEGES AND BY THE U. S. DEPARTMENT OF AGRICULTURENo work done on the farm brings such large returns as thoroughly preparing the grain and seed by recleaning and grading for planting. This insures an even stand of strong, healthy plants, and a larger yield of a higher grade. The "Clipper" cleaner is especially adapted to this kind of work on account of its ability to separate the small, also the light, dead seed or grain from the perfect seed or grain.
Other mills depend entirely upon screens for this work, and with unsatisfactory results. The "Clipper" screens all straw and foreign matter from the grain before it enters the air shaft, and the "Vertical Blast" does the rest.

Screens are so arranged as to be in plain view and of easy access to the operator while machine is in operation, and a set of ten being furnished with either the No. 1B or No. 2B. These are ample for general work-but special screens can be furnished for any cleaning operation.

Guarantecd to do the most perfect work of any Hand Seed Cleaner
The "Clipper" is a first-class, inexpensive and durable mill for general use No. 1B-Capacity 20 bu. grain or 10 bu. seed per hour. Price $\$ 40.00$. No. 2 B -Capacity 25 bu . grain or 15 bu . seed per hour. Price $\$ 50.00$.
No. 6-POWER. Capacity 200 bu . grain or 35 bu . seed per hour. Price $\$ 150$.
No. 16-POWER MILL. Three-step pulley air control. Capacity 200 bu. grain
or 35 bu . seed per hour. Price $\$ 225.00$.
No. 16-POWER MILL. Variable air control. Capacity 200 bu . grain or 35
 bu. seed per hour. Price $\mathbf{\$ 2 8 0 . 0 0}$.
We can also supply Clipper Power Cleaners of any capacity for any purpose.
We have supplied "Clipper Cleaners" to the mills, dealers and prominent growers of the Northwest. If you grow grain or seed and do not own a "Clipper," you are losing many times its cost every year. Let us send you "The Clipper" Catalog of hand and power cleaners. All sizes and prices. ALL PRICES ON THIS PAGE ARE F. O. B. PORTLAND.

## QUEEN INCUBATORS <br> FAMOUS for BIG HATCHES of STRONG HEALTHY CHICKS that LIVE and GROW



No. 21


No. 2
Queen Incubators have been built for over twenty-five years and have thoroughly demonstrated the statement that they will hatch every hatchable egg. They are in use all over the world and have given the highest degree of satisfaction. We offer this line with confidence that we can give it our complete endorsement. Read carefully the following special features:

INSULATION-The Queen is doubly insulated, insuring a proper maintenance of uniform heat throughout hatching period, less fuel and stronger chicks. The double walls are made of redwood with corrugated strawboard between the walls forming two dead air spaces. Redwood is best as it will not warp, split, absorb moisture or odors, and insects dislike it. Double doors in front of redwood complete tbe double insulations. Inner doors have glass panels full length and height of egg chamber.

HOT WATER HEATING SYSTEM eliminates the injurious drying out tendency of a hot air system, provides a soft uniform heat for each egg and holds heat evenly while filling lamp or should it be forgotten for a time. Radiator and boiler are made of rolled copper (not copperized tin), and are designed to give a forced circulation. Expansion cup holds surplus water and cares for expansion of water, Lamp has an egg testing attachment; convenient to test eggs and watch dehas an egg

EGG TRAYS are self supporting-no danger of dropping and breaking egrs. Nursery trays included.

THERMOMETER is perfectly accurate and of the best quality. AUTOMATIC HEAT REGULATOR is guaranteed to the fraction of a degree, automatically caring for the slightest change of temperature in the incubator. HEATER is incased in a double jacket of heavy galvanized iron with 5 layers of asbestos between so that all the heat value is used in heating the water, greatly reducing fuel use. Heater has double the heating capacity normally required. Clear smokeless flame, no odor.
No..................... Floor Space, in.... Egg Trays, size.... No. of Egg Trays Shipping Weight_


No. 22


No. 25 parts. Prices on request.


No. 0-1-2-3 Style

## Queen Colony Brooder Stoves

A new and improved design, best quality heavy iron castings. For hard or soft coal, briquets, coke or charcoal. Automatic control of both damper and draft, by use of water thermostat the same as used on incubators. Draft and damper are in combination-when one opens the other closes. Down draft hot blast pipe draws air from above hover, heating it all the way down. closes. Adjustable heat regulation. Feed door is above hover dor easy feednger to chicles from backfire below insures safety to chicks. No openings in ash door, ind ot inder stove. Asbestos lined bottom. Heat is kept perfectly or gas. Free circulation of air under stove. Asbestos lined bottom. Heat is kept perfectly
uniform, night and day, cold weather and warm. Rocker grate. Hover is heavy galvanized iron with bail to attach lifting rope.
No. ............................................................
Chick Size
$\begin{array}{cc}0 & \\ 400 & \\ 18 & \\ 9 & \\ 4 & \\ 42 & \\ 76 & \\ \$ 18.00 & \$ 2\end{array}$

| 1 | 2 |
| :---: | :---: |
| 800 | 120 |
| 23 | 2 |
| 9 | 10 |
| 4 |  |
| 48 |  |
| 81 | 108 |
| $\$ 23.76$ | $\$ 2$ |

8
1600
30
$111 / 2$
5
60
120
$\$ 34.00$

Diam. of Grates, inches....................
Diam. of Pipe Collar, inches......... Diam. of Hover, inches.................. Ship. Weight with Hover, lbs........
Price f. o. b. Portland.

## Queen Mammoth Magazine Brooder Stove

This brooder stove operates the same as those above, but has considerably greater capacity and will prove very popular. HERE ARE THE DIMENSIONS:
No.

| Dia. of grate........... 131/2 in. |
| :---: |
| Depth of ash pit_...... 6 in . |
| Pipe opening ............. 5 |
| Dia. of canopy........... 60 |
| Coal capacity .......... 75 lbs . |
| Ship. Wt. ..-.-...........- 165 lbs. |
| rice ................. \$35.00 |

Height over all............ 37 in . Depth of fire box ..... 14 in . Circ. of fire box.......- 42 in. Depth of magazine..... 14 in . Circ. of magazine.... 18 in .


## QUEEN OIL BURNING BROODERS

Keeps chicka perfectly warm-broods chicks that live and grow. Canopy of heavy galvanized Iron, bas top ventilator, two gallon welded metal tank, non-breakable. Asbestos wick. Queen quality throughout. Illustrated folder sent on request. 800 chick size, 32 -inch Hover.
600 chick size, 42 -inch Hover.
r...............

PRICES ARE F. O. B. PORTLAND


## Closing Out Prices on BUCKEYE Incubators

As long as our stock lasts these special prices will prevail. Those who have decided to buy a Buckeye should place their order at once.

## All new machines.

PRICES F. O. B. PORTLAND

| Size | Style | Weight | Regular Price | Special Price |
| :---: | :---: | :---: | :---: | :---: |
| No. $16-110 \cdot \mathrm{egg}$, Sgl. wall.......... 85 lbs. No. $5-600 \cdot \mathrm{egg}$, Standard........ 325 lbs . |  |  | \$30.75 | \$24.00 |
|  |  |  | No. 5-600.egg, Standard........... 325 lbs .116 .00 90.00 |  |
| Ask for comp | - Bucl | atalog. | ree on | Ue |

EXTRA BUCKEYE PARTS
We carry a complete stock of parts; price list sent on request or send us your order for quick service.

The temperature of every Buckeye built is guaranteed to be nniform within a fraction of a degree at all times in the egg tray. The regulation of temperature is purely automatic and needs no watching. You set the regulator when the hatch is started and do not touch it again until the next hatch. The incubator can be operated in any temperature regardless of sudden changes. We guarantee every Buckeye to work satisfactorily in any temperature down to freezing. No previous incubator experience is required to operate a Buckeye. Outside of filling the lamp and turning the eggs, everything is automatic and requires no attention from the operator.


Showing a Sectional View of the "Buckeye" Brooder
The Lamp Brooder that broods like a stove Brooder. Air under the hover is drawn from the outside, into the upper chamber, discharged through exhaust tubes. Made of galvanized iron. Lamp chamber is separate from chicks. Air is heated by passing around lamp and distributed equally over entire brooding chamber. Thermometer registers
temperature at all times. temperature at all times.
Prices F. O. B. Portland
Regular Special
Diameter Capacity
No. 20-19 inches, 60 chicks
No. $21-22$ inches, 100 chicks
No. 22-30 inches, 160 chicks Price $\$ 12.50$ 16.25 20.00 Price $\$ 10.00$
3.50 Ahove Prices Are Good Only While Present Stock Lasts

## LITTLE PUTMAN

 Just the thing for making a home-made oat sprouter or for warming water for poultry. New principle burner, insuring perfect combustion of oil and doubling heat value. Burns 3 to 4 weeks without refilling. Wick never needs trimming. Non-explosive. if timped over or buried in if tipped over or buried in plete directions for making oat sprouterPostpaid \$1.95.


The Mann's Green Bone Cutter is offered on a warranty to produce a perfectly edible food, witb no waste, from any lot of green bones, with less labor, and less annoyance than any other bone cutter. The Mann's has a selfogoverning feed, producing uniform pressure against the knife, whether the bone be hard or soft. No. 5-Has four knives, large solid cylinder, patent automatic governing spring feed which makes it one of the best low-priced bone cutters ever offered. We can furnish with balance wheel for bench use.
No. 7-The new No. 7 is mounted on a strong iron stand, patent automatic governing spring feed. Large openhinged cylinder, instant access to all working parts, six knives, gear guard, anti-clog device, heavy balance wheel. No. $71 / 2$-To run by hand or power without any change. The particular advantage of the $71 / 2$ is that while it is a complete power machine, it can be operated by hand just as easily as the No. 7. No. 9 -Intended for flocks of 100 to 300 hens. Similar to No. 7 but has larger cylinder, greater hold-
MANN'S No. 12-POWER-Capacity 120 to 150 pounds per hour. Horsepower required, one to two.
No. 15-Similar to No. 12 but much larger and heavier, with more belt power. Cylinder is twice as No. 15-Similar to No. 12 but much larger and heavier, with more belt power. Cylinder is twice as
deep; capacity 150 to 250 lbs . per hour. Takes almost any size bones.

## Mann's Corn Sheller

Styles
F.O.B. Portland Price Wgt.

Best low-priced corn sheller made. A profitable tool if you have corn to shell. Weight 10 lbs. Price $\$ 3.75$, f.o.b. Port.

## Mann'sCastIronMortar

For breaking glass, crockery ware or oyster shells. Weight 33 lbs ; height 12 inches; 9 inches square; pestle 4 feet long. Price \$400, f.o.b. Portland.

No. 5B (with balance wheel)...... \$18.50
No. 7 (B.W. and iron stand) 27.50
No. 71/2 (hand or power)................ 42.00
No. 9 (hand)
44.00

No. 12 (power machine) ............ 70.00
No. 15 (power machine) ............ 136.00


PUTMAN BROODER HEATER
You can make your own brooder out of a box, for accommodating 25 to 60 chicks, by using this heater. Heater requires filling but once a week. Uses less than a gallon of oil a month. Perfect ventilation a utomatically. Heat radiates from above onto backs of chicks. Can be operated anywhere, in the house or out of doors. Directions for naking brooder enclozed. Postpaid \$4.75.

## "NEW MODEL" CLOVER CUTTER FOR

 POULTRYCuts either green or dry, such growths as clover, alfalfa, egetable tops, etc., into $1 / s$ inch lengths.
The Cutting Mechanisin is the most vitally important part of a Clover Cutter. The "New Model" admits of perfect cutting at all times, because cutter bar is adjustable, easily accessible, and the four 7 -inch spiral steel knives can readily be removed for sharpening. Length over all $281 / 2$ inches. Weight 70 pounds. Price $\$ 18.00$, f. o. b. Portland.


The strongest, lightest egg carrier made. You can mail eggs in this crate for 150 miles and have crate returned for $31 / 4 \mathrm{c}$ a dozen. 12 dozen capacity
Without fillers, 65 c, doz. $\$ 7.20$
With fillers, 75 E , doz. $\$ \mathbf{8 . 2 5}$

## Kant-Krack Folding Egg Box

Especially designed for safe delivery of valuable eggs for hatching and is a great favorite with poultrymen. Made of heavy corrugated paper. Only a few seconds work to set the box up, pack it with eggs, and address it. These boxes are light but very strong, being firmly braced, and will stand the weight of several hundred pounds without crushing. 1 dozen in a package; cannot break packages.

| No | Size | Wt. | Doz. |
| :---: | :---: | :---: | :---: |
| 3 | 15-Egg | 1 lb . | \$2.00 |
| 4 | $30-\mathrm{Egg}$ | $11 / 2 \mathrm{lb}$. | \$3.75 |
|  | 50.Egg |  | \$5.00 |

## Egg Cases

30 -doz. size, with fillers. Each 70 c. EGG CASE FILLERS
Packed in cases containing fillers for 2 30-doz. cases. Per Case $\$ 3.35$.
Fillers for 130 -doz. case, 35c.
Fillers holding 3 doz. each. Each 6c.

## Ideal Paper Egg Boxes

For delivering eggs to private families. Nicely printed with a blank space for your name and address. Wt. 12 lbs . per 100. Prices: 1-doz. size, 2OC doz.; \$1.10 per 100; \$10.00 per 1000 .

WIRE HENS' NESTS
Strongly made; very durable; fasten to the wall; no harbor for vermin. Wt. 10 oz. each. Each 25c; doz. \$2.75.


CIIINA NEST EGGSBest grade Opal Eggs. Wt. doz. 3/4 1b. Each 5 c ; 12 for 25 e.
LIME NEST EGG-Su. perior to China, not so cold, and are indestructible. Wt. doz.
2 lbs . Each 5c; doz. 40 c .

## RABBIT DISHES

Earthenware rabbit dishes have incurved dges that prevent them from rooting out their edges that prevent them from rooting out their
food. Very serviceable. Price, 6-inch, 20 c




McCANDLISH CHICK FEEDER-Revolving rod, prevents chicks perching on it, making feeder sanon it, making feeder sanitary, adurable parti drinking. Galv. iron, mo rough edges, cannot capsize.
20 inch, wt. 3 lbs.......50c. 80 inch, wt. 4 lbs ...... 75 c .
"GUARANTEED" AUTOMATIC WATER FOUNTAIN Espocially designed for poultry, can be attached to any water line, tank or barrel. Operated by gravity pressure of drinking pan, supplies fresh water to fowls automatically. $\$ 1.50$ each or $\$ 1.60$ postpaid.


GILT EDGE EGG SCALE
Simple in construction, easy to oper ate, graduating by the ounce per dozen Price $\$ 1.25$, or $\$ 1.35$ postpaid.


THE LINCOLN EGG SCALE
No adjusting; simple, durable, accurate. Price 5Oc, or COc postpaid.


CHAMPION EGG GRADING SCALE
Improved type, grades with eggs in any position. Meets all requirements, grading pewee pullet and standard eggs. Solid brass, will not get out of order; no loose parts to get lost. Each $\$ 2.00$; postpaid $\$ 2.10$.
BREEDER'S MAGIC EGG TESTER
No light. No electricity. No expense and lasts a lifetime. Shows the hatchable eggs before incubation. Each $\$ 2.50$.

2, $\Omega^{4}$ 日

## LEG BANDS FOR POULTRY AND PIGEONS

Heat, compact and smooth fastening, with no catching points; easily attached and absolutely secure. Prices, postpaid, 12 for 20 c ; 25 for 25 c ; 50 for $40 \mathrm{c} ; 100$ for 65 c .


SPIRAL COLORED LEG BANDS-Made like a key ringeasy to put on, nothing to catch or tear off. All sizes.
Ten Colors - Red, White, Yellow, Black, Pink, Green, Brown, Purple, Light Blue Dark Blue. Prices, postpaid, 12 for 20c; 25 for 25 c ; 50 for 40 c ; 100 for 65 c .


PETTEY'S POULRRY PUNCH
Can be put on a key ring or used for a watch charm. Will not clog. for a watch charm. $25 c$ postpaid

## SCISSOR POULTRY PUNCH

Strong. Cuts clean. 15c; postpaid 20c.
McCANDLISH IMPROVED TIN BUTTERMILK FEEDER, with new style hood. 20 inch, each 65c; 30 inch, each 90 c .


SANITARY STONE FOUNTAIN Strong, well finish ed; made in two pieces. They keep the water cool.
1/2 Gallon ........65c 1 Gallon .......... 75 c 2 Gallon......... $\$ 1.25$
 CIRCULAR CHICK FEEDER - Heavy galvanized iron chicks cannot climb 8 holes, each...... 15 c 12 holes, each...... 25 c


STAR FOUNT AND FEEDER - One piece of metal, holds Mason quart jar. Without Jar Each 10c


MARIKERS FOR CATTLE, SHEEP AND HOGS
Metal Ear Labels and Ideal Ear Buttons are satisfactory and casily applied marks of identification that are indispensable to breeders and stockmen. Your name and address on one side
number on the other.

## METAL EAR LABELS

Not more than ten large letters can be used on the hog and sheep size; 15 large lctters on cattle size or 22 small ones.


- Cattle sizc, \$1.75 Sheep and Hog size, \$1.40. Postage 10c each.

IDEAL EAR BUTTONS
Pure Aluminum Hardened
Medium sized, suits all animals, clinches tight, cannot come out; double strength. Name
and address on top side; number on bottom, and address on top side; number on bottom, or number and name can both appear on one side if not more than 18 letters and figures; if more than 18 both sides can be used to the limit of 30 letters and figures. Easily at tached with special punch and pliers.

25-Weight 3 oz.
50-Weight $1 / 4 \mathrm{lb}$.
lb.................................................... 21.
100-Weight $3 / 4$ 1b.................................. 3.75
500-Weight 4 lbs................................... 16.50
1000-Weight 6 lbs............................... 30.00
If mailed, postage extra
Punch and Pliers-Each \$1.50. Postage 10c.

## "DIAMOND QUALITY" POULTRY FOODS



## Diamond Chick Food

A Properly Balanced Ration that will make chicks grow and keep them healthy. For young Turkeys, Pheasants and all young fowls DIAMOND CHICK FOOD is unexcelled.

The select grains that are used in the preparation of Diamond Chick Food are cut by a special process, screened to a uniform size and run through a fanning mill to remove the dust and meal, which is the fatal element in most chick foods. After this process the ingredients are carefully weighed and mixed in correct proportions. No guess work. Diamond Chick Food gives the chicks just what Nature intended they should have, a food composed of grains (cracked), small seeds, bone, etc., mixed in the right proportions to produce a quick and profitable growth without loss. Convenient, always ready for use, and you can raise so many more chicks by feeding it that it is so many more chicks by feeding it that it is
the cheapest food to buy. Write for Prices.

## Diamond Baby Chick Mash

A veritable chick insurance and is a starting and developing food for chicks without an equal. On the First Month's Feed Depends the Future Returns.
FOR EARLY MATURITY-After the chicks are a few days old, keep Diamond Baby Chick Mash constantly before them in dry form, just as it comes from the bag, in a feeder they can get at easily without getting into.
When 48 hours old, and three times a day thereafter, throw into the litter a feed of Diamond Chick Food (allow one pint to every 50 chicks per feed, at first). Feed only as much as they will cat up clean. Also scatter in the litter a handful of chick-size grit once a day for the first few days, then keep a supply in a box or hopper always before them. Plenty of fresh air, fresh clean water, fresh finely chopped green feed, and table scraps, are essential at all times. Above all watch your chicks. Do not overfeed grain or scraps, as the Mash contains every food element necessary for perfect development. It will, if necessary, keep for months if stored in a cool dry place. WRITE FOR PRICES.

## EGG-O.HATCH

Egg-o-hatch is a dry powder. It is mixed with water and the resulting liquid is applied to eggs two or three times during the 21 days of incubation. It is a liquid that does three thingssupplies oxygen for the growing chicks; absorbs carbon dioxide given off; makes more brittle and porous the shell of the egg. Price 50c, postpaid 55c. Will treat 600 eggs.

## Diamond Scratch Food

## ALL GRAIN

Complete, economical and satisfactory for every feeding requirement from the three-weeks-old chick to mature fowls. A perfect "working ration" for fowls. Carefully prepared.
When fed in conjunction with Diamond Egg Food a scant allowance scattered in the scratching material in the morning keeps the hens busy hunting for the grains. In the evening feed sufficient that hens may go to roost with crops full. Diamond Scratch Food can be fed to young chicks at three weeks and has every element necessary to hasten normal growth and build up bone and flesh. A rich, nourishing food they greatly relish. Write for Prices.

## Meat Scraps

Perfectly prepared, fine ground and clean. Write for Prices

## Meat Meal

Should be mixed with the soft food. No hides or tankage in our meat meal, but, as its name implies, meat, cooked, dried and ground : unexcelled for egg-production. Write for prices.

## Blood Meal

The most highly concentrated egg-producer on the market. To be fed in soft food. Write for Prices.

## Bone Meal

Finely ground from hard white bones, and of a superior quality. Write for Prices.

## Granulated Bone

Made from selected hard white raw bones, and of a superior quality; indispensable for laying hens. Write for Prices.

## Fish Meal

A fine-ground, pure, sweet fish meal, containing protein-feed as you would meat meal ; a rich, wholesome food. Write for Prices.

LINSEED MEAI, OLD PROCESS Write for Prices
BLATCHFORD'S CHICK MASH
In 100,50 and 25 lb . bags. 100 lbs . makes 100 gallons of Complete MilkEqual. 10 lbs. 90c; 25 lbs. $\$ 1.50 ; 100$ lis. \$5.75. F. O. B. Portland subject to market changes.

## Diamond Oyster Shell

Clean stock, free from dust and waste. Crushed in two sizes, coarse and fine. $6 \mathrm{lbs} .25 \mathrm{c} ; 100 \mathrm{lbs} . \$ 1.50 ;$ f.o.b. Portland.

## Diamond Crystal Grit

Two sizes, chick and hen size. We send hen size unless otherwise ordered. 100 lbs. \$1.00; f.o.b. Portland.

## CHARCOAL

Prepared especially for poultry; no dust; a good thing for bowel trouble, sour crop and indigestion. 50 lbs. \$2.00; f.o.b. Portland.

## Poultry Minerals

Blatchford's, 100 lbs. $\$ 5.50$, F. O. B Portland.

## POULTRY PEPPER COMPOUND

A tonic and invigorator; ground. 1 lb .25 c .

## Lee's Germozone

Regular use of Germozone insures BETTER health; BETTER chicks; BETTER layers; and the RIGHT kind of BREEDERS. Use it for Bowel Complaint in little chicks; for Cholera, Roup and other diseases among the older fowls; and regularly TWICE-A-WEEK for ALL fowls. It prevents contagion, tones the system, and insures BETTER health for the entire flock. Liquid, not prepaid, 4-0z. bottle 40c; 12-oz. 75c; 32-02. \$1.50; gal. \$4.50.


## Diamond Egg Food

## A LAYING MASH

Makes hens lay when eggs are high, keeps poultry healthy. Unequaled for feeding young chicks. A complete ground food to be fed dry or wet. Starts hens laying and keeps them at it. Hastens moulting. Puts poultry in prime condition.
No Drugs-No Stimulants-but a rich, wholesome nourishing food for growing fowls and hens, encouraging rapid growth and increasing egg production. Can be fed dry or as a mash and is the most successful combination of egg producing elements. Feed Diamond Egg Food to the hens in your breeding pens and they will produce eggs of strong vitality that hatch into sturdy chicks. Write for Prices.

## Powdered Buttermilk

The pure solid contert of the liquid butter. milk, with only the water taken out and nothing else added. Write for prices.

## Super-Solid Buttermilk

This is creamery buttermilk condensed to a thick semi-solid paste. In this form it has the greatest possible feeding value. It will keep the flock up to its highest point of health and egg lay. ing efficiency and practically free from worms. For baby chicks it should be the first food that goes into their system. Mortality will be reduced greatly by its use. Write for booklet.
5 gallons ................................................ $\$ \mathbf{3 . 0 0}$
10 gallon keg...................................... 5.25
1/2 barrel (30 gallons)......................... 14.85
Barrel (52 gallons).
21.50
F. O. B. Portland

LEE'S HEADLICE OINTMENT - For little chicks. Large box 15 c .
LEE'S HOG REMEDY-Cures all diseases of hogs and keeps them healthy. $71 / 2-\mathrm{lb}$. pkg. $\$ 1.50$; mailing weight 9 lbs.; $2 \overline{5}-1 \mathrm{~b}$. pail $\$ 3.00$.
LEE'S WHITE DLAKRHOEA REM-EDY-The best medicine for this dangerous disease of little chicks. Wt. 2 lbs., 12-oz. bottle 50 c .
LEE'S WORM POWDER-For horses, cattle, sheep and hogs. Safe and sure in results. Pkg. 25 c ; wt. $11 / 4 \mathrm{lbs}$. LEE'S PEERLESS BUG KILLER Wt. pkd. 2 lbs.; 12 -oz. bottle 35 c .


## CONKEY'S WHITE DIARRHEA TABLETS

As a preventive of bowel troubles, White Diarrhea and other digestive complaints, it has given great satisfaction for many years. Also recommended as a preventive measure and in treatment of coccidioarly to White Diarrhea, but which differs in that a principal symptom is bloody droppings rather than white.
Plss. $30 \mathrm{c}, 60 \mathrm{c}, \$ 1.20$; or $35 \mathrm{c}, 65 \mathrm{c}, \$ 1.30$ postpaid. Breeder Size ( 1200 Tablets), $\$ 4.00$; or $\$ 4.10$ postpaid.
OONKEY'S CANKER \& BRONCHI-
TIS RTEMEDY-
Checks cankerous growths and sores and soon restores the bird to normal. Pkg. 60c; or 65 c postpaid.
OONIEEY'S CHOLNERA REMEDY-So-called Cholera, bowel troublea, indigestion, diarrhea and kindred ailments often kill a whole flock in a few days. Diarrhea, a drowsy, listless appearance and great thirst-these are the signals to put Conkey's Cholers Remedy In the drinking water.
Pkg. $30 \mathrm{c}, 60 \mathrm{c}, \$ 1.20$; or $35 \mathrm{c}, 65 \mathrm{c}, 31.30$ postpaid; breeder size ( 5 lbs. ) $\$ 3.00$; $\$ 3.15$ postpaid. CONKEY'S POULTRY TONTC-
Every hird from chick to maturity will be more productive, healthier and more profitable if given a good tonic and regulator. Conkey's Poultry Tonic helps birds to get more out of their feed; they produce more eggs and better flesh on LESS FEED, through better digestion and assimilation.
Pkg. $11 / 2 \mathrm{lbs} ., 30 \mathrm{c} ; 91 / 4 \mathrm{lbs} ., 60 \mathrm{c} ; 7 \mathrm{lbs} ., \$ 1.20$; or $40 \mathrm{c}, 75 \mathrm{c}, \$ 1.45$ postpaid; pails, 12 lbs. $\$ 2.25$ 25 lbs., $\$ 3.75$; bags, 50 lbs., $\$ 7.00$; 100 lbs., 13.00; f. o. b. Portland.

## CONKEY'S GAPE REMEDY-

Comprises two powders-both in same box for one price-one sifted over chicks causes them to dislodge the worms in windpipe by coughing, the other is a tonic powder which is mixed in the feed-to help the bird huild is mixed in the feed-
pkgs. $30 \mathrm{c}, 60 \mathrm{c}$; or $35 \mathrm{e}, 65 \mathrm{c}$ postpaid.
OONKEY'S POULIRY COND I-
TIONEIR-
Highly concentrated fowl-regulator, bloodpurifier and nerve food, to build up hirds $\ln$ a run-down condition or for fowls recovering rom disease.
Phgs. 20 cc . 60 c : or $35 \mathrm{c}, 65 \mathrm{c}$ postpaid.
CONKEY'S BLACKHEAD REMEDY
Turkey breeders should have package on zand as Blackhead is deadly in advanced stages. Pkg. 60c; or 65 c postpaid.

CONKEY'S SCALY LEG REMEDYThis ointment applied to birds' legs in a few treatments will kill the parasites responsible for the trouble and heal up the leg with a healthy lustre. Pkg. 30c; or 25 c postpaid.
CONKEY'S LIMBERNNECK REMEDY This remedy should be on hand at all times as Limberneck must he treated promptly.
Pkg. 60c; or 65 c postpaid.
CONKEI'S Y-O. YHAST WITH COD LIVIER OII-
Made to supply vitamins A, B and D which are essential to the life of poultry and live stock. The Conkey process seals the cod liver on the yeast so that the potency of the cod liver oil is preserved. Conkey'a Y-O should be added to every feeding ration, whether for poultry or stock.
Pkgs. 1 lb. $75 \mathrm{c} ; 2 \mathrm{lbs} ., \$ 1.35$; 5 lbs., $\$ 2.75$; or $85 \mathrm{c}, \$ 1.45$ and $\$ 2.95$ postpaid. The following larger sizes: F. O. B. Portland, 25 lb . drum, $\$ 12.50$; 50 lb . drum, $\$ 22.50$; $100 \mathrm{lbs} .$, $\$ 36.00$.
CONKEY'S STOCK TONIC-
Pkgs. 30c, 60c, \$1.20; pails, 12 lbs. \$2.75; 25 lbs. $\$ 4.50$; bags, 50 lbs. $\$ 7.25$; 100 lbs. $\$ 13.00$; F. O. B. Portland.

## OONKEY'S LICE POWDER

## (Contains Sodiam Fluoride)

For dusting hens, nests, growing chickswherever body lice must be overcome.
Pkgs. $25 \mathrm{c}, 45 \mathrm{c}, 90 \mathrm{c}$; pails, $12 \mathrm{lbs} . \$ 3.00$; 25 lbs. \$5.75. F. O. B. Portland.
CONKEY'S HEAD LICE OLNTMENT For overcoming and preventing the murderous head louse which "eats up" bahy chicks. Pkgs. $15 \mathrm{c}, 30 \mathrm{c}$; or $20 \mathrm{c}, 35 \mathrm{c}$ postpaid.

CONKEY'S HICE FIX
A preparation in ointment form for fighting body lice. One application lasts a month.
Pkgs. 30c, 60c; or 35c, 65c postpaid.
CONKEY'S MITE LIQUID
For painting roosts, fittings, inside of house, nest boxes and wherever mites congregate. Cans, qt. 60c: 2 qt. 90c; gal. $\$ 1.50$; 5 gal. \$7.00. F. O. B. Portland.

## HAVE A "CONKEY CORNER" IN YOUR POULTRY HOUSE

Raising poultry is pleasant and profitable when "good luck" is with you. Good luck, however, is not merely a matter of chance, but of BEING PREPARED. For more than twenty-five years Conkey has been THE POULTRY DOCTOR. Take his advice.

CONKEX'S POULTRY BOOK FREE if you call at our store, or mailed for CONKEY'S ROUP REMEDY-

When Roup breaks out there's no time to experimentstart treatment at once-the disease is very contagious. Always at the first sign of "roupy weather" place Conkey's Roup Remedy in fountains-it's a great preventive. Pkgs. 30c, $60 \mathrm{c}, \$ 1.20$; or $35 \mathrm{c}, 65 \mathrm{c}, \$ 1.30$ postpaid; $11 / 2 \mathrm{lb}$. can $\$ 2.503$ postpaid; breeder size ( 5 lb . can) $\$ 5.75$ postpaid.
CONKEY'S 1ROUP PILLS-
For treating individual cases and for use at shows when birds develop colds. These pills have saved many a valuable bird. Plegs. $30 \mathrm{c}, 60 \mathrm{c}, \$ 1.20$; or $35 \mathrm{c}, 65 \mathrm{c}, \mathbf{S 1 . 3 0}$ postpaid; breeder size ( 1000 pills) $\$ 3.00$; or $\$ 3.10$ postpaid.

## CONKEY'S SOREHEAD REMEDY

For sorehead or chicken pox, pigeon pox. warts and pain. Attacks trouble from two angles-a powder for the blood and a salve for the sores.
Pkgs. 30c, 6
$\underset{\text { Pkgs. } 30 \mathrm{c}, 60 \mathrm{c} ; \text { or } 35 \mathrm{c}, 65 \mathrm{c} \text { postpald; breeder }}{ }$

## CONKEY'S POULTRY WOORM

## REMEDY

This prescription rids birds of many troublesome worms, thus promoting a return to healthy conditions. Plgs. 30c, 60 c ; or $35 \mathrm{c}, 65 \mathrm{c}$ postpaid; breeder size, $\$ 2.75$; or $\$ 2.85$ postpald.

CONKEY'S POULTRY LAXATIVE
Experts say, and we have found through experiments, that a poultry laxative given every week or two not only keeps the birds ln better condition but also increases the egg yield very materially.
Pkg. 30c, 60c: or $35 \mathrm{c}, 65 \mathrm{c}$ postpaid; breeder slze, $\$ 2.75$; or $\$ 2.90$ postpaid.

## CONKEY'S FLY KNOCKER

For Cows and Horses
PRICES—Cans, qt. 80 c ; $1 / 2$ gal. $\$ 1.35$; gal. $\$ 2.00$; 5 gal. $\$ 9.05$; 10 gal. $\$ 17.00$; f. o. b. Portland.

## Conkey's NOX-I-CIDE <br> DIP AND DISINFECTANT

For spraying during the "weekly clean-up," as a preventive of disease and a help in keep. ing down red mites, ticks, blue bugs, etc. Very effective for washing incubators, brooders, fountains and other utensils. Widely used and highly recommended as a dip for hogs, sheep, cattle and other animals.

Try Conkey's Nox-i-cide for household uses -for assisting in driving out ants, destroying odors, routing out bedbugs and cockroaches, for making sinks, cess-pools, garbage containers, etc., sanitary and safe.
PRICES-Pint 60c; quart 90 c ; $1 / 2$ gallon \$1.50; gallon $\$ 2.25$ : 5 gallons $\$ 10.50 ; 10$ gallons $\$ 19.00$; f. o. b. Portland.


## Cholerine

Millions of Baby Chicks Die Annually. White Diarrhoea fills them White Diarrhoea is a Gcrm disease. This disease is not only prevent ed but eradicated by Cholerine. Fowls fed Cholerine will keep healthier and produce more eggs during the season. The mortality will be much less and they will go less and they will go through the moulting sea-
son in far better condison
tion.
For Baby Chicks-We recommend it as a preventative and specific for white diarrhoea, cocidiosis (bloody diarrhoea), cholera, roup, limber neck and other germ diseases. intestinal troubles, indigestion and worms. Use it from the start as a preventative. It, will pay big returns. They will brood better and have more "pep" and grow into more profitable birds.

For Laying or Breeding Fowls-Use six tablespoonfuls Cholerine to one hundred birds, a pint to five hundred birds, three days a week. Many of the largest poultrymen on the Coast and throughout the United States are continuous feeders of Cholerine. It will aid fowls obtain full nutriment of food consumed.
Prices F. O. B. Portland-Quart $\$ 1.00$; Gallon $\$ 2.50$; Five Gallon Can $\$ 12.50$; 30 Gallon Barrel $\$ 50.00$.

## BARNES WORM EMULSION

Many so-called remedies are offered and some will cause live worms to be expelled, but the expelled worms are frequently eaten by poultry, and greater infection results than before because the worms themselves are a mass of eggs. But BARNES WORM EMULSION kills the worm, eggs and all, without harm to the chicken. Send for booklet giving full details.
$16 \mathrm{oz} .60 \mathrm{c} ;$ qut. $\$ 1$; gal. $\$ 3 ; 5 \mathrm{gal} . \$ 12.50 ; 30 \mathrm{gal} . \$ 60$.

## "Gold Leaf" Tobacco Powder

As a result of extensive investigation carried on by the Californla Agricultural Experiment Station, it was found that finely powdered tobacco was a most effective remedy against round worms in poultry which could be used; one that is uniform in strength and texture, and contains not less than $1 \%$ and not more tban $1.5 \%$ of actual nicotine These requirements are provided in "Gold Leaf" Tobacco Powder
Prices: 2 ib. plas. $30 c$ each or $\$ 3,00$ per doz.; 10 lb . pkgs. $\$ 1.00$ each or $\$ 5.50$ per case of 6 .

## PULVULES (Filled Capsules)

## NICOTINE AND LLOYD'S REAGENT

For the eradication of round worms in poultry. Also for eradication of worms in dogs, sheep and hogs. As suggested by the College of Agriculture of California. DOSE: For chickens, one capsule to the bird, place well down its throat, moisten with water. Per 100, \$1.00; per 1000, \$8.50; f.o.b. Portland.


## KOW - KARE

Makes Poor Cows Good-Good Cows Better, and Makes More Money for Cow Owners.

## "The Home Cow Doctor"

A handbook for cow owners, describing diseases that effect a cow's productivity and telling how to prevent and cure them in a single cow or a whole herd. Free on request.

KOW KARE (originally Kow Kure) is different from anything over discovered for cow troubles. It is the only cow medicine that is etrictly for cows only. It is not a stock food, but a specific remedy especially for cow diseases, such as Barrenness, Scours, Milk Fever, Caked Udder, Bloating, Red Water, Swelling of Bag, etc. It prevents abortion and removes retained after-birth. It tones up the system, renews vitality, restores appetite to cows that are "off feed," and keeps them healthy. It increases the milk flow, and enables the cows to produce strong, vigorous calves. It is the diaryman's gold mine, and a sure profit-payer. Medium cans, Mail wi. 2 lbs., Price 65c.; Large cans, Mail wt. 4 lbs., $\$ 1.25$.

## American Dairy Association Remedies

BAG BALM-A soothing, penetrating ointment for all affections of the bag. Wt. 8 oz. pkg. 60c, postage extra.
GRANGE GARGET CURE-An unsurpassed and positive cure. Wt. 2 lbs. can 65c, postage extra.
HORSE COMFORT-For wire cuts and flesh wounds. 30c bottles-wt. 1 lb.; 60c bottles-wt. 2 lbs., postage extra.
AMERICAN HORSE TONIC-A general improver for horses. 30c boxeswt. 1 lb.; 65c boxes-wt. 2 lbs., postage extra.

## Blatchford's Calf Meal

The Complete Milk Equal is in reality a substitute for milk-and should not be considered as an ordinary "feed" or "meal." It contains all the elements of milk-"baby fnod" for calves, absolutely the only milksubstitute that contains in proper proportion the elements necessary for rapid and healthy growth, and the only calf meal that is cooked and prepared for easy digestion. In 100,50 and $25-1 \mathrm{lb}$. bags. 100 lbs . makes 100 gallons of Complete Milk-Equal.

$$
10 \mathrm{lb} .25 \mathrm{lb} . \quad 50 \mathrm{lb} . \quad 100 \mathrm{lb} \text {. }
$$

Call Meal $\qquad$ $\$ 2.00$ \$3.15 \$8.2 Chick Mash $\$ 0.90 \$ 1.50$ $\$ 5.75$ F. O. B. Portland Subject to Market Changes.

## Blatchford Cattle Minerals

For toning up the system, keeping cattle and stock in excellent condition. Write for folder. 100 lbs. $\$ 5.35$, f. o. b. Portland.
BLATCHFORD'S POULTRY MINERALS
100 ths $\$ 5.50$, f. o. b. Portland


## Leslie Salt

In prepared bricks or half ground.
Price f.o.b. Portland Half Ground
50 lbs.................. 50 c
100 lbs.......................90c
Bricks
5 lb. bricks..... 15 c

## Wandotte

A cleaner especially prepared for creamery, cheese factory and dairy purposes.

It contains no grease. It makes no. suds. It has no soapy smell. It is pure and purifying. It cuts the butter fats and milk solids quickly and thoroughly, making everything sweet, clean and sanitary.

5 lbs. 50c; 80 lb . keg $\$ 6.50$; f. o. b. Portland.


DISINFECTANT, DEODORANT, ANTISEP-TIC-NOT A POISON
By Government test B-K has over ten times greater germ-killing strength than carbolic acid. Much stronger than coal tar disinfectants. Colorless, leaves no stain on floors or walls. Destroys foul odors-leaves no odor of itself. Contains no poison, acid nor oil. So itself. Contains no poison, acid nor oil. So much stronger than other disinfectants that
more water is used. It goes farther. Write more water is used. It goes farther. Write
for booklet. Prices, f.o. b. Portland: 1 gal. jug $\$ 3.00 ; 5$ gal. carboy $\$ 12.50$.

## Conkey's <br> NOX-I-CIDE DIP AND

## DISINFECTANT

A preventive of disease and a help in keeping down red mites, ticks, blue bugs, etc. Very effective for washing incubators, brood-
ers, fountains and other
 ers, fou
utensils.

PRICES-Pint 60c; quart 90c; galIon $\$ 2.25 ; 5$ gallons $\$ 10.50 ; 10$ gallons $\$ 19.00$; f. o. b. Portland.


## Conkey's

 Fly Knocker
## FOR COWS AND

 HORSESPRICES-Cans, qt. 80c; $1 / 2$ gal. \$1.35; ral. \$2.00; 5 gal. $\$ 9.00 ; 10$ gal. \$17; f. o. b. Portland.

## LEE'S FLYO-CURO

 We sell thousands of cans of this fly spray every season, and it gives good satisfaction. Qt. 60c; 1/a gal. 90c; gal. \$1.50; 5 gal. $\$ 7.00$; f. o. b. Portland.TARX-Soluble disinfectant for spraying hog and poultry houses, barns, etc., and for dipping. Handy, convenient to use. Crush a tube in a gallon of water and you have a gallon of dip exactly correct strength. Never loses strength, can be used in spray pumps. Send for booklet. Each tube makes a pallon of dip. 50 lbs . ( 150 tubes)


## C-A - WOOD - PRESERVER <br> (Carbolineum America) STOP THAT ROT



WOOD PRESERVER
WOOD PRESERVER
FEGIGTERED
USATNT OFFICS
"C-A-WOOD-PRESERVER" (Carbolineum America) is a pure unadulterated high boiling anthracene oil and only sold with an affidavit guaranteeing you superior quality. Don't confuse "C-A-WOOD-PRESERVER" with ordinary creosote oil, but buy your wood preservative according to quality-not price.

Among the largest users of "C-A-WOOD-PRESERVER" ore the railroad companies, for treating railroad ties and bridge timbers; telephone and telegraph companies, for treating poles and cross arms. Used in treating timber of all kinds exposed to the weather.

POULTRY HOUSES AND STABLES can in a great measure be made proof against vermin for 5 years if thoroughly treated inside. This oil preserves wood by disinfection and in the same manner keeps down lice and mites. For this purpose it is worth 100 times its cost, and no poultry grower will ever be without it, once it is tried. It will in a great measure prevent all disease around any building where animals are kept if used every few years.

SHINGLE ROOFS can be given a nut brown color and be made to last 50 years if coated every five or ten years with this preserver. The shingles will not curl.

$$
\text { Prices: Qt. 75c; Gal. \$1.75; } 5 \text { Gal. \$7.50; F. O. B. Portland }
$$

Portland Seed Company, Portland, Oregon, Distributors for Northern California, Oregon, Washington and Idaho.


## BEE SUPPLIES

Our Western hives, either Pine or Cedar, are standard sizes and well made of selected material dovetailed When ordering note the different figures. Fig. 1 means complete with sections and foundation for starter. Fig. 2 means without sections and foundation starter. Story and a half hives are preferred by many, consisting of brood chamber, brood frames, excelsior cover, bottom board, super for sections, with section holders and separators. Single story hives are equipped with brood frames, covers and bottom boards. Supers used for sections or extracting with half Hoffman frames or hive bodies with full depth frames require no extra cover or bottom boards. In complete or Fig. I hives, we send one sheet of foundation as starter for brood frames and one sheet of foundation as starter for brood frames and
one sheet of super foundation for starter in sections. If one sheet of super foundation for starter in sections. If
full sheets are wanted, these must be ordered by the pound. Hives and supers are packed and shipped in crates of 5 K. D. and no less than 5 will be shipped $K$ D. except at nailed price, the added cost being for breaking crates and repacking.

NOTE-Original crates of five hives are too large for Parcel Post. Nailed hives and supers are sold at increased price to cover cost of nailing and these take a higher freight rate than crates K. D. All supers for sections take the regular size $41 / 4 \times 41 / 4 \times 17 / 8$ sections.

| PORTLAND SEED COMPANY'S DOVETALIED | PINE HIVES |  |  |
| :---: | :---: | :---: | :---: |
| These hives made especially for our trade. | Each Nailed | Five <br> K. D. | Wt. of 5 |
| 8 Frame-Fig. 1, One and a half story. | \$4.15 | \$17.00 | 140 |
| 8 Frame-Fig. 1, Single story, no Super | 2.70 | 11.00 | 103 |
| 8 Frame-Fig. 2, with Super, no Section or Starter | 3.50 | 13.75 | 135 |
| 8 Frame-Fig. 2, Single story, no Super.. | 2.60 | 10.60 | 100 |
| 8 Frame-Hive Body, empty ............... | 1.00 | 4.25 | 35 |
| 10 Frame-Fig. 1, One and a half story | 4.45 | 18.50 | 178 |
| 10 Frame-Fig. 1, Single story, no Super. | 2.85 | 11.75 | 123 |
| 10 Frame-Fig. 2, with Super, no Section | 3.75 | 16.00 | 163 |
| 10 Frame-Fig. 2, Single story, no Super. | 2.75 | 11.25 | 127 |
| 8 Frame-Hive Body and brood frames. | 1.40 | 6.00 |  |
| 8 Frame-Covers | . 70 | 2.75 |  |
| 8 Frame-Bottom Boards | . 50 | 2.00 |  |
| 10 Frame-Covers | .75 | 3.25 |  |
| 10 Frame-Bottom Boards | . 60 | 2.60 |  |
| 10 Frame-Hive Body, empty | 1.05 | 4.25 |  |
| 10 Frame-Hive Body and Brood Frames. | 1.50 | 6.25 |  |

We can also supply the same equipment as above, in CEDAR HIVES.


## DOVETAHLED SUPERS

This is one of the best supers sold for the use of $41 / 4 \times 41 / 4 \times 17 / 8$ sections having beeways. We use wood separators (or slat separators), beeway sections, and section holders having bottom bars scored out to correspond with the beeways in the section.

Each ${ }^{5}$ Wt. 5 Fig. 18 fr. Complete …................... $\$ 1.35 \quad \$ 5.75 \quad 40$ Fig. 28 fr. Less Sec. and Fdn..... 1.05 4.50 35 Fig. 08 fr. Empty Fig. 110 fr . Complete Fig. 210 fr. Less Sec. and Fdn................ 1.75 Fig. 0 io 10 . 8 fr . Extracting 2.25 2.25 7.75
5.00 5.00 10 fr . Extracting $\qquad$ 1.10 4.50 $5.25 \quad .45$ Extracting supers are deeper and take the HalfHoffman shallow extracting frames.


HOFFMAN BROOD FRAMES
The Hoffman Improved Foundation Fastening Frames are the most satisfactory. Top bar has a beveled strip which holds foundation in place, perfectly straight and exactly in center of top bar. Wt. fectly straight
per $10,21 / 2 \mathrm{lbs}$.

Improved F. F. Western..................................... | 10 |
| :--- |$\quad 100$ Half Hoffman Western.............................................. $\mathbf{7 5}$ 5.90 The Half Hoffman Frame is used in the Ideal super or shallow extracting super.

## SECTION HOLDERS

Six section holders with separators, one follower and springs are put in each super, and each section holder holds four one-pound honey boxes. The bottom strip is $1 / 4$-inch thick and is cut out to fit insets of sections.
Western, $17 / 8 \times 181 / 8$ inches, slotted. Wt 20 lbs. per 100. Ea. 5 c ; per $100 \$ 4.50$. Blocks- $1 / / 8$ Western. Per 100 , $\$ 1.25$. Bottoms only- $17 / 8$ inches wide, slotted Western. Wt. 11 lbs. per 100. Each 3 c ; per $100 \$ 2.50$.
SEPARATORS-Should be placed between each two section holders so bees will build honey comb even in each section. Wt. 8 lbs. per 100 . Western (Veneer)-Per 100 90c.
DIVISION BOARDS-Wt. 5 oz . Each 20c-10, $\$ 1.50$.
FOLLOWERS-Each Gc-10, 50c.
TIGHTENING SPRINGS- 12 for $15 \mathrm{c}-$ 100, 90c.
VAN DEUSEN HIVE CLAMPS-For fastening bottom board to hives. Without screws, per pair 10c: 10 pairs 90c.


No. 30 TINNED WIRE
8/4-oz. spools, each ..10c


5-lb. coils, each...................................................................
T-TINS AND RABBETS


Flat Tins, 13-in.............................20 20 15-in............................. 20c
HONEY SHIPPING CASES
With glass front, designed for marketing honey. For the best market price put your honey up in nice cases. $24-1 \mathrm{~b} ., 41 / 4 \times 17 / 8$ Section, Nailed, each 55c; 24-1b. for $35 / 8 \times 5$ Sections-Ideal,

## QUEEN BEES

We are in a posi tion to furnish un tested Italian queens after the middle of April, weather conditions being favorable. It takes about these in from the apiary so do these in from the apiary, so do not expect May, June, July, August, Sept. Price $\$ 2.00$. May, June, July, August, Sept. Price $\$ 2.00$.
Tested Queens cannot be furnished beTested Queens cannot be
fore May. Price each, $\$ 2.50$.

## Section Honey Boxes



Our No. 1 Sections are made of choicest white basswood, perfect in finish and free from defects. They vary from snow-white to from defects. They vary from snow-white to a light cream colo
P. S. Co's No. 1, 100 \$1.70, 500 \$7.25. P. S. Co's No. 2, $100 \$ 1.50,500 \$ 6.26$



## No. ${ }^{1}$ or ${ }^{11}$ No. 7 or <br> ZINC HONEY BOARDS

Nos, 1 and 11 are of unbound zinc, and are placed directly on top of frames. This allows bees to pass through holes directly over spaces between the frames. When placed on the dovetailed or other similar hives there is a bee space above and below the zinc. No. 11 - 8 -frame, unbound, $12 \times 191 / 2$ in..... $\$ 0.45$ No. 1-10-frame, unbound, $14 \times 191 / \mathrm{s}$ in...... . 50 No. 8-8-frame, wood, wire, $137 / 8 \times 20 \mathrm{in}$. No. 7-10-frame, wood, wire, $16 \times 20 \mathrm{in}$. 1.00 8-frame, 7-wire ....................................Each 1.10 10-frame, 7-wire ..........................................................................


## DRONE AND QUEEN TRAP

This is placed before entrance of hive, to catch and cage the drones in an apartment by themselves. They can then be carried to another apiary, or be destroyed. The trap will also catch the queen when a swarm issues, and hold her confined until the apiarist can give her his attention. As she cannot get away, the bees will, in all likelihood, return into the hive. An excellent non-sworming device. Directions for use included. Wt. 1 lb . Each, 8 -frame, $\$ 1.00$; 10-frame $\$ 1.10$. BEE ENTRANCE GÚARDS - ROOT'S OR TINKER'S - These are to admit workers, and to exclude drones. After the drones are out, fix the guards over the entrance; at night the drones can be destroyed. Price, Zinc Front, 30c.
IMPROVED WIRE FRONT ENTRANCE
GUARDS-Wt. 6 oz. 8 -fr. 35 c ; 10 -fr. 40 c .


PORTER BEE ESCAPE-For use when taking off the honey. Does away with shaking the supers and smoking the bees. Saves stings. Price, as per illustration, postpaid................25c Price, mounted on board (weight $21 / 4 \mathrm{lbs}$.),


Full Sheet, Triangular and Quarter Sheet Method of Using Foundation

## COMB FOUNDATION

It pays to use foundation in full sheets in brood frames and sections, especially the latter. You should at least use a strip for a starter from one inch up. our foundation is made by the eed process, $5-1 \mathrm{~b}$. cardboard boxes in a case. State grade you want.

GRADE Size No per In Lots of
 Light Brood ............73/4 x167/8 9 . 85 8.00 Thin Super DADANT WHKED CORL TOUNDATIONPer 1 b. \$1.00; 10 lbs. for $\$ 9.50$.


SPUR WIRE IMBEDDER - This is like a tracing wheel, with the teeth set to firmly imbed the wire and not WIC IMBEDDER mail, 50c, plical device ELECTRIC WIRE IMBEDOER - A practical device that imbeds the wire by heating it electrically, the wire melting its way into the center of the wax foundation, only requires two common dry cells.


PARKER
PARKER'S FOUNDATION FASTENERWt. 1 lb . Price 50c.
ROOT'S FOUNDATION FASTENER-Complete with lamp, weight 8 oz . Price 75 c ; without lamp 35 c . DAISY FOUNDATION FASTENER-One of the best for putting starters into sections. Easily operated. With lamp, Wt. $6^{1 / 2} \mathrm{lbs} ., \$ 3.40$, Owing to danger of breakage, no chimney is sent with lamp. VAN DEUSEN WAX TUBE FASTENER-For fastening foundation sheets to thin top-bars. It is a tube half an inch in diameter, six inches long and tapering. This is filled with hot wax, and point
slowly drawn along edge of foundation in contact with top-bar, leaving a fine stream of hot wax to with top-bar, leaving a fine stream of hot
cement in. Price 45 c each, by mail 50 c .

## 



## ALEXANDER

ALEXANDER FEEDER-Bottom board slides forward, feeder is placed at back and under hive. Bees go into feeder from brood chamber. Wt. $11 / 4 \mathrm{lbs}$. BOARDMAN'S FEEDER-Wt. $1 / 2 \mathrm{lb}$. Price, without jar, 35 c
DIVISION BOARD FEEDER-Made to hang in brood chambers to one side or between the frames. Wt $13 / 4 \mathrm{lbs}$. Price 55c.


ROOT NICKELED STEEL HIVE TOOL-Spring steel; will stand any strain as a pry or scraper

BENTON QUEEN CAGE

## The best cage

 for mailing and is adapted likewise for introd ucing. Directions for introducing are printed on cover
dy, 5c each. 100 \$4.50.
ROOT'S QUEEN REARING OUTFITA complete set of tools and materials with instructions, enabling one with little experience to rear his own queens at small expense. Price $\$ 6.50$
WEST QUEEN-CELL PROTECTOREach, by mail, 15c.
SPIRAL CAGES-For holding queen after she hatches. Each 15c, by mail. DOOLITTLE CELL PROTECTORS Each, by mail, 10 c .
For Foul Brood


## D \& B SOLUTION

The Re-Processed Water-Formalin Solution
The U. S. Depart ment of Agricul ture says of the Water - Formalin Solution (Department Circular No 84): "It was found to be the most satisfactory disinfectant for use in sterilizing combs infected with American Foul-brood." In No. 10 sanitary cans, approximately $1 / 8$ gallon When mixed according to directions (1 part solution to 4 parts pure water) can makes $41 / 4$ gallons of disinfectan ready for use, sufficient to sterilize 250 to 300 combs
1 can, shipping wt. 10 lbs . S2.00 1 can, shipping wt. 10 ibs. s2.00 F. O. B. Portland ; not mailable

## BEE HEALTH

Found at last, a treatment for American and European FOUL BROOD B-H. A clear, clean liquid, a preventative. If interested, send for Bulletin 638-B, this gives all details and information. Price, gallon, each $\$ 3.00$.
BOOKS ON BEES
A. B. C. AND X. Y. Z. OF BEE CULTURE. A. I. and E. R. Root. The new and revised edition of this work is the most complete and best bock ever issued and is equally valuable to the advanced beekeeper as well as the berinner. Mailing weight 4 pounds. Price $\$ 3.50$.
EXTRACTED HONEY, HOW TO PRODUCE Root, 40 pages, 20 c FEEDS AND FEEDING. Root. 10 c . FIRST LESSONS IN BEEKEEPING, Dadant. 150 pages. $\$ 1.10$.
HABITS OF THE HONEY BEE, THE. 10 c .
WINTERING BEES. Root. 10c.

## MONTILX BEE PAPERS

 AMERICAN BEE JOURNAL. Illinois. Per year $\$ 1.50$GLEANINGS IN BEE CULTURE. Ohio. Per year $\mathbf{\$ 1 . 0 0}$.
WESTERN HONEY BEE. California Per year $\$ 1.00$.


BEE SMOKERS
R o o t's Improved Corneil-Burns anything, preferably greasy rags for their dense smoke
mall, 3x51/ in., wt. 2 lbs. each ............. $\$ 1.10$ Medium, ${ }^{31 / 2 \times 7}$., wt. $2^{1 / 2}$ lbs., each...... 1.60 Large, $4 \times 7$ in. wt. 2 lbs., ea. 2.00

CLARK'S COLD BLAST SMOKER BLAST SMOKER
Probably the most popular smoker in use today is the cold blast, although many are now changing to the hot blast, claiming that they are more effective. The Clark is the best low priced smoker. Weight 11/4

lbs. Price $\$ 1.10$
HAT BEE VEILS-Rubber band around top, to fit hat snugly.
(Postpaid)
No. 1-Silk tulle...... $\$ 1.60$ No. 2-Cotton tulle, with silk tulle face $\mathbf{1 . 4 0}$ No. 3-Cotton tulle.. 1.20 GLOBE BEE VEIL-No trouble to put on or take off. Protection against mosquitoes, fics. bees, gnats, etc. Weighs only 5 oz . Price \$1.65.
ALEXANDER - Fine Bronze Wire Cloth. Stands clear of face; muslin top and bottom. Wt. 1 lb . Price $\$ 1.50$.

## BEEKEEPERS' GLOVES

CANVAS - Long Sleeve, Oiled, Ladies' or Misses'. Price $\$ 1.25$; postpaid $\$ 1.35$.

## EXTRACTOR

P. S. CO'S TWO-FRAME EXTRACTOR-NOW takes the lead over all others in use, as it is easily reversed. Always the best machine when rapid work is required. Price $\$ 45.00$.


BINGHAM HONEY KNIFE-Price $\$ 1.80$; by mail $\$ 1.85$.


COGGSHALL'S BEE BRUSH-For brushing bees off combs when extracting. Price 30c; by mail 35 c .
 the best, most lasting brushes. Price 45 c by mail 50 c

ROOT STEAM HEATED UNCAPPING KNIFE
 For a large amount of uncapping, this knife is the best tool ever devised. Handle is one piece, fastened securely to blade. Will slice off cappings much more rapidly than a cold knife or one that has to be dipped in ho water. Knife is kept constantly hot, cappings slide off from it without sticking. The copper boiler used with this knife is equipped with a fool-proof safety valve It is adjustable, and opening is also used as a filler hole. This boiler, in connection with a suitable oil or gasoline stove, completes outfit. Three feet of rubber steam hose stove, completes outfit. Three feet of rubber steam hose


Steam boiler with safety valve for use with above Wt. 3 lbs . Price $\$ 3.00$.

## BIRD FOODS AND REMEDIES


P. S. CO. ROLLER SPECIAL BIRD SEED MIXTURE, the very finest, put up especially for singers. 1 lb . sealed pkg. $35 \mathrm{c} ; 5$ phgs. $\$ 1.25$; postpaid.
DIAMOND QUALITY BIRD SEED with cuttlebone, next to our Roller Special the best to be secured. 1 lb. pkg. $25 \mathrm{c} ; 10 \mathrm{lbs} . \$ 1.35$; ppd.
CANARY SEED, recleaned, lb. 20c; $10 \mathrm{lbs} . \$ 1.75$; postpaid.
HEMP SEED, recleaned, lb. 20c; 10 lbs. $\$ 1.10$; postpaid.
RAPE, sweet summer, Ib. 20c; 10 lbs. $\$ 1.45$; postpaid.
MILLEIE, recleaned, lb. 20c; 10 lbs. $\$ 1.45$; postpaid.
CUTTLE BONE, each 10c; doz. 75c; postpaid.


## Gold Fish Foods

## RICE FLAKES,

 2 pkgs. for 350NATURAL
FISH FOOD,
2 pkgs. for 350 Postpaid

## Spratt's Bird Remedies



## Song Bird Specialties

Prices postpaid CANARY HIGH BALL ......... 2 for 30c BIRDOLENE $20 c$ BIRD LICE DESTROYER \& GUN. 306 BHRD NESTS, each NRSTENG HAIR, pkg. .................. 25c BIRD MANNA, pkg. ............................-25c BIRD PASTE, pkg. ................................................ BIRD GRAVEL, pkg

## Parrot Foods

DIAMOND PARROT MIXTURE, 1 lb . 25c; 2 lbs. 45c; 5 lbs. $\$ 1.00$; postage extra.
PARROT SUNFLOWER SEED, 11 l. 20c; 5 lbs .75 c ; postage extra.
HALLER'S PARROT TONIC, postpaid 30c.

## DOG, FOX AND CAT FOODS AND REMEDIES <br> Spratt's Dog Foods and Remedies <br> We are selling agents for these famous preparations which have the

endorsement of the big breeders and fanciers-and are the standard in their line. We can only list items in this catalog, but will mail free to dog owners "Spratt"s Dog Culture", which gives reliable and interesting information on care of dogs and about "Spratt"s" preparations. SPRATT'S OVALS-Pocket biscuit. 10 ibs. $\$ 1.65 ; 25 \mathrm{lbs}$.
$\$ 3.55 ; 50 \mathrm{lbs} . \$ 7.25 ; 100 \mathrm{lbs} . \$ 14.00 ;$ F. 0. B. Portland. SPRATT'S DOG CAKES-10-1b. bags, \$1.60; 25-1b. baga,
$\$ 3.25 ; 50 \mathrm{lbs} . \$ 6.50 ; 100 \mathrm{lbs} . \$ 12.50 ;$ If. O. B. Portland. SPRATT'S PUPPY CAKES-10-1b. bags, \$1.60; 25-lb. bags,
$\$ 3.50 ; 50 \mathrm{lbs} . \$ 6.75 ; 100 \mathrm{lbs} . \$ 13.09$; $\mathbf{F}$. O. B. Portland.
SPRATT'S FIBO-10-lb. bags, $\$ 1.75 ; 25-1 \mathrm{~b}$. bags, $\$ 3.75 ; 50$
lbs. \$7.50; 100 lbs . $\$ 15.00$; F. O. B. Portland.
SPRATT'S FLEA DOG SOAP, 30c, postpaid.
SPRATT'S PUPPY WORM CAPSULES, 60c, postpaid.
SPRATT'S DOG WORM CAPSULHS, 6OG, postpaid.
SPRATT'S DIARRHOEA TABLETS, 60c, postpaid.
SPRATH'S DISTEMPER TABLETS, \$1.00, postpaid.
SPRATT'S DISTEMPER TABLETS-For Toy dogs and puppies, \$1.00, post paid.
SPRATT'S EAR CANKER OINTMENT, 75c, postpaid.
SPRATT'S EYE LOTION TABLETS, 6Oc, postpaid.
SPRATT'S FLEA POWDER, 40c, postpaid.
SPRATT'S MANGE MEDICINE, 60c, postpaid.
SPRATT'S PUPPY AND TOY DOG TONIC AND CONDI.
TION TABLETS, GOc, postpaid.
SPRATT'S DOG CONDITION TABLETS, GOG, postpaid.
SPRATT'S DIGESTIVE TABLETS, COc, postpaid.
SPRATT'S PURGATIVE TABLETS, GOc, postpaid.
SPRATT'S CHOREA TABLETS, 60c, postpaid.
SPRATT'S COUGH TABLETS, GOc, postpaid.

## California Brand Dog Foods

Prices F. O. B. Portland.
CALIITORNIA MEAT BONE BISCUITS, for grown dogs. $10 \mathrm{lbs} . \$ 1.50 ; 20 \mathrm{lbs} . \$ 2.65 ; 50 \mathrm{lbs} . \$ 6.50 ; 100 \mathrm{lbs} . \$ 12.50$.
CALIFORNIA NUT BONE BISCUITS, for puppies and small dogs. $10 \cdot \mathrm{lb}$. bags, $\$ 1.50 ; 20 \mathrm{lbs} . \$ 2.65 ; 50 \mathrm{lbs} . \$ 6.50 ; 100$ lbs. \$12.50.
CALIFORNIA PUP-O, makes a tempting dish and an excellent change of food for any size dog. 10 lbs . $\$ 1.50$; 20 lbs . $\$ 2.65 ; 50 \mathrm{lbs} . \$ 6.50 ; 100 \mathrm{lbs} . \$ 12.50$.
CALIFORNIA CIRCLES-A small size convenient biscuit for all sizes of dogs. They do not crumble in the pocket. 10 lios. $\$ 1.50 ; 20 \mathrm{lbs} . \$ 2.85 ; 50 \mathrm{lbs} . \$ 6.50 ; 100 \mathrm{lbs} . \$ 12.50$.
CALIPORNLA KIBBLE-Dog biscuits partly broken up fo: mixing with soup or vegetables. $10 \mathrm{lbs} . \$ 1.50$; 20 lbs. $\$ 2.65 ; 50 \mathrm{lbs} . \$ 6.50 ; 100 \mathrm{lbs} . \$ 12.50$.

## FOX BISCUIT

Especially prepared for silver foxes, for maintaining perfect condition and health, increasing the growth of coat and improving its lustre and quality. Better than dog biscuit ior foxes, and also very good for dogs. Try them. Per lb. 20c; $100 \mathrm{lbs} . \$ 12.00 ;$ f. o. b. Portland.

Send for Clayton's free book full of valuable information to dog owners, describing full line of Clayton's Remedies. For Parcel Post Add Postage to Prices Below

| CLAXTON'S MANGE REMEDY | 600 |
| :---: | :---: |
| CLATTON'S LAXATIVE PILLS | 600 |
| CLAYTON'S WORM PILLS | 600 |
| CLAYTON'S COUGH REMEDY | 800 |
| CLAYTON'S PUPPY TONIC | 600 |
| CLAYTON'S KILFLEA SOAP | 350 |
| CLAYTON'S KILFLEA POWDER | 350 |
| CLAYTON'S CEOLINE SOAP | 250 |
| CLAYTON'S COD LIVER OIL | \$1.00 |
| CLAYTON'S DIARRHOEA TABLETS | 60c |
| CLAYTON'S DISTEMPERINE | 60c |
| CLAYTON'S DISTEMPERINE TABLETS | 60c |
| CLAY'ON'S DIGESTIVE TABLETS | 60c |
| CLAYTON'S FIT REMEDY | 606 |
| CLAYTON'S TAPE WORM EXPELLER | 60\% |
| CLAYTON'S CONDITION PILLS | 608 |
| CLAYTON'S BLOOD PILLS | 60 c |
| CLAYTON'S VERMIFUGE FOR WORMS | 60¢ |
| CLAYTON'S RED WORM BULLETS | 0 |

## Glover's Dog Remedies

GLOVER'S VERMIFUGE, 65c, postage extra.
GLOVFR'S MANGE CURE, 65c, postage extra.
GLOVER'S DISTEMPER REMEDY, $\$ 1.25$, postage extra.

## Delcreo Dog Remedy

The one recommended remedy for distemper, black tongue, pneumonia, colds, etc. Every breeder should keep it on hand. 4 oz . bottle $\$ 1.50 ; 16 \mathrm{oz}$. bottle $\$ 5.00 ;$ F. O. B. Portland.

## Canned Dog Foods

These foods are used and recommended by the leading veterinarians, also used by fanciers and breeders. A perfectly balanced ration ready to serve. Prices f. o. b. Port-land-add postage for Parcel Post.
KEN-L.HATION, 1 lb . cans, each 20c, doz. \$2.00; 7 lb . cans, each $\$ 1.00,6$ cans $\$ 5.75$.
PUPP-ERATION, 1 lib. cans, each 20c, doz. \$2.25; 21/2 lb. cans, each 50c, doz. $\$ 5.50$.
HEMO-RATION, 1 lib. cans, each 20c, doz. \$2.25.
MARO-MEAT, $21 / 2 \mathrm{lb}$. cans, each GOc.

## CAT REMEDIES

SPRATT'S CAT WORM CAPSULES, 60c, postpaid.
CAT DIARRIOEA REVIEDY, 60c, postpaid.
CAT TONIC AND CONSTIPATION TABLETS, 60c, ppd.
CAT CONSTIPATION REMEDY, GOG, postpaid.
CAr' CHOREA REMRDY, 60c, postpaid.
CATNIP, package $15 \mathrm{c} ;$ postpaid 20 c .
CATNIP'MICE, each 15 c ; postpaid 20c.

| Warehouse | Seeds | Bee | Nursery | Order No. |
| :--- | :--- | :--- | :--- | :--- |
| Store | General | Potatoes | Florist |  |
| O. K. |  |  | Card Made |  |
|  |  | Zone | By |  |

## PORTLAND SEED COMPANY, Portland, Oregon

READ INSTRUCTIONS FOR ORDERING ON PAGE 1 OF THIS CATALOG and save all misunderstandings. Write on a separate sheet about any matters not pertaining to this order. This will save delays in filling order.

## Name.

Write Name and Address Plainly
Post Office.
R. F. D. No. or Street.
..Date.

| Write Name and Address Plainly |  |
| :---: | :---: |
|  | AMOUNT PURCHASED |
| Post Office.. |  |
| R. F. D. No. or Street. | Parcel Post, Express and Freight Station, without an Agent must be prepaid. To cover charges if prepaid, add : |
|  |  |
| Station. |  |
| County.............................................................................-.-. State. | \$...-..........-.-............-...-.-................cts. |
| Be Sure to Give Name of County | TOTAL AMOUNT ENCLOSED |
| Ship by.. |  |
| State if Wanted by Mail, Express or Steamer |  |

NOTE-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 we sell and will not be in any way responsiole for the crop. If the purchaser does not accept the goods on stock, roots or plants we sell and will not be in any way responsi
these terms, they are to be returned at once.--Portland Seed Co.
Quantity

# ACME Insecticides and Fungicides 

 Take the Speculation Out of Spraying. Write for free spraying guide

ICME GAIRIDEN GUTIRJ)
A garden insecticide and fungicide for use as a dust. No water, no mixing no muss.
For use on cabbage, cauliflower, to mato plants. melon vines, currants and gooseberrits and other vegetables, flow rs and shrubs of many kinds:

35 c
90 c

Not mailable

ACME IPMRIS GRELEN
A rich emerald color and of fine flutify physical character: Containing $55 \%$ ar senious oxide, it will give quickest control where extreme measures are neces For use on potatoes, cotton, toluceo also to mix with arsenate of learl for fruit thee spraving where quick result are neressary

C 1b. carton
$1+\mathrm{lb}$. keg
$104 \mathrm{lb} . \mathrm{keg}$
rut mes

ICNE TWO-IVAV SPR:IY


A belanced insecticide and fungicide containing $1 t^{\prime}$; arsenate of lead ant s3'. Bordeaux mixture. Two results with one apmlication
currant and gooseberry, srape, pa
plum, strawhery, pecan, bean, beft, cu cumber, pepper, potato tomato and many other fruits and vegetable

25 c
45 c
\$1.25
Not mailable
. CME LONDON PURPLE

| A favored insecticide for 50 years. |  |
| :---: | :---: |
| Now stronger and better than ever: | N ACME |
| London lurple is one of the lightest |  |
| and fluffiest powdered insecticides on | LONDON |
| the market, assuring complete coverage | E |
| and greatest adhesion to foliage. <br> For use on potatoes cotton tobacco |  |
| sugar beets and many other slirubs and | 1 |
| vegetalkes affected by loaf chewing in- |  |
|  |  |
| 1/4 1b. carton ... ... .a........ 15c |  |
| 1 lb . hag ...a........... ............ 45c |  |
| 1b. lag ... ............ ...... \$1.25 |  |


| MCME MESENSTE OF LE.SI) |  |
| :---: | :---: |
| The most favored arsenical inseeti- |  |
|  |  |
| is safest to use on tender foliage and sticks well on the leaves. Recommended for fruit troes, vegetables, bushes and tobacen. 'an the usel as dust or spray. |  |
|  |  |
|  |  |
|  |  |
|  |  |
| $1 \cdot 2 \mathrm{lb}$. cartom. |  |
| 1 lb . Carton |  |
| 4 13. lag |  |
| Noot mail |  |

DCME LIME SULFELS
standard 33 Banme linte and
 sulpliur der hut having all the effectivenes of the liguid protuct when dis: solver in water. against scale, peach blight, leaf curland twig berel. Summer spray ing against seal, woot, botch, red spider and mite.
$\begin{array}{rrrr}10 & 1 \mathrm{l} & \mathbf{\$ 1 . 5 0} 100 \mathrm{lb}, . . \\ \mathbf{\$ 2 . 2 0} & \mathbf{1 2 . 5 0}\end{array}$


## Spray in Time and Profit Later

## Whether you have large acreage or just a garden patch. you will have to shray if you expect to raise crops

 which will give you a profitalle returnInsect pests and fungous diseases play no farorites
Spray in time. Won't let the bugs get you on the run. I'su Acme Spraying Materials acomaling to the recom mendations of the Acme Guide and you will be assured of adequate and safe motection. Write for this complete guide.

Portland Seed Company, Portland, Oregon



[^0]:    Always remember that corn increases in food value and digestibility as it reaches the ripe stage-while other forage crops become more difficult of digestion and lose much of their food value as they ripen.

[^1]:    $$
    1 E
    $$

[^2]:    "NICO-FUME" TOBACCO POWDER
    Tobacco Powder impregnated with a high strength nicotine solution. Effective for fumigating in greenhouses to destroy Aphis, Thrips, etc.: Fill $21 / 2$-inch flower pot heaping full of "Nico-fume" Powder, pour powder out on ground or cement walk in a narrow pile about 7 inches long and light. Use a pile to each 5000 cubic feet of air space. Place piles equal distance apart.
    1 lb . can \$1.25; 5 lb. can \$4.75; 10 lb. can $\$ 8.50$; f. o. b. Portland.

