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# STUMMPRWMALTER CO:S SEEED ANNUANL 

## 1927



STTMMDP \& WALTIER CO 30-32 BARCLAY STREETR $\mathbb{N E W C O R E R G I T M}$

## FREE DELIVERY IN THE UNITED STATES

When cash accompanies your order, we deliver, free of charge, to your railroad station or your post office, all lawnseed mixtures, vegetable seeds (except beans, corn and peas when ordered alone), flower seeds, cannas, gladiolius, dahlias, lilies, and books. We also deliver fertilizers in original 100pound sacks or over within 100 miles of our New York store, when cash is sent with order, except when otherwise stated in this catalogue. When we prepay delivery charges, we ship by mail, express, or freight, at our option.

The customer pays transportation on all merchandise which is billed and charged through our Accounting Department, and on a few items, whether a prepaid order or a charge order, the weight or bulk of which is large in relation to value;
these are beans, corn, and peas when ordered alone; vegetable roots-rhubarb, witloof, and potatoes; field seeds-corn, clover, cereals, and grass seeds in separate varieties; live plants-roses, peonies, climbers, vines, fruit trees, shrubs, and stolons except where noted; insecticides, fungicides, implements, and garden supplies, except where we offer to prepay.

We make no charge for cartage to steamship docks, railroad stations, or express offices in Greater New York.

FREE PACKING. We make no charge for cases or packing for domestic shipments, only for cotton and burlap bags. These we invoice at cost and make full allowance for when returned, prepaid, in good condition. Sender's name and address must be marked on each package.

## Business Rules and Suggestions to Customers

PLEASE USE THE ORDER SHEETS. Also keep a copy of your list, and, above all, do not omit your name and address. Numerous orders reach us every season without these important particulars.

ORDER EARLY. It is difficult for us to serve you as promptly as we wish when we receive a very large number of rush orders just prior to planting-time. Will you not help us by giving us your order early? We will appreciate the favor indeed, and you will gain too: by having the goods on hand you will be saved possible delay and be able to take advantage of early opportunities for planting.
ERRORS. Ordering early helps to prevent errors. Our orderfilling system calls for complete rechecking by efficient supervisors; customers may be assured of full weight and correct count. We believe we have reduced errors to the minimum, yet should mistakes occur, our patrons may rely upon us to rectify them promptly.
COMPLAINTS. These will always be adjusted to the purchaser's satisfaction, but we ask that we be notified promptlywithin 5 days of receipt of goods. We cannot consider complaints made after this period, nor can we accept responsibility for failures of the crop.
PLANT ORDERS. Kindly use the special order-sheet for plants to be found at the end of this book. We ship trees, shrubs, roses, etc., at the correct date for planting, which may be some time after your order reaches us. When the plants arrive, unpack them at once and water them. They should be "heeled in," that is, be planted temporarily, or should have some soil placed around their roots if you are not ready to use them at once.
IF ANYTHING IS MISSING when you unpack your goods, do not think we have necessarily made an error. Look first for a memorandum, either enclosed with your order or sent by mail, telling you that some items of the order are to follow later; these may be goods which are not ready, or not suitable for using right away. Onion sets, trees, shrubs, roses, and plants generally are not shipped until it is the proper time to plant them. We sometimes enclose small packages in larger bags of seed or fertilizer; please examine these before reporting shortage.

VISITORS TO OUR ESTABLISHMENT. When in New York we hope you will find time to visit our store and warehouses. We also welcome you to our Long Island trial-grounds, where our annual spring display of Tulips, Hyacinths and Narcissi is particularly worth inspection. We suggest that you first communicate with us so that you may see our grounds at a time when some one or other of our trial-crops is at its best. If you drive, take the Motor Parkway to Huntington Lodge-our grounds are on both sides of the Parkway at this point. Should you proceed by Long Island Railroad, Farmingdale Station is $11 / 2$ miles from our grounds.

PRICES. Our prices are net, with no discounts, and they are subject to change without notice.

REMITTANCES. These should be made by check, bank draft, post-office order, or express money order; small sums may be sent in postage stamps. Do not send currency unless by registered letter.
C. O. D. We are always glad to supply seeds, bulbs, fertilizers, or insecticides to be paid for on delivery, the purchaser also paying transportation charges. We do not send shrubs, roots, or other perishable goods C. O. D.

CHARGE ACCOUNTS. We will be pleased to open charge accounts to responsible parties on receipt of the usual trade references; in this case our invoices are payable within 30 days net-no discount.

CANADIAN SHIPMENTS. In sending orders for bulbs or nursery stock, a permit number should first be obtained by our Canadian friends from the Secretary, Destructive Insect and Pest Act Advisory Board, Ottawa, and forwarded to us so that shipment may be made without delay. There is no charge for this permit, nor is there any difficulty in obtaining it. Note especially that this is not required for seeds, fertilizers, or implements. Due to cost of international parcel-post, we are obliged to charge postage on Canadian shipments. Import duties also are payable by the purchaser.

EXPORT DEPARTMENT. Shipments to distant points form an important feature of our business, and we are well equipped to take care of these orders through our Export Department, which is dedicated to serving our clients in foreign lands. Purchasers may rely upon proper packing, prompt delivery to steamers, and correct preparation of the necessary documents. Transportation and special packing will be charged extra at cost.
EMPLOYMENT REGISTER for Superintendents, Gardeners, Greenkeepers, Groundsmen, Poultrymen. We always have on our books the names of reliable men seeking positions, most of whom are known personally to our representatives, and we will be glad to put them in touch with employers seeking help of this kind. No charge is made to either party, and no obligation is incurred in connection with this service.
ADVISORY SERVICE. Every mail brings us problems connected with gardening, farming, and lawn-keeping. It is always a pleasure to be of help in solving these, and we take pains to answer these inquiries promptly and fully. In the development of estates or in the seeding of large areas, you may wish to confer with a technical representative on the ground; generally we can arrange this for a nominal fee that would be no more than the actual cost of transportation to and from New York.

## CATALOGUES ISSUED

These are mailed regularly to customers, and prospective customers are invited to write for them

January 1. GARDEN ANNUAL, 180 pages of garden information, many colored plates, and hundreds of half-tone illustrations.
February 1. GOLF TURF, deals with the production and maintenance of golf courses, polo fields, and large lawns. 72 pages, many illustrations.

May 1. MIDSUMMER AND ADVANCE BULB CATALOGUE. Merchandise for summer planting, together with bulbs at favorable rates for special import orders.
September 1. BULB CATALOGUE, describing the newest in Tulips, Hyacinths, Narcissi. Offering American-grown stock, also bulbs from Holland, France, Bermuda, and Japan.

GEORGE G. STUMPP, President JULIAN H. WALTER, Treasurer THOMAS F. KEARNEY, Asst. Treas. WILLIAM A. SPERLING, Secretary


## THE TWENTY-NINTH YEAR OF STUMPP \& WALTER CO.'S SEED SERVICE

HIGH QUALITY AND ABSOLUTE RELIABILITY. Seeds cost little, but the labor needed to produce a crop is continuous,

Selected for quality by tbe most dependable growers in the world, mercbandise reacbes our establisbment from tbe ends of the eartb. Our stores, warebouses, and offices occupy a total of 75,000 square feet, and comprise, we believe, the largest area in the neigbborbood of New York devoted to the suppty of seeds, bulbs, plants, fertilizers, implements and insecticides.

Vegetable Seeds from United States, Canada, France, Holland, Denmark, England, Italy. Flower Seeds from United States, France, Italy, Germany, India. Lawn Seeds from United States, Germany, Holland, Australia, New Zealand, Ireland, England, and Canada.
Clovers, Field Seeds from United States, South America, Africa, and Canada,
Cotton from United States, Egypt. Jute from India.
Sugar Beet from United States, Germany, Russia.
Bulbs from United States, Holland, France, Japan, Bermuda.

GEORGE G. STUMPP, President
JULIAN H. WALTER, Treasurer
THOMAS F. KEARNEY, Asst. Treas.
WILLIAM A. SPERLING, Secretary


Above-Stumpp ef Walter Co.'s Seeds are lested to make sure they grow.

Right - Stumpp ef Walter Co.'s Seeds are proved for quality at our mammotb trial-grounds on Long Island.
and the time taken for plants to grow is so long that, in seeds, bigb quality is the only consideration. Before being passed for sale, all Stumpp \& Walter Co.'s seeds are tested for vitality in our laboratory, and during the summer they are subjected to further tests
 in our trial-grounds. It is the aim of the Stumpp \& Walter Co. to have their customers sow only the best seeds obtainable.

NON-WARRANTY. We, Stumpp \& Walter Co., give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, or plants we send out, and will not be responsible for the crop. As bearing on the above, the following remarks, taken from a recent Bulletin of the U. S. Department of Agriculture, are interesting: "Without attempting to discuss the arguments for the seedsman's disclaimer pro and con, the fact remains that reputable seedsmen stand back of their seeds and do not knowingly and willfully sell seeds that are unfit for planting purposes."

## 30-32 BARCLAY STREET

 NEW YORK CITYNew York Phones: $\begin{cases}4830 & 4831 \\ 4832\end{cases}$ Cortlandt $\begin{cases}4832 & 4833\end{cases}$
BALTIMORE, MD., BRANCH: 204-206 NORTH EUTAW STREET


## How to Make

 a Lawn
## With"Staigreen"Grass Seeds

THE production of a good lawn is not at all difficult. The method is as follows: (I) Dig the soil about 6 inches deep, but only when it is dry; if rain has fallen recently allow a few days of fine weather to elapse before commencing work. (2) As you dig, lift each clod high enough to enable you to turn it completely over. (3) Strike the inverted clod with the back of the fork to break it. (4) As the work proceeds, remove all stones, sticks, and rubbish. (5) Scatter Stumpp \& Walter Co.'s Emerald Grass Fertilizer on the dug earth; use I ton per acre or I pound to each 25 square feet. (6) Draw a rake back and forth until the soil is smooth and in fine condition. (7) Sow Staigreen Lawn Seed at the minimum rate of 100 pounds per acre ( 4 bushels) or I pound (nearly 2 quarts) to each 400 square feet. Double the quantity when turf is needed quickly. Select a day when no wind is blowing; divide the seed into two portions and sow the land twice to insure its even covering; it is important to stir the contents of the bag now and again. When you have sown the seed, rake the land once more, but very lightiy. Do not work the rake back and forth-merely draw it toward you in a series of light strokes, raking only once in the same place. The idea is to bury most of the grass seeds
no more than 1/8inch deep. (8) Roll the seeded area, but should rain fall before the work is completed, defer the rolling until the land has dried.

How long will the Lawn be growing? This varies with the time of year, quality of soil, rainfall, etc. Under very favorable conditions the young seedlings show through in less than ten days and the whole area looks green in a further two weeks; wait four weeks more before walking on the grass except to mow and roll it.
When is the best
time to make a Lawn? Early spring and late summer are the best, but seed will grow quite well if sown at any time of the year excent during July.
Will the above directions hold on poor or sandy land? Before commencing work on poor soil, spread rotted horse-manure or cow-manure over the land at the rate of 20 tons to the acre or I pound per square foot. Then proceed exactly as directed. If manure cannot be procured, use Pulverized Sheep Manure at the rate of 2 tons to the acre or I pound to each io square feet. Do not attempt to grow a lawn on excavated soil, subsoil, or "fill" without first applying manure, digging, then adding at least an inch of top-soil, two or three if possible. Apply Emerald Grass Fertilizer, and proceed as suggested.
How about moist, sour soil? Spread hydrated lime at the rate of 2 tons per acre or I pound to each io square feet: then follow directions. In bad cases it will be necessary first to drain the land by digging ditches and laying tile.


Should I sprinkle the new Lawn with water? Yes, if seeding is followed by hot, dry weather. Otherwise it is best not to water for the first three weeks. Later, when the grass has started, it may be watered as required: use an approved sprinkler and soak every three days.
EMERALD GRASS FERTILIZER. 5 lbs. $50 \mathrm{cts} .$, Io lbs. $90 \mathrm{cts} ., 25 \mathrm{lbs} . \$ \mathrm{I} .75,50 \mathrm{lbs}$. $\$ 3.25$, 10o lbs. $\$ 5.50$, $500 \mathrm{lbs} . \$ 22$, ton $\$ 75$.
PULVERIZED SHEEP MANURE. $5 \mathrm{lbs} .50 \mathrm{cts} .$, Io lbs. 90 cts., 25 lbs . \$1.50, $50 \mathrm{lbs} . \$ 2.75$, 100 lbs. $\$ 4.50,500 \mathrm{lbs} . \$ \mathrm{I} 8$, ton $\$ 65$.

What after-care is needed? As soon as the young grass is 2 inches high, begin cutting it and keep it regularly mown; roll it now and again, and water during dry weather.
How about Weeds? Stumpp \& Walter Co.'s seeds are as free from weeds as care and modern machinery can make them. All soils, however, contain seeds of weeds-some more than cthers-and many of these start to grow along with the grass. Close cutting will kill most of them. but the few that remain must be taken out, and the holes filled with good soil in which you have mixed some grass seeds.
How about White Clover? We include Clover only in our lowest-priced mixture, which we call "High Grade Lawn Seed," because Clover is generally omitted nowadays in the finest lawns. For the convenience of our customers who wish it, we offer Superfine White Clover. Oz . Ioc., 1/4lb. 30c., lb. 8oc., io lbs. $\$ 7.50$, bus. ( 60 lbs .) $\$ 36$, Ioo lbs. $\$ 60$. Mixed with grass seeds, usual allowance of clover is 5 per cent.
Is "Staigreen"" the best seed to use? No seeds are purer and no seeds grow more vigorously than the grass seeds in Staigreen, which is a mixture of five distinct varieties, and for the finest lawns Staigreen cannot be surpassed. For shade and special conditions use the mixtures described on the following pages. Staigreen Lawn Mixture, packed in I-lb. sifter-top container, $6_{5} \mathrm{cts}$. In bags, $2^{1 / 2}$ lbs. $\$ \mathrm{I} .55,5 \mathrm{lbs}$. $\$ 3, \mathrm{I} 2 / 2 \mathrm{lbs} . \$ 7.25,25 \mathrm{lbs}$. $\$ 14$, ioo lbs. $\$ 55$.


## How to Make a Lawn <br> WITH STOLONS OF CREEPING BENT GRASS

THE NEW METHOD OF PRODUCING TURF WITHOUT GRASS SEEDS


Creeping Bent in Stumpp \& Walter Co.'s Nurseries
(1) Growing in the Nurseries of the Stumpp \& Walter Co. are rows of Creeping Bent turf, known to botanists as Agrostis stolonifera


Clipping the turf into $11 / 2$-inch lengths
(5) The turf is clipped into pieces about $11 / 2$ inches long. Shears are satisfactory for small quantities, but a food-chopper is used for large areas.

Plant the clipped stolons in spring or fall-not during hot weather-and best results are obtained on a well-drained soil, naturally moist and rich.

An Important Point. Keep the stolons always slightly moist until you have planted and covered them with soil.


Sprinkling stolons on the new Harmon Golf Links in Brooklyn, New York. Stolons supplied by Stumpp \& Walter Co.
7) Water the newly planted stolons daily for two weeks, by which time the young grass should be well through. Many golf greens are planted with stolons of Creeping Bent.


Shaking the Creeping Bent free of soil (3) Immediately the turf reaches you, unpack it, and then shake the earth from it. It will be found to consist mainly of tangled stems, like string. These are the string. These are the
 (2) To make a Creeping Bent lawn, first estimate the size it will be in square feet and then purchase on-tenth the area in Creeping Bent turf. For square feet in area, order 100 square teet of the turt, it costs $\$ 25$ 100 square feet. On receipt of your order the required quan tity is stripped as shown and sent to you by ex. press.

Covering stolon clippings with a thin layer of fine earth
(6) Spread the clippings evenly on well-manured, fine, smooth earth, and immediately cover them with $1 / 2$ inch of sifted soil.


A "stolon" or runner of Creeping Bent
(4) A "stolon" or runner of Creeping Bent is able to produce new plants at intervals throughout its length

## Lawns Grown without Seeds

Turf produced by planting the clipped "stolons" or runners of Creeping Bent Grass has a rug-like texture and very even color. Generally, too, it is very free of weeds. A lawn may be grown in as short a time from stolons as from seed, and the process is very certain, failures being infrequent.
"STOLONS" OR RUNNERS OF CREEPING BENT GRASS, 5 square feet $\$ 1.50$, 100 square feet $\$ 25$, 1,000 square feet $\$ 225$
Purchaser pays transportation from our Nurseries. Five square feet will plant a lawn 40 to 50 square feet in area; 100 square feet will plant a lawn 700 to 1,000 square feet in area. Weight of one square foot about one pound.

## HOW ABOUT YOUR LAWN?



# Stointeen Latw SEDD 

## 25-Pound versus 14-Pound LAWN SEED

Many low-priced Grass Seed mixtures weigh only 14 pounds per bushel. This indicates either a good proportion of chaff or some of the real good varieties in the rough state, not properly cleansed so as to leave only the vital part and less of the chaff or shell-in other words, so many less seeds to the quart or pound that will germinate and grow real grass.

Why Not Buy the Recleaned Kind-
A mixture of grasses weighing 25 pounds per bushel, of high germination and purity, permanent in nature, the varieties carefuily proportioned so that they will succeed one another in brightness of foliage, with the result that the lawn, even in its first year, will have a bright, rich green color from early spring until covered by snow. Staigreen consists of the purest and choicest varieties of grasses, regardless of high money value. Certain varieties are scarcer in some seasons than others, but the formula from which Staigreen is compounded does not change with the years: it is always the same and always the best.

## 

One Pound will sow a Plot
Sow 100 Pounds to the Acre Double above quantities when
quick results are desired

## 30 and 32 Barclay St. New York

25 Lbs. Not ILow Cheap But How Cood


## 30 gascrax st

NEW YOFX

| Siftertop <br> container | $\$ 1.55$ | $\$ 3.00$ | $\$ 7.25$ | $\$ 14$ | $\$ 55$ |
| ---: | :---: | :---: | :---: | :---: | :---: |

## WHEN CASH ACCOMPANIES ORDER

HOWTO BULD A PERNANENT LWN
PAMPHL ET FRES N EVERY BAG
25 LBS.


## Frye onir



## Lawn Seed Mixtures <br> For Special Purposes



For Lawns Under Trees

## SHADY PLACE FORMULA

Usually it is not difficult to obtain good turf under trees if the correct seed varieties are used. In very stubborn cases, where the shade is excessive, it may be necessary to remake the lawn every season for two or three years, in which case, procedure may well be as follows: Add lime every autumn at the rate of 1 pound to each zo square feet; fork the land lightly in the spring, and apply Pulverized Sheep Manure at the rate of I pound per 20 square feet; rake smooth and sow Shady Place Formula Grass Seeds; rake again to cover the seed and either roll with a light roller or flatten with the back of a spade; sow some further seeds to renovate the lawn at the end of summer. Use as a minimum allowance i quart of seed for each I5 feet by I5 feet or 5 bushels per acre; sow at half these rates when renovating a lawn, and use double this quantity for quick results. Qt. 60 cts., 4 qts. $\$ 1.99,8$ qts. $\$ 3.50,1 / 2$ bus. $\$ 6.25$, bus. $\$ 12,10$ bus. \$115. Charges prepaid when cash accompanies order.


For Lawn Tennis and Croquet

## WEST SIDE TENNIS FORMULA

The turf required for these sports must be firm and yet elastic, fine, and composed of grasses which can be mowed close and kept exceedingly dwarf. This mixture is made up of the best-known, fineleaved, deep-rooting grasses, properly proportioned so as to give an even playing surface throughout the year. It is advisable to sow more seed than the quantity ordinarily used for lawn purposes in order to obtain a playing turf quickly and to crowd out weeds as much as possible; at least one quart for each ioo square feet is advisable on new seeding-one-half this rate for renovating. Lb. 65 cts., $21 / 2 \mathbf{l b s}$. $\$ 1.55,5$ lbs. $\$ 3,121 / 2 \mathrm{lbs} . \$ 7.25,25$ lbs. $\$ 14,100 \mathrm{lbs} . \$ 55$. Charges prepaid when cash accompanies order.


For Lawns of the Very Finest Texture and Home Putting-Greens

## ALL-BENT LAWN FORMULA

This is composed of Agrostis varieties only, a mixture of the wonderful Bent grasses with a proportion of high-quality Red Top. In rich soil it will produce a turf much finer in texture than a lawn of the ordinary type, and the creeping character of these grasses causes them to mat together and produce the soft, luxuriant feel of an expensive rug. The turf is a deep, rich green color. For this mixture the soil should be inherently good and should have additional rotted manure worked into it. Several times during the growing season, sulphate of ammonia, at the rate of I ounce to the square yard, should be applied to the turf, first mixing the fertilizer with six times its bulk of fine sifted soil. Every spring and autumn, also, 2 ounces to the square yard of S. \& W. Co.'s Emerald Grass Fertilizer should be applied, mixed with six times its bulk of soil. Sow the seed at the rate of I pound per 300 square feet or 150 pounds per acre. This is particularly heavy seed, one bushel weighing 30 pounds. Lb. \$1.25, $2^{1 / 2}$ lbs. $\$ 3$, 5 lbs. $\$ 5.75$, $12^{1 / 2}$ lbs. $\$ 13.50$, 25 lbs. $\$ 26,100$ lbs. $\$ 100$. Charges prepaid when cash accompanies order.


A Tough Grass for Athletic Fields-Polo, Football, Baseball

## HURLINGHAM SPORTS FORMULA

For fine, uniform, hard-wearing, and quickly recuperating turf we find that the formula of grass seeds long used at the famous English polo field at Hurlingham gives the utmost satisfaction in this country. The grass seeds used are of the highest quality and the strongest germination. Use 200 pounds to the acre. Lb. 60 cts., $21 / 2$ lbs. $\$ 1.45,5$ lbs. $\$ 2.75,121 / 2$ lbs. $\$ 6.50,25$ lbs. $\$ 12.75,100$ lbs. $\$ 50$. Charges prepaid when cash accompanies order.

## The Best Two Lawn Dressings

For use when preparing land for grass or feeding established turf EMIERALD GRASS FERTILIZER. 5 lbs. 50 cts ., Io lbs. 90 cts . 25 lbs. $\$ 1.75,50$ lbs. $\$ 3$, 100 lbs. $\$ 5.50$, 500 lbs. $\$ 22$, ton $\$ 75$. Use one ton per acre or one pound to each 25 square feet.
PULVERIZED SHEEP MANURE. 5 lbs . 50 c ., Io lbs. $90 \mathrm{c} ., 25 \mathrm{lbs}$. $\$ \mathrm{I} .50$, 50 lbs . $\$ 2.75$, Ioo lbs. $\$ 4.50 .500 \mathrm{lbs}$. $\$ 18$, ton $\$ 65$. Use two tons per acre or one pound to each 10 square feet. For nourishing established lawns, one-half the above allowances may be used.


For Terraces, Hillsides and Embankments

## TERRACE SOD FORMULA

A mixture of grasses that will produce strong, spreading roots, will withstand drought and exposure, thrive on shallow soils, and at the same time produce a rich, green turf throughout the season.
To Grass a Bank or Terrace: if the slope is gentle, say not more than $221 / 2$ degrees, dig the soil, add I inch of top-soil and then broadcast S. \& W. Co's Emerald Grass Fertilizer at the rate of 5 pounds to each ioo square feet. Rake the fertilizer into the soil and sow Terrace Sod Formula, I quart to each roo square feet. Rake lightly to cover the seed and either roll with a light roller or beat the soil flat with the back of a spade. If the slope is severe, say between $221 / 2$ and 45 degrees, proceed exactly as above, except to sow with the grass seeds some ordinary seed oats-I quart of seeds and I quart of oats to each ioo square feet. Cut the oats as soon as they are long enough for a mower to cut them, and if you keep them cut twice weekly the oats will slowly give place to the grass. If the slope is very steep, that is, more than 45 degrees, proceed as follows: Mix I quart of Terrace Sod Formula with two large pailfuls of fine clean earth. Make notches with the corner of a hoe about 9 inches apart and 3 inches deep, and fill the notches with the mixture. At first the slope will be covered with clumps of grass, but these will knit together in time. Qt. 60c., 4 qts. $\$ 1.90,8$ qts. $\$ 3.50,1 / 2$ bus. $\$ 6.25$, bus. $\$ 12$, 10 bus. $\$ 115$. Charges prepaid when cash accompanies order.


For Lawns in the South

## SOUTHERN LAWN FORMULA

From central Virginia south, the ordinary northern grasses will not thrive permanently, and good results are not likely to follow the use of the customary mixtures. As a result of an intimate knowledge of southern conditions we offer a special formula which we find is highly satisfactory. We advise that two seedings be made, one in spring and one in fall, allowing at each one quart to each 15 by 15 feet or 5 bushels to the acre. Qt. $\mathbf{4 5 c} ., 4$ qts. $\$ 1.50,8$ qts. $\$ 2.75,1 / 2$ bus. $\$ 4.75$, bus. $\$ 9,10$ bus. $\$ 85$. Charges prepaid when cash accompanies order.

## Lawn Seed Mixtures

For Special Purposes


For Areas Subject to the Influence of Salt Spray

## SEASHORE LAWN FORMULA

The varieties of which this mixture is compounded are selected for their deep rooting qualities, resistance to salt spray and high winds. It is recommended for those situations on the ocean front where difficulty has been experienced in getting a lawn with the usual grass seeds. The soil in the neighborhood of the sea is frequently very poor, and a very good preparation for seed is to apply Pulverized Sheep Manure at the rate of I pound to each ro square feet; rake after applying this manure and then sow seed. One quart of this seed should be sown on an area 15 by 15 feet, or five bushels to the acre. Use one-half of these quantities for renovating; double for quick results. Qt. 45 cts., 4 qts. $\$ 1.50,8$ qts. $\$ 2.75,1 / 2$ bus. $\$ 4.75$, bus. $\$ 9,10$ bus. $\$ 85$. Charges prepaid when cash accompanies order.


For Parks, College Grounds, and Other Large Areas

## "HIGH-GRADE" LAWN SEED

Our "High-Grade" Grass Seed is composed of fine, recleaned grasses, care being taken to include varieties of high purity and vitality. They are carefully proportioned so that they will succeed one another and give the lawn that much-desired green, velvety appearance through the summer. One quart will sow is by is feet or five bushels to the acre; use one-half these quantities for renovating old lawns; double quantities for quick results. We advise the use of "High Grade" Lawn Seed on large areas or on lawns where low cost of materials is more important than extreme fineness of turf. Qt. 45 cts., 4 qts. $\$ 1.50,8$ qts. $\$ 2.75,1 / 2$ bus. $\$ 4.75$, bus. $\$ 9,10$ bus. $\$ 85$.

## Grass Seeds for Golf

EXTREME PURITY NECESSARY.-A club annually spends a large sum for the purpose of removing weeds from greens, tees, and, in some cases, fairways. The seeds from which these weeds spring may be already in the soil, and they further may be washed onto the green, blown onto the green, and deposited there by birds or other agencies. It is obviously unwise to add to these weeds, which ordinarily find their way onto a golf course, by sowing more weed seeds-in other words, by sowing seeds which could, by dint of a little more care and trouble, be made freer of weed seeds. No golf club need ever sow seeds which have not been cleaned and recleaned to the highest point of perfection. Such seeds cost a few cents per pound more than commercial stocks, but such a slight extra charge is offset again and again by the saving in the club's labor bill for weeding. Further, you will invariably get more seeds of the kind you want in a pound of seed that has been thoroughly recleaned than you will from seeds that have not been so thoroughly purified, because along with the weed seeds, empty husks and other materials are withdrawn by the cleaning. Very often the highest-priced seed is really cheaper (by actual count of seeds) than the lower-priced seed.

## Putting-Green Mixtures

WHY USE MIXTURES? You may sow one variety of grass only if you wish; good results are often obtained and some authorities recommend it, but we do not. Rather than seeding with one kind, we prefer the use of mixed seeds. An established green from a mixture of varieties gives a good turf quickly, one that is more uniform through the year and is less likely to suffer badly from extremes of climate or from attacks of fungous disease. The use of mixtures as against separate varieties has the practical support of many years' experience.

## Recommended for light, dry soils

## Standard Putting-Green Mixture

This is a formula consisting of imported and domestic grass seeds of fine quality-all of high purity and strong germination. The mixture includes German Bent, and is a well-balanced one; its use for more than ten years has proved its reliability. Splendid for light, dry soils. Lb. 75 cts., 5 lbs. $\$ 3.50$, 25 lbs. $\$ 16,100$ lbs. $\$ 60$.

## Recommended for well-prepared, rich soils

## Special Putting-Green Bent Formula

This is a mixture consisting of imported and domestic grass seeds of the finest quality-all of the highest purity and strongest germination. We include in the formula an increased proportion of German Bent, however, on account of its wonderful fineness and its suitability for golf. Lb. 90 cts., 5 lbs. \$4.25, 25 lbs. \$20, 100 lbs. $\$ 75$.

## The weight of a measured bushel of the above mixtures is 25 pounds

QUANTITY OF SEED REQUIRED.-There is considerable variation of opinion on this point, but we generally find longexperienced turf-growers lean toward heavy seeding: we have known many cases of disappointment traceable to too light seeding; it is rare to see a case where seed has been sown so thickly that failure has occurred. Use one pound of mixed seeds to each 100 square feet when seeding a new putting-green. It is usual to allow one-half this quantity when applying seed for renovating a worn turf.
"GOLF TURF" is the title of our free book on the problems of the greenkeeper. Chairmen of greens committees and others interested are invited to send for a copy.


The Eighteenth Green, new course, Salisbury Golf Links, Salisbury Plains, L. I. (Lannin Realty Co., Inc., owners). Here are now five complete 18 -hole golf courses in play. Grass seeds, fertilizers, and implements supplied by the Stumpp \& Walter Co.

## Grass Seeds for Golf



Beautiful Turf from Tee to Green
Photo: Levick

## Fairgreen Mixtures

It is essential that the proper grass varieties be grown on a fairway: very often grasses are used that are not fit to make a proper golf sod. It is essential, too, that only seeds of the best quality be used. When ordering let us know if your soil is sandy, heavy, moist, or dry: we adapt our formula to your conditions so that an even, tough and lasting turf is secured.

> S. \& W. Co.'s Fairgreen Formula, Superfine Quality. This mixture contains Bent seed land Fescue, Kentucky Bluegrass, and Superfine Redtop. The weight of as well as Chewing's New ZeaUse 200 pounds to the acre on new fairways; one-quarter to one-half this quantity for renovating existing turf. Lb. 60 cts., 5 lbs. $\$ 2.75,25 \mathrm{lbs}$. $\$ 12.75,100 \mathrm{lbs}$. $\$ 50$.
> S. $\begin{aligned} & \text { W. Co.'s Fairgreen Formula, Fine Quality. The weight of a measured bushel of } \\ & \text { This } \\ & \text { formula }\end{aligned}$ 50 cts., 5 lbs. $\$ 2,25$ lbs. $\$ 9,100$ lbs. $\$ 35$. this formula is 20 pounds. Lb.

Remember: All our seeds are of the highest quality, obtained direct from the most reliable sources of supply and are carefully examined as to purity and growth, including tests made for us by leading seed-testing stations. We furnish, on request, the percentage of purity and growth.

We are always glad to suggest varieties suited to your soil and climate, to assemble combinations of seed to your specifications, or to supply our own mixtures and tell you the exact percentage of each of the varieties in the mixture.

Without obligation, we shall be pleased to send a representative who, from long experience, is qualified to advise regarding grasses and furnish such other information as is necessary for the best results.


No. 11 Green, North course, Lake Placid Club, N. Y. In the background the Sentinel Range of the Adirondacks. Stumpp \& Walter seeds used


At the Wolf Hollow Golf Club, Delaware Water Gap, Pa. Stumpp \& Walter seeds used

Pholo: Levick

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## Grass Seeds for Golf



No. 18 Green, Canoebrook Country Club. Stumpp \& Walter Seeds used

## SPECIAL DIVOT FORMULA

Always Keep a Bag in Stock

A mixture consisting of (a) seeds of fine, strong wearing, permanent grasses suitable for fairways and tees, with (b) seeds of the quickest growing plants we know that are of a temporary nature. The temporary plants grow immediately, and in a day or two you cannot locate the divot; in the course of a few weeks, with cutting, the temporary plants disappear, leaving the permanent grasses, now established, in full possession of the soil.


No. 13 Green, Oakmont Golf Club. Stumpp \& Walter Seeds used

How to use Divot Formula. Take two pailfuls of screened soil; with one of them mix thoroughly $21 / 2$ pounds of Divot Formula. Fill the divot with unmixed soil, and scatter a $1 / 4$-inch layer of the mixed soil and Divot Formula over it; press smooth with the foot. For ideal results tees should be inspected and treated in this way after each day's play, and fairways once a week.

SPECIAL MIXTURE FOR TEES. Our
formula includes only those varieties which will stand rough usage and recuperate quickly after excessive wear. Lb. 60 cts., 5 lbs. $\$ 2.75,25$ lbs. $\$ 12.75,100$ lbs. $\$ 50$.
SPECIAL 'ROUGH" FORMULA. Consists of the taller-growing hardy perennial grasses in combination with gorse, yarrow, and other plants suitable for the purpose and least likely to give serious trouble as weeds should their seed be carried by the wind and other agencies on to your greens or fairways. Lb. 50 cts., 5 lbs. \$2, 25 lbs. $\$ 9$, 100 lbs. $\$ 35$.
MIXED FESCUES FOR BUNKERS. A mixture of Red, Hard, Dwarf, Fineleaved, Various-leaved, and Tall Fescues. Excellent for mounds, bunkers, and exposed sandy situations in the "rough." Lb. 60 ets., 5 lbs. \$2.75, 25 lbs. $\$ 12.75,100$ lbs. $\$ 50$.


No. 17 Putting-Green, Hollywood Golf Club. Stumpp \& Walter Seeds used


Laconia Country Club. Stumpp \& Walter Seeds used

## SEMESAN

## For the control of brown-patch in turf

Infected turf is first drenched with a solution of Semesan and afterwards it is either sprayed with the solution or dusted with dry Semesan.
One pound of Semesan Powder is dissolved in a 50 -gallon barrel of water, and this solution is applied at the rate of 5 quarts per square yard to the affected areas, using a water can; this drenches the turf. Later, at intervals of ten days, the turf is sprayed, using 1 gallon of the solution to each 25 turf is sprayed, using 1 gallon of the solution to each 25
square yards. If preferred, the powder may be dusted on dry instead of spraying, using 1 pound of the powder per 1,000 square feet.

The quantity of Semesan required for the first drenching depends upon the extent of the infected areas; the subsequent spraying or dusting should be over the entire green, when 4 pounds of the powder in solution should be allowed to each average green; rather more is required if the powder is put on dry-allow 5 pounds to each average green. Lb. $\$ 2.75,5$ lbs. $\$ 13,25$ lbs. $\$ 62.50,100$ lbs. $\$ 240$.

WHITE CLOVER (Trifolium repens). Do not use for putting-greens, but it is occasionally recommended for fairways and tees. We offer the finest sample procurable. Lb. 80 cts., 5 lbs. $\$ 3.50,25$ lbs. $\$ 16,100$ lbs. $\$ 60$.

GORSE, or FURZE (Ulex europœus). This shrub makes British courses bright with its yellow blossoms in the spring. It is a slow grower and it will be some years before it will be effective. Broadcast ten pounds per acre over the "rough" and harrow in. Not recommended for the extreme North. Lb. \$1.50.

YARROW (Achillea millefolium). A deep-rooting, drought-resisting plant with delicate, fern-like leaves, sometimes used in mixtures for tees or put-ting-greens. May be sown alone (when one pound is sufficient for an area of 40 by 40 ft .) or in combination with grass seeds. Lb. \$2.


No. 15 Green, New Course, Essex County Country Club. Stumpp \& Walter Seeds used


## Grass and Clover Mixtures for the Farmer

Timothy, Red-Top, and Red Clover have Iong formed the standard hay and pasture mixture for use on the American farm. It is not an ideal combination, but is inexpensive and we offer it under the heading of Timothy-Red-Top-Clover Formula. Where large yield and high quality are looked for. we recommend that a much wider variety than this be sown, using in addition to the above such types as Orchard Grass, Meadow Foxtail, Sheep's Fescue, Rhode Island Bent, Fiorin or German Bent, Cocoo's Bent, Sweet-scented Vernal, Meadow Fescue, the Rye Grasses, the Blue Grasses, Oat Grass, Red, Mammoth, White, Wild White and Alsike Clovers; each of these is suited especially to certain kinds of soil and climatic conditions; some do well on high ground, others prefer plenty of moisture. It is necessary that these be selected in proper proportions, suitable to the soil conditions and for the purpose required. We use the best recleaned seeds only in these mixtures.
CLOVER AND GRASS FORMULA. For high quality hay or pasture. Includes a wide range of both grasses and clovers. Use 75 lbs. per acre when sowing new land. Lb. 50 cts., postpaid 60 cts.; $10 \mathrm{lbs} . \$ 4.50,100 \mathrm{lbs} . \$ 40$.
ALL-GRASS FORMULA. For high-quality hay or pasture. Grasses only-no clovers. Use 85 lbs. per acre when sowing new land. Lb. 45 cts ., postpaid $55 \mathrm{cts} . ; 10 \mathrm{lbs} . \$ 4,100 \mathrm{lbs} . \$ 35$.
ALL.CLOVER FORMULA. For pasture. Use 25 lbs . per acre when sowing new land. Lb. 60 cts., postpaid 70 cts.; 10 lbs. $\$ 5.50,100 \mathrm{lbs} . \$ 50$.
TIMOTHY-RED-TOP-CLOVER FORMULA. For hay and pasture at low cost. Use 50 lbs. per acre when sowing new land. Lb. 35 cts., postpaid 45 cts.; 10 lbs. $\$ 3.25,100 \mathrm{lbs} . \$ 30$.

For renovating existing fields, use one-half the above quantities
IMPORTANT. When ordering these seeds, tell us whether the field is to be used for hay or pasture, or both; please also describe the nature of your soil.

## S. \& W. CO.'S WHEELBARROW GRASS SEEDERS

For sowing all kinds of grass seeds broadcast, clover, timothy, alfalfa, Hungarian millet, rape and all small seeds. Also all chaffy seeds like red-top, orchard grass, and clean blue grass, bent grass, any quantity per acre desired. They are no experiment, and are guaranteed to do an even, accurate, first-class job of seeding. Price ( 14 feet sowing area) $\$ 17$; with additional hopper, for broadcasting Bordeaux powder, tobacco dust, etc., $\$ 30$.


## STEEL DISC SMOOTHING <br> HARROW

The frame measures 6 feet 8 inches by 6 feet, and has four sets of rollers, having 58 discs, 8 inches in diameter. Price \$40. Price subject to change without notice.

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## GRASS SEEDS <br> OF KNOWN PURITY AND PROVED VITALITY

The Grass Seed problem, whether applied to the farm or lawn, is one that can be rightly solved only when the grower fully takes into consideration four essential details: SEED, SOIL, LOCATION, and CLIMATE. Advice regarding mixtures for special locations freely given on request.

| Variety | Description* <br> Enables you to distinguish varieties in your turf | Period of Maximum DevelopMENT $\dagger$ | Use | SoilSuitable |  |  | Price |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Lb. | ro lbs. | 100 lbs . |
| AGROSTIS VARIETIES OR BENTS (1 Ib. contains about 4,000,000 live seeds) |  |  |  |  |  |  |  |  |  |
| Creeping Bent, South German Mixed Bent, Fiorin (Agrostis species). | "Creeping Bent," a name used for many years for seed collected in Central Europe; and consisting of a mixture of $A$. vulgaris, A. canina, A. palustris. | Early fall | Makes velvet-like, thick, beautiful, soft putting-greens and lawns; used largely in conjunction with Red Fescue. <br> Superfine Quality. <br> Fine Quality. $\qquad$ $\qquad$ | $\begin{array}{\|l\|} \hline \text { All; espe- } \\ \text { cially } \\ \text { mooist } \\ \text { land. } \end{array}$ | 12 | 24 | \$I 75 | \$15 00 <br> 12 50 | \$135 I IO O |
| Creeping Bent, Cocoos Strain (A. maritima). | Blades wide; strongly creeping. | Early fall | Makes mat-like, uniform turf. | Moist land | 12 | 18 | 250 | 2250 | 20000 |
| Colonial Bent (A. tenuis; <br> A. vulgaris). | Blades very narrow, flat. Slightly creeping. Forms a brownish green velvety turf. Leaves are rolled in the bud. | Early fall | Splendid for putting-greens and fine lawns. Identical with Rhode Island Bent. <br> Superfine Quality Fine Quality . | All soils. <br>  <br> $\ldots \ldots .$. <br> $\cdots$. | 18 | 24 | I 85 I 65 1 | I6  <br> 14 50 <br> 16  | I40 I2 O |
| Rhode Island Bent, WashingtonStrain(A.tenuis). | As above. | Eariyfall |  | All soils. | 18 | 20 | 1 185 | 1650 | I 40 |
| Red Top (A. palustris; A. alba). | Leaf-blades narrow, becoming very narrow with turf cultivation; plants slightly creeping. The young leaves are rolled in the bud. Prominent ligule. | Earlyfall | Valuable for the farmer and lawn-maker alike. Superfine Quality. Recleaned Quality . . . . Ordinary GoodCommer cial Quality(unkulled) | All soils. | 24 | 36 <br> 32 <br> 18 | 65 60 45 | $\begin{array}{ll}6 & 00 \\ 5 & 50 \\ 4 & 00\end{array}$ | $\begin{aligned} & 50 \text { oo } \\ & 45 \\ & 45 \\ & 32 \\ & 32 \\ & \hline \end{aligned}$ |

POA VARIETIES OR MEADOW GRASSES ( 1 lb . contains about $2,000,000$ live seeds)

| Canadian Blue Grass (Poa compressa). | $\begin{aligned} & \text { Leaf-blades narrow, fiat; } \\ & \text { plants siightly creeping; } \\ & \text { stems flattened; color } \\ & \text { gray-green. } \end{aligned}$ | Early summer | $\begin{aligned} & \text { Used by the farmer and lawn- } \\ & \text { maker, but Kentucky Blue } \\ & \text { Grass is more desirable. } \end{aligned}$ | $\left\|\begin{array}{c} \text { All; espe- } \\ \text { cially } \\ 1 \text { i m me }- \\ \text { stones. } \end{array}\right\|$ | 12 | 18 | \$0 50 | \$4 50 | \$40 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kentucky Blue Grass ( $P$. pratensis; June Grass). | Leaf-blades very narrow, flat; plants slightly creeping. Deep vivid green. Ligule short and thick. The young leaves are folded in the bud. | Early summer | Ideal ingredient in fairway mixtures; frequently used for putting-greens. Largely employed for lawns; makes good pasture. <br> Superfine Quality. <br> Fine Quality. | All; par-ticularly those containing lime. | I2 | 27 | 60 55 | 50 500 |  |
| Rough-stalked Meadow Grass, Bird Grass ( $P$. trivialis). | Leaf-blades narrow, flat; plants not creeping. The young leaves are folded in the bud. Lower surfaces of leaves glossy. | Early summer | Suited for putting-greens, fairways or lawns under trees. Quite the best grass for shaded situations. Makes an exquisite turf. | Ail soils, including sandy. | 12 | 26 | 75 85 | 700 |  |
| Wood Meadow Grass ( $P$. nemoralis). | Leaf-blades narrow, flat. Medium dark green. The young leaves folded. | Late spring | Cannot be traced as permanently adapted to our climatic conditions. | 11 of medium texture. | 12 | 20 | 85 | 8 oo |  |
| Bulbous Blue grass bulbosa). | Leaves very fine; plant very dwarf; markedly frostresistant. | Winter | For a winter lawn, particularly on Bermuda turf in the South. |  | 6 |  | 300 | 2500 | 225 |

FESTUCA VARIETIES OR FESCUES ( 1 lb . contains from 500,000 to $1,000,000$ live seeds)

| Hard Fescue (Festuca duriuscula). <br> Red Fescue Chewing's, (F. N. | Leaves wire-like; plants tend to grow in tufts. <br> Leaves wire-like and stiff, not flat; plants have a tendency to creep, but frequently form tufts. | Late <br> spring <br> Summer | A valuable pasture variety when mixed with others. <br> Excellent for putting-greens, tees, and fairways; also hayand pasture-fields. Gives good results under trees. | $\begin{aligned} & \text { Thin, dry } \\ & \text { soils. } \\ & \text { Satisfac- } \\ & \text { tory on } \\ & \text { poo r } \\ & \text { land. } \end{aligned}$ | 12 | 27 | \$0 55 | $\begin{array}{rr} \$ 4 & 75 \\ 5 & 50 \end{array}$ | 8425 50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Red Fescue, Eu |  |  |  |  |  | 27 | 55 |  |  |
| Sheep's Fescue (F. ovina; English Fescue). | Leaves wire-like and stiff, not flat. Ligule reduced to short ears. | Late spring | Occasionally used on sheep pastures; excellent for the "rough" on golf-links. | $\begin{aligned} & \text { Any ex- } \\ & \text { cept wet } \\ & \text { land. } \end{aligned}$ | 12 | 16 | 55 |  |  |
| Fine-leaved Sheep's Fescue (F.ovina angustifolia; F. capillata; $F$. tenuifolia). | Leaves wire-like and stiff, not flat; very fine. Color a beautiful dark green. | Late spring | Used on putting-greens and tees. Gives fair resuits where situation is shaded. | $\begin{aligned} & \text { Any dry } \\ & \text { Soil. } \end{aligned}$ | 9 | 22 | 95 | 9 |  |
| Various-leaved Fescue (F. heterophylla). | $\begin{aligned} & \text { Bottom leaves are bristly; } \\ & \text { upper leaves flat. Fine } \\ & \text { dark green. Plants of a } \\ & \text { tufted habit. } \end{aligned}$ | Late spring | Used to a limited extent on tees and fairways; also of value as an ingredient in hay and pasture mixtures. | Light soils, rich in humus. | 15 | I5 | 95 | 9 |  |
| Meadow Fescue (F. pratensis). | Leaves broad. Base of leafsheaths red. Young leaves are rolled. | Summer | Gives an abundance of fodder as a hay or pasture grass. | Any soil. | 36 | 27 | 45 | 400 |  |
| 11 Fescue ( $F$. elatior). | Le | Summer | ve food for cattle. | Any. | 48 | 22 | 60 | 550 | 45 |

## GENERAL LIST OF GRASSES, continued

| Variety | Description* <br> Enables you to distinguish varieties in your turf | Period of Maximum DevelopMENT $\dagger$ | Use | Soil <br> SUitable |  | Price |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Lb. | Io lbs . | 100 lbs. |

## LOLIUM VARIETIES OR RYE GRASSES ( 1 lb . contains about $\mathbf{3 0 0 , 0 0 0}$ live seeds)

| English Rye Grass (L. perenne). | Leaves narrow and flat, smooth and shining; leafbases red. Usually lives three years. The young leaves are folded in the bud. | Summer | A rapid grower and of value as a "nurse grass" under some conditions; particularly useful where a lawn is needed quickly; valuable for hay and pasture. | $\begin{array}{\|c\|} \hline \text { Medium } \\ \text { soilwell } \\ \text { supplied } \\ \text { w i t } h \\ \text { mois }- \\ \text { ture. } \end{array}$ | 24 | 28 | So 35 | \$3 00 | \$2500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pacey's Perennial Rye Grass (L. perenne Pacey). | A smaller-seeded, finerleaved, smaller plant than the above. | Summer | Superior to the above for turf purposes, claimed to be more resistant to cold. | As above. | 24 | 30 | 35 | 325 | 2750 |
| Italian Rye Grass (L. italicum; L. multiflorum). | An annual grass with a tendency to grow in tufts; tall; broad, flat leaves. Base of sheaths red. The young leaves are rolled in the bud. | Early summer | In the North occasionally valuable as a "nurse grass." Gives mammoth hay crops on rich land. In the South makes excellent winter turf, following Bermuda Grass. | Medium soil well supplied with mois ture. | 36 | 22 | 30 | 250 | 2000 |
| Wimmera Rye Grass ( $L$. subulatum). | An annual grass much used in hot climates. | Summer | Gives mammoth returns on rich land. | As above. | 36 | 24 | Prices | on | request |

BROMUS VARIETIES OR BROME GRASSES

| Awnless Brome Grass (Bromus inermis). | A large-growing perennial stoloniferous grass. | Summer | Useful for binding the soil of embankments. A pasture grass recommended for the dry soils of the Northwest. | Any. | 30 | I4 | So 40 | \$3 50 | \$30 00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## SUNDRY VARIETIES

| Bermuda Grass (Cynodon dactylon; Capriola dactylon; Scutch Grass). | $\left\lvert\, \begin{aligned} & \text { A medium broad-leaved } \\ & \text { grass, strongly creeping. } \\ & \text { Does not survive winter } \\ & \text { north of Virginia. } \end{aligned}\right.$ | $\begin{aligned} & \text { Early } \\ & \text { fall } \end{aligned}$ | Valuable in the South for put-ting-greens, fair-greens, and lawns; also for pastures and hay-fields. Binds sand. <br> Superfine Quality...... | All soils. | I2 | 36 | So 70 | \$6 50 | \$60 oo |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carpet Grass (Axonopus compressus). | A coarse perennial with creeping root stocks. | Summer | Satisfactory turf grass for the moist sandy soils of Florida. | Moist sands. | 12 | 24 | 65 | 6 оo | 55 oo |
| Crested Dog's-tail (Cynosurus cristatus). | Leaves narrow and flat. The young leaves are folded in the bud. Base of leaf-sheaths yellow. | Early summer | Of limited usefulness in this country. | Hard, dry loams. | 24 | 30 | 80 | 750 | 70 ¢0 |
| Dallas Grass (Paspalum dilatatum). | A strongly growing perennial. | Summer | Gives splendid grazing summer and winter in the South. | All soils. | 30 | 20 | Prices | on | request |
| Meadow Foxtail (Alopecurus pratensis). | Medium broad, flat leaves. Flower-heads resemble timothy. Base of leafsheaths violet. The young leaves are rolled. | Late spring | As a field-grass gives large yields early. | All soils. | 36 | 10 | 00 | 975 | 95 оо |
| Orchard Grass (Dactylis glomerata; Cocksfoot). | Large plant, bluish green in color, with flattened leafbases. Ligule prominent. The young leaves are folded in he bud. | Late spring | Widely used for hay and pasture, for which purposes it is of additional value in that it thrives under trees. | All soils. | 48 | 14 | 40 | 350 | 30 oo |
| Rhodes Grass (Chloris virgata). | A large, coarse perennial. | Summer | A splendid hay crop for the South. | All soils. | 36 | 25 | 90 | 850 | 80 oo |
| Sweet Vernal (Anthoxanthum odoratum). | Narrow, flat leaves. The young leaves are rolled in the bud; leaf-sheaths hairy. | Late spring | Very fragrant when drying. Occasionally used in mixtures of seeds for hay-fie.ds. | All soils. | 18 | Io | 100 | 950 | 90 oo |
| Tall Oat Grass (Avena elatior; Arrhenatherum elatius; False Oat Grass). | Very broad leaves; plant has the appearance of a slender, small oat. | Early summer | Valuable for hay and pasture. | All soils. | 48 | I4 | 45 | 400 | 3500 |
| Timothy (Phleum pratense; Herd's Grass; Cat's Tail). |  | Summer | The most important American grass for hay and pasture. | Rich land. | 36 | 45 | 20 | I 75 | 15 oo |

Stolons. We offer "stolons" or runners of Creeping Bent grass at $\$_{1} .50$ for 5 square feet, or $\$_{25}$ per roo square feet; 5 square feet of described on stolons

FURTHER INFORMATION ON GRASSES: For additional reading on this subject we recommend:
"Golf Turf." Production and maintenance of golf links, lawns, and tennis courts. 80 pages, illustrated. Mailed free on request.
"Farm Grasses of the United States." Cultural notes for the farmer and botanical descriptions. 248 pages, many illustrations. W. J. Spillman. Price, with postage, $\$ 2$.
"Turf for Golf Courses." Authoritative and practical treatise on the production of turf. 262 pages, with photographs and maps. C. V. Piper and R. A. Oakley, Price, with postage, $\$_{3}$.


## S. \& W. Co.'s Novelties and

## Pedigreed Washington Asparagus

Originally developed by the U. S. Department of Agriculture, further selected and improved. It is rust-resistant, particularly vigorous, and of wonderful quality. The shoots are large, straight, dark green in color and with a heavy purple over-tone; the tight, firm tips do not begin to open out until well out of the ground. Pedigreed Washington Asparagus stands ahead of all other varieties as a standard for the home- or market-garden. Extra-choice roots, $\$ 5$ per $100 ; \$ 45$ per 1,000 . Seed, pkt. 20 cts., oz. 65 cts., $1 / 41 \mathrm{~b}$. $\$ 1.75$, 1b. $\$ 5$.

## Early Giant Bush Lima Bean

A quick-growing variety. The short period in which this Bean matures enables it to be grown for succession, sowings being made from May I5 to July Io in the neighborhood of New York. Other varieties of Lima Beans take so long to mature that more than one seeding is barely practicable with them. The flavor of this variety is particularly refined, and the fine, luscious Beans, which are large, thick, and flat are produced in remarkable quantity. We suggest that our patrons give this variety a trial. Pkt. 15 cts., $1 / 2 \mathbf{l b}$. 30 cts., lb. 55 cts., 2 lbs. $\$ 1,5$ lbs. $\$ 2.25$, 15 lbs. $\$ 6.25$.

## Magpie Bush Bean

Magpie is of European origin and is so named from the speckled black-and-white seeds of the variety. The plant is of very strong growth, stocky, and very resistant to rust. The pods are long, meaty,
and of the highest quality. Magpie is an enormous producer. Although largely grown as an outdoor sort it is suitable also for culture under glass. A great favorite on the estates of Westchester County, Long Island, and Connecticut. Pkt. 25 cts., $1 / 2 \mathbf{1 b} .45$ cts., lb. 85 cts., 2 lbs. $\$ 1.50,5$ lbs. $\$ 3.40,15$ lbs. $\$ 10$.

## Early Wonder Beet

A variety which has gained wide popularity among marketgardeners, and one which the amateur may also grow with every confidence. It may be sown early, and it matures very rapidly. It is so uniform in growth that the crop can be lifted practically at one time, yielding the land early and quickly for the second crop. The root is nearly globular in shape, slightly flattened. The leaves are of medium size, and the color of the flesh is deep blood red. Pkt. 15 ets., oz. 35 cts., $1 / 41 \mathrm{~b}$. $\$ 1,1 \mathrm{~b}$. $\$ 3$.

## New York Market Broccoli (True Italian Strain)

The sprouting Broccolis furnish delicious boiling greens during summer, autumn, and early winter. The very choice variety which we offer has green, tender shoots and leaves produced in the greatest abundance. Cultivation is the same as that for cabbage, sowing from March to early July, transplanting later, 2 feet or more apart. Broccoli is preferred by many to cauliflower. Pkt. 25 cts., $1 / 40 z$. $\$ 1.50,1 / 2 \mathrm{Oz} . \$ 2.75$, oz. $\$ 5$.

## Early Cone Savoy Cabbage

In this type the firm, close, solid heart is of a conical shape, corresponding in smooth Cabbages to Early Jersey Wakefield. The leaves are heavily and deeply corrugated; in color they are a rich dark green, the center blanching to a creamy white. Of all Savoys, this has the most refined flavor, and when touched with the first frosts of autumn it is delicious indeed. Pkt. 20 cts., $1 / 40 z .45$ cts., $1 / 2 \mathrm{oz}$. 75 cts., oz. $\$ 1.25,1 / 41 \mathrm{~b}$. $\$ 4$.

## Zenith Red Cabbage

We consider this a great improvement on all other types of Red Cabbage. The heads are of medium size and very solid; the leaves are of fine texture with thin, light ribs, the outer leaves being few and small. In color, Zenith is particularly dark; and the variety is the best we know for home pickling or for market. Its relatively small size enables Zenith to be planted closer than Cabbage of the ordinary type, an important point where the area devoted to Cabbage is limited. Pkt. 15 cts., $1 / 40 \mathrm{Oz} .40 \mathrm{cts},. 1 / 2 \mathrm{oz} .60 \mathrm{cts} .$, oz. $\$ 1,1 / 41 \mathrm{~b} . \$ 3.50$.

## Golden-Acre Cabbage

A small, but very fine variety, as early as Jersey Wakefield, but with round, solid heads. The few outer leaves are small, permitting close planting and making the type a very suitable one, both for growth under glass and for the suburban gardener. Golden-Acre produces uniform, tightly folded, and well-blanched heads of the best mild table quality. Pkt. 25 cts., $1 / 4 \mathrm{oz} .70$ cts., $1 / 2 \mathrm{oz} . \$ 1.25,0 z . \$ 2.25$, $1 / 41 \mathrm{lb}$. $\$ 6$.


## Specialties in Vegetable Seeds

## S. \& W. Co.'s Melting Marrow Carrot

A specially fine variety that is cylindrical in shape and of wonderful butter quality. The skin is smooth and the fine red color is carried through the entire root. This splendid Carrot is recommended to the favorable notice of the private gardener for exhibition purposes, and to the commercial grower for profit. It is, further, the best Carrot we know from the culinary standpoint. Pkt. 15 cts., oz. 55 cts., $1 / 4 \mathrm{lb}$. $\$ 1.50$, 1b. $\$ 4$.

## The Best Early Cauliflower, S. \& W. Co.'s Best of All

The easiest grown and surest heading Cauliflower offered today. In habit the plant is very dwarf, stocky, and erect. It has very few outer leaves and, as a consequence, the young Cauliflower plants may be planted less than 2 feet apart each way. All that 's necessary is to select suitable soil, when every plant will form a large, solid, perfect head of the finest table quality and of handsome appearance. Pkt. 25 cts., $1 / 8$ oz. $\$ 1,1 / 4$ oz. $\$ 1.75,1 / 2$ oz. $\$ 3.25$, oz. $\$ 6$.

## New Wonder Bantam Corn

A successful cross between Early Wonder and Golden Bantam, possessing all the good qualities of Golden Bantam-its earliness, flavor, and color-but being more vigorous, more productive, and yielding larger ears. Wonder Bantam grows from 5 to 6 feet in height, bearing ears, high up on the stalk, which measure 8 to Io inches in length. The ears are filled with 8 rows of rich, golden, sugar-sweet kernels. Wonder Bantam appeals alike to the critical market grower, the home gardener, and the canner. Pkt. $15 \mathrm{cts} ., 1 / 2 \mathrm{lb} .30 \mathrm{cts} ., 1 \mathrm{lb} .55 \mathrm{cts} ., 2 \mathrm{lbs} . \$ 1,5 \mathrm{lbs} . \$ 2.25,15 \mathrm{lbs} . \$ 6.25$.

## S. \& W. Co.'s Midget Sweet Corn

A miniature Sweet Corn that is markedly suitable for the small garden, city back yard, window-box, or for growth in pots, and adapted for culture under glass. The tiny plant grows no taller than about 30 inches, and the ears are only 3 to 4 inches long, but from two to five of these petite ears are produced on a single stalk. The ears are of fine quality-the kernels white, meaty, and very sweet, while the cob is small. The ease with which these tiny ears may be handled in the kitchen is alone sufficient to commend it to the housewife, while, in addition, the quality is superior to a degree. A decided novelty. Pkt. 15 cts., oz. 35 cts., $1 / 41 \mathrm{~b}$. $\$ 1$.

## Improved Early White Spine Cucumber

The fruits are nearly cylindrical in form, slightly pointed at the ends, perfectly smooth and of deep, rich coloring marked with distinct white lines at the blossom end. Will retain its color longer after pickling than most varieties, and is splendid as a table Cucumber. Pkt. 10 cts., oz. 25 cts., $1 / 41 \mathrm{~b} .65$ cts., $1 \mathrm{lb} . \$ 1.75$.

## Sicilian Fennel

This vegetable is given the same general cultivation as celery, although it is not blancined to thel same degree. An earthing of 3 inches or less, thrown up around the thickened leaf-stems, is sufficient. In this superior type the "bulb" is in section a thick oval, and not flat, as in the Florence Fennel. Pkt. 10 ets., oz. 25 cts., $1 / 4 \mathrm{lb} .80$ cts.

## Earligreen Celery

Earligreen is the finest, earliest green Celery that we know, and is a fitting counterpart to Golden Plume. Sown in February and March, and planted out in May, we have seen this variety offered in the New York market by mid-August, fetching high prices in the short period after the supply of southern Celery has ceased and before local Celery comes into the market. The plant is surprisingly large for an earliest early sort; although it is stocky in habit, it is not so markedly so as Golden Self-blanching and Golden Plume. The outer leaves are green, and the very full heart is pure white, brittle, and of the most delicious flavor. Earligreen is like Golden Plume in that both are originations of leading growers, both of whom have been, for many years, supplying the New York consumer with table Celery. It is of sterling merit, and we predict a fine future for it. This year again the supply of seed is strictly limited, and we offer only in packets. Pkt. 25 cts., 6 pkts. \$1.25.

## Golden Plume Celery

Golden Plume Celery fills a want that both amateur and professional gardeners have long felt. It is a much-improved form of Golden Self-blanching, and the improvements are (a) superior eating quality, (b) wonderful golden color, (c) marked resistance to blight and rust, (d) earlier maturity, ( $e$ ) superior keeping qualities, ( $f$ ) increased size. It possesses a fine, nut-like flavor, and is handsome in appearance. We offer the raiser's original strain.

Pkt. 25 cts., $1 / 8 \mathrm{oz}$. $\$ 1.10,1 / 4 \mathrm{oz}$. $\$ 2,1 / 2 \mathrm{oz} . \$ 3.50$, oz. $\$ 6$.

S. \& W. Co.'s Best of All Caulifower


## Earliest Selected White Kohlrabi

A handsome early type with very few small leaves, seldom over 8 inches long. The "bulb" is of medium size and fine quality, large enough to be eaten in ten weeks from the time of sowing. The small size of the plant makes this variety particularly valuable for growth under glass as well as in the open ground. Its small size also enables this variety to be planted very much closer than usual, making it very economical for the home garden. Pkt. 20 cts., oz. 65 cts., $1 / 4 \mathrm{lb}$. $\$ 1.75$, lb. $\$ 5$.

## New York or Wonderful Lettuce

Possibly the largest Lettuce in cultivation. It is so distinct that, with its crisply curled leaves, very dark color, and remarkable size, a row of New York frequently puzzles even the experienced grower if unacquainted with this variety-at first glance he is likely to wonder what kind of a plant he is looking at. New York is a sure-heading variety, suitable both for spring and late summer planting; the big, compact, white heads are of the best possible quality. The heart is large, white, crisp and very compact. New York or Wonderful needs 50 per cent more room in which to grow than varieties of the usual type. Pkt. 15 cts., oz. 50 cts., $1 / 4 \mathrm{lb} . \$ 1.40, \mathbf{l b} . \$ 4$.

## "10/25" Salmon Tint Muskmelon

The Rocky Ford Muskmelon has been improved under the direction of Professor Blinn of the Colorado Experiment Station, and " $10 / 25$ " is the best yet. The fruit is heavily and evenly netted, very uniform in size, rust-resisting and early; the flesh is a rich gold in the center, shading out to emerald-green near the rind. The flavor is highly aromatic and pleasing to a degree. Pkt. 10 cts., oz. 35 cts., $\mathbf{1 / 4} \mathbf{1 b}$. $\$ 1$, lb. $\$ 3$.


New York or Wonderful Lettuce

## Gigantic Gibraltar Exhibition Onion

By far the most dependable strain of the giant type of Onion. It is somewhat similar in appearance to Prizetaker, except that it is lighter in color, and, while larger in size, is a splendid keeper and of decidedly mild flavor. In some cases the Onions have weighed $35 / 2$ pounds, and are quite the largest we have ever seen. Comparative tests show that from an exhibition standpoint its longer period of growing warrants a trial against the favorite Ailsa Craig. To grow these extra-large exhibition specimens, seeds are generally sown early in February, in a hotbed or greenhouse, and the young seedlings are transplanted. Pkt. 20c., $1 / 20 z .45 \mathrm{c} .$, oz. $75 \mathrm{c} ., 1 / 4 \mathrm{lb} . \$ 2, \mathbf{l b} . \$ 5.50$.

## S. \& W. Co.'s Exhibition Curled Parsley

This Parsley is remarkable for its fine leaves and close habit. In flavor it is superior to that of any known variety, and it is very tender. The seed offered has been saved from exhibition plants only. Pkt. 25 cts., 5 pkts. \$1.

## S. \& W. Co.'s Selected Exhibition Parsnip

A splendid Parsnip for exhibition purposes. This variety, grown by a very successful exhibitor, was pronounced quite the best of five varieties sent for exhibition purposes. Pkt. 25 cts., 5 pkts. \$1.

## Three Wonderful Peas

Eight Weeks. A remarkable super-first-early round-seeded Pea, I8 inches high. It may be sown on a warm border when snow is still present in other parts of the garden; the result will be Peas weeks before those obtained from main seedings. Pkt. 15 cts., $1 / 21 \mathrm{lb} .30$ cts., lb. 50 cts., 2 lbs. 90 cts., 5 lbs. $\$ 2.10$, 15 lbs. \$5.75.
Market Surprise. On vines 3 feet tall. Market Surprise bears 60 days from date of sowin 2 -inch pod best Extra-Early, while the pods contain on an average two more Peas, and the Peas are larger. They are of truly remarkable sweetness. Home-gardeners, as well as truckers, will find this new sort a big surprise in every way. Pkt. 15 ets., $1 / 21 \mathrm{lb} 30$ ets., $1 \mathrm{lb} .50 \mathrm{cts} .$, 2 lbs. 90 ets., 5 lbs. $\$ 2.10$, 15 lbs. $\$ 5.75$.
Admiral Beatty. The parents of this splendid new English intermediate bariety are Gradus and Alderman, and it is intermediate between them in habit and season. It is $3^{x / 2}$ feet high, and the Peas are wrinkled; their cooking quality is excellent. The pods are long and pointed, contain nine or ten Peas, and are produced abundantly. Pkt. 20 ets., $1 / 2 \mathrm{lb} .35$ cts., lb. 60 cts., 2 lbs. $\$ 1.10$, 5 lbs. \$2.50, 15 lbs. \$7.25.

## Perfection Pimiento Pepper

One of the best for the home garden, to be used both green or ripe. Top-shaped, smooth, the flesh is twice as thick as that of ordinary Peppers, delicious in flavor, sweet and entirely free from pungency. Pkt. 15 cts., $1 / 2$ Oz. 50 cts., oz. 85 cts., $1 / 41 \mathrm{~b}$. $\$ 2.50$.


## Topepo

## THE LARGE TOMATO-LIKE PEPPER

This fruit resembles a tomato in shape and size, and is of a beautiful orange color. The seeds are few and the seed cavity is relatively smail. The flavor is mild and exceedingly sweet, and the thick skin which encloses the flesh makes it a valuable shipping sort. Its handsome appearance and sweet flavor warrant its inclusion in every garden. It may be used as a salad vegetable, sliced and served with tomatoes and lettuce, or the center of the fruit may be removed and filled with crab-meat, shrimp, or lobster. Topepos also are splendid either boiled or baked. Pkt. 50 cts., 5 pkts. \$2.

## Twenty-Day Leafless Radish

The quickest maturing of all Radishes-within twenty days from the date of sowing you have roots ready for the table. The Radishes are oval in shape, bright scarlet in color, with a tip of white. The flesh is clear white, solid, tender yet crisp, and of excellent flavor; in fact, the quality is unsurpassed. When mature the plant has but two small leaves, just sufficient for bunching. Twenty-Day Leafless is suitable both for forcing under glass and for spring and fall cultivation in the open ground. It is valuable alike to the estate superintendent, commercial grower, and amateur gardener. Pkt. 15 cts., oz. 45 cts., $1 / 4 \mathrm{lb}$. $\$ 1.30,1 \mathrm{lb}$. $\$ 3.50$.

## S. \& W. Co.'s Emerald Standing Spinach

A very large and vigorous type of compact, flat, spreading growth. The leaves are large, thick, slightly crumpled, very fleshy, and carried on long stems. The color is a very dark green. The most important point about this Spinach, however, is that it stands fully one month longer than any other variety before bolting to seed. In spite of this, it is quite early to mature, and is a variety to be recommended from every point of view. Pkt. 10 cts., oz. 20 cts., $1 / 4 \mathrm{lb} .45$ cts., lb. $\$ 1.25$.

## Perpetual Spinach

The seed of this desirable plant may be sown any time from April to June and in six weeks cutting may commence, to continue right through into fall, for perpetual Spinach is highly resistant to frost. The "greens" furnished are similar in flavor to true Spinach, the leaves being very tender, even when allowed to grow large; they are both palatable and healthful. Cut the leaves about 3 inches from the ground. We offer a special strain of imported seed that has given satisfaction wherever sown. Pkt. 15 cts., oz. 55 ets., $1 / 41 \mathrm{~b}$. $\$ 1.50,1 \mathrm{~b}$. $\$ 4$.

## Mammoth New York Swiss Chard

This is a new and quite distinct sort, medium green in color, and of large size. The leaves are smooth, and the stalks are solid, thick, and of a pearly whiteness. The remarkable feature about Mammoth New York, however, is its superior flavor: careful breeding has entirely eliminated the earthy flavor which many Chards possess. We anticipate a large demand for this variety. Pkt. 20 cts., $1 / 2$ oz. 55 cts., oz. 95 cts., $1 / 41 \mathrm{~b}$. $\$ 2.50$.

## Bonny Best Tomato: McFarland's Strain

This Tomato has been developed by Prof. F. T. McFarland, of the University of Kentucky. His efforts have been toward the production of a type that resists the attacks of the blossom-end rot, and so far not a single Tomato of this strain has shown the slighest trace of rot. The seed of this variety is strictly limited. Pkt. 25 cts., 5 pkts. \$1.

## Essex Wonder Tomato

This variety has been evolved by an English grower, and combines extreme hardiness with high-quality fruit and heavy yield. It will withstand several degrees of frost without injury and may be set out a few days earlier than ordinary sorts, while late plantings will yield fruit along into October.

Seven trusses of fruit on a single-stem plant is not exceptional, and many trusses may consist of upward of twenty fruits, each weighing three to four ounces. These fruits set, develop, and ripen in a remarkable hurry. Essex Wonder Tomato has a thin skin; its plumlike pulp, abundant juice, and freedom from tough, fibrous matter make it good eating indeed. Pkt. (about 200 seeds) 50 ets.

## English Vegetable Marrow

A type of Squash that always occupies an important place in European gardens, and one which is considered superior in many respects to our American varieties of Summer Squash. Cultivation is similar, although to obtain quickest and largest yields it is often grown on spent hotbeds or in a few inches of soil placed on a manurepile. The Marrows are gathered before they ripen-usually in about a similar stage of maturity to that of cucumbers when gathered for slicing. They are peeled, divided, and the seeds are removed; then cut into 3 -inch squares, boiled until tender and served as a melting and delicious side dish with cream sauce.
Long Green Trailing. Pkt. Io cts., oz. 35 cts., $1 / 4 \mathrm{lb} . \$ \mathrm{I}, \mathrm{lb} . \$ 3$. Long White Trailing. Pkt. I5 cts.,
oz. 35 cts., $1 / 4 \mathrm{lb}$. \$I, lb. $\$_{3}$.
Moore's Cream. Pkt. Is cts., oz. $45 \mathrm{cts} ., 1 / 4 \mathrm{lb}$. $\$ \mathrm{I} .30, \mathrm{lb} . \$ 3.50$.
Mixed Vegetable Marrow. Pkt.


## Stumpp \& Walter Co.'s Vegetable Seeds

It has always been our endeavor to list only such sorts of Vegetable Seeds as, from our tests, we have found to be of superior merit; and, while we have in many instances not listed certain varieties, which have been struck out on account of being out of date, we have in every instance listed a superior sort which we can recommend as being more satisfactory both for the market and the home garden.

## WE STRONGLY RECOMMEND ALL VARIETIES LISTED IN BOLD TYPE

## ASPARAGUS ROOTS

The demand for Asparagus as an early spring vegetable is becoming quite popular. It is generally thought that it requires too much space for growing, but a plot 6 feet wide and 50 feet long will be sufficient to plant roo of our Mammoth roots, sufficient for an ordinary family. Roots of this age should be planted, as they will yield Asparagus quickly.


Culture.--Dig a trench, $I^{I / 2}$ feet deep and $I$ foot wide, and fill in about 4 inches with well-rotted manure, tread down firmly. On this put about 5 inches of good, rich soil, and then lay the roots in, about 18 ins. apart, taking care to spread well, having the crown in an upright position. Cover to within 4 inches of the top of the trench and, as the plants grow, gradually fill the trench to the surface. For spacing between the rows allow 18 ins.
Pedigreed Washington. Originally developed by the ture further larly vigorous, and of wonderful quality. The shoots are large, straight, dark green in color and with a heavy purple over-tone; the tight, firm tips do not begin to open out until well out of the ground. Pedigreed Washington Asparagus stands ahead of all other varieties as a standard for the home- or market-garden. Extra-choice roots, $\$ 5$ per $100 ; \$ 45$ per 1,000.
CONOVER'S COLOSSAL. A mammoth bright green sort, the tips of which are often tinged purple. Very tender and of good quality-quite the best of the older standard kinds.
Mammoth Roots . . . . . . . . . . . . . . . . . . . . . . . . $\$ 3^{100} 50{ }_{50}^{1,000} 00$
Extra-choice Roots.
$\begin{array}{rrr}\$ 3 & 50 & \$ 3000 \\ 250 & 20 & 00\end{array}$

## ASPARAGUS SEED

## One ounce will plant about 50 feet of drill

PEDIGREED WASHINGTON. One of the difficulties in growing Asparagus is the damage often done by rust. Dusting with powdered sulphur when the plants are wet with dew is good practice, and spraying with bordeaux mixture is also to be recommended. The best procedure, however, is to plant only rust-resistant varieties, and Pedigreed Washington is the most highly resistant type we know. Read the description above. Seed, pkt. 20 cts., oz. 65 cts., $1 / 4 \mathrm{lb} . \$ \mathrm{I} .75, \mathrm{lb} . \$ 5$.
CONOVER'S COLOSSAL. The standard variety. Reliable. Seed, pkt. Io cts., oz. 15 cts., I/4lb. 40 cts., lb. \$I.
Note.-For the Asparagus beetle, spray with arsenate of lead, offered on page 177 .

## ARTICHOKE $\begin{gathered}\text { One ounce will pro- } \\ \text { duce soo } \\ \text { dints }\end{gathered}$

The scales and bottom of the flower-heads are eaten, either boiled or raw, as a salad. The young suckers are sometimes tied together and blanched and served in the same manner as asparagus. The plants thrive best in deep, rich soil where the water will not lodge in winter-time. Sow seeds indoors, and pot up similar to tomatoes, setting out in May, in rows 3 feet apart, leaving 2 to 3 feet between the plants. Some flower-buds may be had the first year. Cover with ashes and leaves in winter. Usually bears best the second year.
Large Green Globe. The best variety. Pkt. 25 cts., $1 / 2 \mathrm{Oz} .60 \mathrm{cts}$, oz. $\$ \mathrm{I}, 1 / 4 \mathrm{lb}$. $\$ 3$.

## ARTICHOKE ROOTS

Jerusalem Artichoke. Distinct from the Globe, and propagated by and for the tubers. Plant in rows, 3 feet apart and $I$ foot apart in the row, and cultivate occasionally. Allow the tubers to remain in the ground until needed. Used for feeding stock or pickling, or may be served boiled, like new potatoes. Qt. 35 cts ., pk. $\$ 2$.


## LIMA BEANS

## (Dwarf Bush)

One pound will plant 50 to 100 feet of drill
If ordered alone add for mailing, 5 cts . per $1 / 2$ pound, 10 cts . per pound, and 15 cts. per 2 pounds to the prices listed
Fordhook. A form of the popular Challenger or Potato Lima, and earlier. Both pods and Beans are almost twice the size of the Kumerle or Dreer's Bush Lima. Pods measure 4 to 5 inches, frequently containing 4 fine Beans of the finest flavor. Pkt. 10 ets., $1 / 2 \mathbf{1 b} .30$ cts., $1 \mathrm{lb} .50 \mathrm{cts} .$, 2 lbs. 90 ets., 5 lbs. $\$ 2.10$, 15 lbs. $\$ 5.75$.
New Improved Bush Lima. Similar to Burpee's Bush Lima except that pods are larger in size and are well filled with larger and thicker Beans. A far greater producer; growth more vigorous; the blossombearing stalks are thrown well out of the foliage, and the Beans are ready for picking a full week earlier. $1 / 2 \mathrm{lb} .30$ cts., $\mathbf{1 b} .50$ cts., 2 lbs. 90 cts., 5 lbs. $\$ 2.10,15$ lbs. $\$ 5.75$. Early Giant. A quick-growing variety. The short period in which this Bean from May 5 to matures enables it to be grown for succession, sowings being made from May 15 to July io in the neighborhood of New York. Other varieties of Lima Beans take so long to mature that more than one seeding is barely practicable with them. The flavor of this variety is particularly refined, and the fine, luscious Beans, which are large, thick, and flat are produced in remarkable quantity. Pkt. 15 ets., $1 / 2 \mathrm{lb}$. 30 cts., 1 lb .55 cts., 2 lbs. $\$ 1,5$ lbs. $\$ 2.25,15$ lbs. $\$ 6.25$.
Henderson Bush Lima. Both pods and Beans are small, but they are produced in large quantities. The standard Lima for canning. $\mathrm{I} / 2 \mathrm{lb}$. 25 cts ., 1 lb .40 cts ., 2 lbs. 75 cts., 5 lbs. \$. 75,15 lbs. $\$ 4.75$.

## CULTURE OF LIMA BEANS

Don't waste your seed by sowing Lima Beans before all danger of frost is over and the soil is thoroughly warm. Sow Bush sorts in rows 2 feet apart and about 3 inches deep, putting the Beans 2 inches apart in the row "eye down," later thinning so that the plants stand 6 to 8 inches apart. For Pole varieties put six seeds in each hill, arranging the hills 3 feet apart each way. They require a pole 7 feet high, and when the vines have reached the top, pinch them and so increase the yield. Some gardeners plant under glass and transplant about the time seeds are usually sown. Limas always do best on a nice, rich, loamy soil. Surplus stock may be ripened on the vines, dried and kept for winter use.
BEANS
$1 / 2 \mathrm{lb}$. equals about $1 / 2$ pint 1 lb . equals about 1 pint 2 lbs. equal about 1 quart 15 lbs. equal about 1 peck

Fordhook Bush Lima Beans

## LIMA BEANS (Pole)

One pound will plant 50 hills
If ordered alone add for mailing, 5c. per $1 / 2$ pound, 10 c. per pound, and 15 c. per 2 pounds to the prices listed
S. \& W. Co.'s Green-seeded. The vine is very strong of vigorrunners or branches, producing a great many fine pods which, large Beans, a large proportion containing four. This is a broad-seeded Bean, much nearer to having every Bean perfect than any other Pole Lima. The green tint is a distinctive feature of this Bean, for it retains this tint in the dry state to a greater extent than usual, which indicates the fine qualities which it possesses, being fineflavored and more tender when cooked than white-seeded Beans, and making it more pleasing to gardeners and housekeepers. It is the most peffect Pole Lima. $1 / 2 \mathrm{lb}$. 30 cts., 1 lb .55 cts., 2 lbs. $\$ 1,5$ lbs. $\$ 2.25$, 15 libs. $\$ 6.25$.
Early Leviathan. The earliest variety of Pole Lima; produces pods in Plusters. A splendid variety where the season is short. Pkt. 10 cts., $1 / 2 \mathrm{lb} .25$ cts., 1 lb .45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2,15$ lbs. $\$ 5.50$.
Challenger, or Potato. Early and more prolific than the large Lima; 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2,15$ lbs. $\$ 5.50$
Ford's Mammoth. Very large pods, frequently measuring 9 inches long; Beans flat and large; fine for the home garden; productive and of good flavor. $1 / 2 \mathrm{lb} .25$ cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $\$ 1.75,15$ lbs. $\$ 4.75$.
SPECIAL FREE DELIVERY. We deliver assorted vegetable and flower seeds anywhere in the United States when cash accompanies your order; please, however, add postage when peas, beans and corn (which are heavy in proportion to their value), are ordered alone.

S. \& W. Co.'s Green-seeded Pole Lima Beans


## DWARF or BUSH BEANS

One pound will plant 100 feet of drill

Culture.-Plant as soon as danger of frost is over, placing the seeds 2 to 3 inches apart in drills and about $21 / 2$ inches deep. The rows should be about $21 / 2$ feet apart, and the soil slightly hilled, to insure good drainage and keep the Beans from touching the ground. Most Beans should be picked when about 4 inches long. Frequent pickings insure a more prolonged bearing season. Avoid jerking the plant, as this frequently disturbs young feeding roots. Use the finger-nails to sever the stems. Do not pick when bushes are wet, as this may cause blight and rust. For succession in the home-garden plant 30 feet of row every other week up to August 1 .

## GREEN-PODDED BEANS

If ordered alone add for mailing, 5c. per $1 / 2$ pound, $10 c$. per pound, and $15 c$. per 2 pounds Bountiful. To this Bean belongs the distinction of being one of the best flat, GreenPodded Bush Beans; very prolific and a continuous bearer from early spring to late fall. It is tender and of delicious flavor. Is as entirely stringless as the breeder has been able to make a flat, green-podded Bean. Its pods contain a little more fiber than Stringless Green-Pod of like age, but they average large and are entirely stringless until they become longer than 5 inches. One of the earliest Bush Beans. Pkt. 10 ets., $1 / 2 \mathrm{lb} .25$ ets., lb. 45 cts ., 2 lbs. 85 cts., 5 lbs. $\$ 2$, 15 lbs. $\$ 5.50$.
Stringless Green-Pod. This Bean remains among the very best first-early roundpodded Bush Beans. A very free bearer; entirely stringless; averages 5 inches long and is slightly curved. A handsome sort, borne on a healthy plant which stands dry weather well. $1 / 2 \mathrm{lb} .25$ cts., 1 lb .45 ets., 2 lbs. 85 cts., 5 lbs. $\$ 2,15$ los. $\$ 5.50$.
Giant Stringless Green-Pod. Pods greatly resemble those of Stringless Green-Pod. Fully an inch longer in size but a trifle later. A art for succession when planted with Strin on account of its size and good shape. Splendid sort for succession when planted with Stringless Green-Pod. $1 / 2 \mathrm{lb} .25 \mathrm{c} ., 1 \mathrm{lb} .45 \mathrm{c}$., $2 \mathrm{lbs} .85 \mathrm{c} ., 5 \mathrm{lbs} . \$ 2,15 \mathrm{lbs} . \$ 5.50$.
Black Valentine. A Bean which has been planted extensively in the South on account of its heat-resisting qualities. Matures early, producing long, round, straight pods, which are tender when quite young. Perfects the crop all at once, hence valuable as a market sort. Pkt. 10 c., $1 / 2 \mathrm{lb} .25$ ets., lb. 40 ets., 2 lbs. 75 ets., 5 lbs. $\$ 1.75$, 15 lbs. \$4.75.
Early Red Valentine.
This variety is valuable on account of its earliness. Pods very fleshy, round and saddle-backed, with slight strings. Bushes grow uniformly about 15 inches in height and produce a large crop. $1 / 2 \mathrm{lb} .25$ ets., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2,15$ lbs. $\$ 5.50$.
Dwarf Horticultural. Pods are medium in length, slightly curved, and when nearly developed are splashed with bright red on a yellow skin. The green-shelled Beans are of fair size, tender, and fine flavored. T/2lb. 25 cts., 1b. 40 cts., 2 libs. 75 cts., 5 lbs. \$I. 75 , I5 lbs. $\$ 4.75$.
Bountiful Green-Podded Beans

Longfellow. Extra-early, producing long, round, green pods which are tender, brittle, and stringless when young. $1 / 2 \mathrm{lb}$. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2$, I 5 lbs. $\$ 5 \cdot 50$. Refugee, or $\mathbf{1 , 0 0 0 - t o - 1}$. One of the latest Beans. The pods are nearly round, light green, 5 inches long, terminating in a slender point; fleshy, brittle, and mild in flavor, with but slight strings. Pkt. Io cts., $1 / 2 \mathrm{lb} .25 \mathrm{cts} ., 1 \mathrm{l} .40 \mathrm{cts} ., 2 \mathrm{lbs} .75 \mathrm{cts} .$, 5 lbs. 8 I .75 , I 5 lbs. $\$ 4.75$.
Stringless Refugee. The most satisfactory all-round Bean we know of. A very heavy cropper, its flavor is wonderful and it is absolutely stringless. Valuable for immediate use, for pickling or for canning. Pkt. I 5 cts., $1 / 2 \mathrm{lb} .30$ cts., $1 \mathrm{~b} .50 \mathrm{cts} ., 2 \mathrm{lbs}$. 90 cts., 5 lbs. $\$ 2$.Io, 15 lbs. $\$ 5.75$.
Magpie. (See Novelties, page I4.) Pkt. 25 cts., $1 / 2 \mathrm{lb} .45 \mathrm{cts} ., \mathrm{lb} .85 \mathrm{cts} ., 2 \mathrm{lbs} . \$ \mathrm{I} .5 \mathrm{o}, 5 \mathrm{lbs}$. \$3.40, I5 lbs. \$io.
NOTE.-The American seed trade generally has adopted the cental system of packing Beans, Corn, and Peas, and we therefore offer them by weight instead of measure. One pound of Beans is equal to one pint, two pounds to one quart; the average weight of a bushel of Beans is 60 pounds.

## BEANS FOR DRY SHELLING

Pea, or Navy. A snowy white variety of uniform small size. The plants grow upright and bear the pods well off the ground. A field Bean of which large acreages are grown. $1 / 21 \mathrm{lb} .20$ cts., $1 \mathrm{lb} .35 \mathrm{cts} ., 2$ ibs. 65 cts., $5 \mathrm{lbs} . \$ \mathrm{I} .50$, I $5 \mathrm{lbs} . \$ 4.25$. Boston Marrow.\} $\left.\begin{array}{l}\text { Boston Marrow. } \\ \text { Red Kidney. }\end{array}\right\} \quad \mathrm{I} / 2 \mathrm{lb} .20 \mathrm{cts} ., 1 \mathrm{lb} .35 \mathrm{cts} ., 2 \mathrm{lbs} .65 \mathrm{cts} ., 5 \mathrm{lbs} . \$ \mathrm{I} .5 \mathrm{o}, \mathrm{I} 5 \mathrm{lbs} . \$ 4.25$.

## FORCING BEANS

Masterpiece. We offer the true strain of this fine English variety, carefully grown by experts under our supervision. Masterpiece is of splendid constitution, a quick grower and very prolific, the pods attaining a length of over 7 inches, straight, tender, meaty and stringless. As a quick grower under glass, Masterpiece is difficult to beat. Bean thick-flat. $1 / 2 \mathrm{lb} .60$ ets., $1 \mathrm{~b} . \$ 1,2 \mathrm{lbs} . \$ 1.85,5 \mathrm{lbs} . \$ 4.50,15 \mathrm{lbs} . \$ 13.25$. S. $\varepsilon^{2}$ W. Co.'s Wonder. Of fine color and refined flavor. The pods are round, abundance. $1 / 2 \mathrm{lb} .35$ ets., lb. 60 ets., $2 \mathrm{lbs} . \$ 1.10,5 \mathrm{lbs} . \$ 2.50,15 \mathrm{lbs} . \$ 7.25$.


## DWARF or BUSH WAX-PODDED BEANS

One pound will plant 100 feet of drill
If ordered alone add for mailing, 5 cts. per $1 / 2 \mathrm{lb}$., 10 cts. per lb., 15 cts. per 2 lbs.
Sure-Crop Stringless Wax. The plant grows to a large size and, having a strong,解 in great abundance large, handsome, golden yellow pods which are stringless and tender at all stages of development. Being very hardy, the seed may be planted early. Sure-Crop is more rustproof and will stand a longer season of damp, wet weather than any other Stringless Wax Bean. $1 / 2 \mathrm{lb} .25$ cts., lb. 45 ets., 2 lbs. 85 ets., 5 lbs. $\$ 2,15$ lbs. $\$ 5.50$.
Hardy Wax. One of the best round-podded stringless Wax Beans ever evolved. The plants have thick, leathery leaves which resist cold, blight and plant diseases to a curved deep yellow pods. Remains in bearing for a remarkably long period. $\mathbf{1} / \mathbf{2 l b} \mathbf{2 5} \mathbf{~ c t s . , ~ l \mathbf { l b }}$. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2$, 15 lbs. $\$ 5.50$.
Brittle Wax. Without a doubt the earliest of all Wax Beans; also a great cropper. The bushes entirely stringless, are remarkably hardy and extremely prolific, while the pods are fleshy and
 The pods have white seeds showing only a small $1 / 2 \mathrm{lb} .25 \mathrm{cts} ., 1 \mathrm{lb} .45 \mathrm{cts} ., 2 \mathrm{lbs} .85 \mathrm{cts} ., 5 \mathrm{lbs} . \$ 2,15 \mathrm{lbs} . \$ 5.50$.
New Kidney Wax. The fleshy pods are flattened in form, from 6 to 7 inches in length, $1 / 2 \mathrm{inch}$ broad and $3 / 8$ inch thick; the color is a rich lemon-yellow. Under ordinary field culture the plants produce nearly twice as many pods as the Wardwell. The pods are remarkable for their meatiness, fine flavor, brittleness and absolute freedom from strings or tough fiber. $1 / 2 \mathrm{lb} .30 \mathrm{cts} ., \mathrm{lb} .50 \mathrm{cts} ., 2 \mathrm{lbs} .90 \mathrm{cts} ., 5 \mathrm{lbs} . \$ 2.10,15 \mathrm{lbs} . \$ 5.75$.
New Hodson Wax. A distinctly late variety, bearing enormous quantities of flat but fleshy pearing in prom of a creamy yellow color. The plant is vigorous, and comes into bearing in from 80 to 85 days from date of sowing the seeds. The pods of this variety often measure 7 to 8 inches in length and are remarkably free from spot or rust. $1 / 2 \mathbf{l b} .25$ cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2,15$ lbs. $\$ 5.50$.
Improved Golden Wax. A very early variety with flat, golden pods. Pkt. Io cts., 1/2lb. 25 cts. lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2$, I 5 lbs. $\$ 5.50$.
Improved Black Wax. The pods are round, and they are yielded in large quantities; early. 1/2lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2$, 15 lbs. $\$ 5.50$.
Davis White Wax. Long, straight, handsome pods. The seed is white and excellent for green shelling and for baking. $1 / 2 \mathrm{lb} .25 \mathrm{cts} ., \mathrm{lb} .45 \mathrm{cts} ., 2 \mathrm{lbs} .85 \mathrm{cts} ., 5 \mathrm{lbs} . \$ 2,15 \mathrm{lbs} . \$ 5.50$.
Wardwell Kidney Wax. Extra early; long, flat, waxy pods. $1 / 2 \mathrm{lb} .25 \mathrm{cts} .1 \mathrm{l}$ b. $45 \mathrm{cts} ., 2$ lbs. $85 \mathrm{cts}$. ,


Hardy Wax. A new, stringless, round-podded variety remarkable for its heavy yielding properties. See text above.

## BROAD BEANS

Windsor. The heavy pods pairsand usually produced in pairs and usually contain three seeds. They are prepared for the table in the same way as Limas. As a matter of fact, Windsor Beans are sometimes termed the English Lima, but differ from all other American types in that they are not sensitive to cold. Good results are only obtainable from seedings made in early spring on strong
lb. 50 cts., 2 lbs. 90 cts., 5 lbs. $\$ 2.10$, 1

## POLE or RUNNING BEANS

## One pound will plant 200 hills

Old Homestead (Green Kentucky Wonder). An improved sort of this well-known Bean. The pods are entirely stringless and of silvery green color, hanging in large clusters from the top to the bottom of the pole. One of the most prolific. Pkt. 10 ets., $1 / 2 \mathrm{lb}$. 25 cts., lb. 45 cts., 2 lbs. 85 ets., 5 lbs. $\$ 2,15$ lbs. $\$ 5.50$.
Golden Cluster Wax. The leading early Wax Pole Bean. Pods equal this as a "snap sort" while young, or as a dry. pure white Shell Bean for winter use. Pkt. 10 cts., $1 / 2 \mathrm{lb} .30$ cts., lb. 50 cts., 2 lbs. 90 cts., 5 lbs. $\$ 2.10,15$ lbs. $\$ 5.75$.
Lazy Wife. Green-Pod. The best late, green-podded Pole Bean. Pods medium dark green; broad, thick, very fleshy and entirely stringless. $1 / 2$ lb. 25 cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2$, I 5 lbs. $\$ 5.50$.
Scarlet Runner. Green-Pod. Bright scarlet flowers. Pkt. Io cts., $\mathrm{I} / 2 \mathrm{lb}$. $25 \mathrm{cts} ., \mathrm{lb} .45 \mathrm{cts} ., 2 \mathrm{lbs} .85 \mathrm{cts} ., 5 \mathrm{lbs} . \$ 2, ~ \mathrm{I} 5 \mathrm{lbs} . \$ 5.50$.
Yard-Long Asparagus. A remarkable Bean, yielding narrow rounded pods of enormous length. The quality is excellent. Pkt. I5 cts., I/2 1 lb . $60 \mathrm{cts} ., \mathrm{lb} . \$ \mathrm{I}, 2$ lbs. $\$ \mathrm{I} .85,5 \mathrm{lbs}$. $\$ 4.50$.
NOTE.
We now offer Beans by weight instead of measure: one pound is We now offer Beans by weight instead of measure:
equal to about one pint, two pounds to about one quart.

Culture.-Seed should be sown the latter part of April. The ground should be spaded well and deep, placing rows about 18 inches apart, and the drills i inch deep. Cover the seed carefully and firm in the ground by walking over the drills. When seedlings appear about 3 inches above ground, thin out to about 4 inches between the plants so as to give ample room for the proper development of the bulbs. Beets are best for pulling when about 2 inches in size. Successive sowings may be made up to the middle of July.

## ROUND TYPES

Eclipse. An extra-early sort which produces Beets sixty days from sowing. purplish red with rose zones; remains in table condition for ten days, when it becomes tough. Pkt. 10 ets., oz. 20 cts., $1 / 41 \mathrm{lb} .55$ cts., lb. $\$ 1.50$.
Extra-Early Egyptian. A variety which grows very quickly, producing Exe are pulled when 2 inches in diameter. Pkt. 10c., oz. 20c., $1 / 4 \mathbf{l b}$. 55c., lb. $\$ \mathbf{1 . 5 0}$. Crosby's Original Egyptian. One of the most widely grown turnipshaped Beets in cultivation today. Will produce Beets ready for pulling within
 two or thr ee days after Eclipse. The smooth,

S. \& W. Co.'s Favorite Brussels Sprouts

BRUSSELS SPROUTS
One ounce will produce about 3,000 plants
Culture.-Sow in May, in shallow drills, i inch deep and 12 inches apart. Transplant in July. When the crown, or top sprout is beginning to head, pinch it out, to admit of the whole strength being thrown into the side shoots. Very hardy. This is a delicious vegetable and should find a place in every garden; greatly improved by first frosts.
S. \& W. Co.'s Favorite. New. Semi-dwarf, thickly covered with sprouts by the end of September; excellent. Pkt. I5 cts., oz. 65 cts., 1/4lb. \$I.75, lb. \$5.


## CARDOON

A vegetable that is grown somewhat like celery and served after the manner of asparagus. Sow in the open ground in May, and thin or transplant the seedlings so that they stand $21 / 2$ feet, one from the other, in rows 4 feet apart. A catchcrop such as beans, lettuce or beets may be taken between the rows. At the end of the summer, and two or three weeks before using, it is necessary to blanch the Cardoons. The heads of the plants are tied together, straw is piled against them, and the surrounding soil is then heaped up against the straw. Pkt. 15 ets., oz. 45 ets., $1 / 4 \mathrm{lb}$. $\$ 1.30,1 \mathrm{~b} . \$ 3.50$.

## CHERVIL

One ounce will sow 150 feet of drill
Culture.-The curled Chervil is cultivated like parsley and used for garnishing and flavoring soups and salads.
Moss Curled Extra. Pkt. Ioc., oz. 35c., $1 / 4 \mathrm{lb}$. 9 oc ., lb. $\$ 2.50$.

## CRESS

## (Pepper Grass)

One ounce will sow 100 feet of drill
Culture.-Sow early in the spring. The leaves are crisp, tender, and pungent in flavor. Sow at short intervals for succession, as it soon runs to seed. Curled, or Pepper Grass. Pkt. Io cts., oz. 20c., 1/4 lb . $55 \mathrm{cts} .$, lb. \$I.50.
True Erfurt Water Cress. Pkt. I5 cts.; $1 / 2 \mathrm{Oz} .40 \mathrm{cts}$. oz. 65 cts., $1 / 4$ lb. $\$$ I. 75, lb. $\$ 5$.

## CHICORY

## Witloof, or French En-

dive. A winter salad, most delicious served with French dressing and eaten like Cos lettuce. The seed should be sown in the open ground not later than June, in drills 12 to I8 inches apart, thinning out the plants so that they will not stand closer than 3 inches. The plant forms long, parsnipshaped roots, which should be lifted in the fall, cutting off the leaves about $11 / 2$ inches from the neck and shortening the roots by cutting off the bottoms to within 8 inches of the neck. The roots should then be planted in a trench 16 to 18 inches deep in a dark, warm cellar or under a greenhouse bench, and placed upright about $11 / 2$ to 2 inches apart, which will allow the neck of the root to come within 9 inches of the level of the trench.
inches of the level of the trench. light and if a quicker grow desired, this can be accomplished by a mulch of fresh manure about 2 feet deep. It requires about one month to force the roots. Pkt. $10 \mathrm{cts} .$, oz. $40 \mathrm{cts} ., 1 / 4 \mathrm{lb} . \$ 1.10,1 \mathrm{~b} . \$ 3$.
Common, or Wild (Barbe de Capucin). Pkt. I5 cts., oz. 55 cts., $1 / 4 \mathrm{lb} . \$ \mathrm{I} .50, \mathrm{lb} . \$ 4$.
Large-rooted Magdeburg. Cultivated for the roots. Pkt. Io cts., oz. 35 cts., $1 / 4 \mathrm{lb}$. $\$ \mathrm{I}, \mathrm{lb} . \$ 3$.

For Endive, see page 32
WITLOOF ROOTS for forcing are offered on page 52 .

## CABBAGE

One ounce will produce about 3,000 plants

Culture.-Sow early kinds in hotbeds in February and March, and in the open ground during April and May. Late varieties for fall and winter use should also be sown in May. Early sorts may be planted in rows 2 feet apart, with 20 inches between plants in the row; late kinds should stand at least 2 feet each way. To be well grown, Cabbages require a deep, rich, loamy soil, but should it be too rich some late kinds may show signs of bursting. If this occurs, push the plants over to one side and so check their growth.

> Disease germs may occasionally be carried on the seed-coats, but in the majority of cases club-root and other troubles are caused by growing Cabbages in infected soil. Growers of Cabbage in q antity are advised to sterilize their seed before sowing by dusting with "Semesan" powder (2-oz. bottle 60 cts.). IPlace the cabbage seed in a jar with a small quantity of the preparation and shake vigorously for several minutes. Seed-beds may also be sterilized by drenching the soil with a 1 to 100 or 1 to 200 solution of formaldehyde (bottle 50 cts.) at the rate of $3 / 4$ gallon per square foot, or it may be steamed. In the field, crop rotation is to be recommended, and the land regularly limed.

## EARLY AND MIDSEASON

## S. \& W. Co.'s Famous Early Conical.

An extremely early variety of conical form, quite distinct from any other on the market. An ideal sort for private gardens, producing solid heads sooner than other varieties and requiring less space than most kinds. Pkt. 20 ets., $1 / 4$ oz. 50 ets., $1 / 2$ oz. 85 ets., oz. $\$ 1.50,1 / 41 \mathrm{l}$. $\$ 4$.
Improved Early Jersey Wakefield. While this -mproved Early Jersey Wakefield. variety is not quite so early as S. \& W. Co.'s Famous Early Conical, it has been long considered as the best early conical-type Cabbage which we have. The heads are hard and solid with just a few outside leaves, which are unusually thick, enabling them to stand cold weather when wintered in coldframe. Pkt. 10 cts., $1 / 202$ Z. 30 cts ., oz. $55 \mathrm{cts.1}$,1/1b. 81.50 . Charleston, or Large-Type Wakefield. Retains all the characteristics of the Improved Early Jersey Wakefield with the added advantage of greater size. Pkt. 15 cts., $1 / 2 \mathrm{Oz} .40$ cts., oz. 65 cts., $1 / 41 \mathrm{~b} . \$ 2$.
Babyhead. Extreme earliness and small size are charless than 6 inches acteristic of this new variety. The head is less than 6 inches across, round, firm, and of splendid mild

## LATE CABBAGES FOR WINTER STORAGE

## Danish Drumhead. Averages much larger size

 than the Ballhead; is about two weeks earlier. The round heads are very solid, fine-grained and sweet-flavored. The best Cabbage for winter use, and a variety which we recommend most highly. Pkt. 15 ets., $1 / 40 \mathrm{Oz} .40$ ets., $1 / 20 \mathrm{z} .60$ ets., oz. $\$ 1,1 / 4 \mathrm{lb}$. $\$ 3.50$.Large Late Flat Dutch. One of the most reliable in cultivation for winter use; produces immense heads of the finest quality; splendid keeper. Pkt. Io cts., I/2OZ. 30 cts ., oz. 55 cts ., $1 / 4 \mathrm{lb}$. \$I. 50 . outer leaves are few and small, and the stem is short. cooking quality. The outer leaves are few and small, and the stem is short Babyhead is recommended as the first to reach the table when grown outdoors, and also for growth under glass, for which purpose it is ideal. Pkt. 25 ets.
Copenhagen Market. The best of all early Cabbages. Stands longer familiar with the Cabbage knows the old and popular Danish Ballhead, the best of all late Cabbages. This new extra-early variety, ripening with Charleston Wakefield, also originated in Denmark, and is as good, in its class, as the old favorite Danish Ballhead. The stem is short, the head round and solid. When ready for cutting, Copenhagen Market is the heaviest of the extra-early varieties, and if left until fully mature, frequently weighs 8 to io pounds. The leaves are small, compact and close to the head, so it will stand close planting. The inside is fine-grained, tender, pure white and compact. A leader for the home-garden and market. Pkt. 15 cts., $1 / 40 z .40$ ets., $1 / 2 \mathrm{oz}$. 60 cts., oz. $\$ 1,1 / 41 \mathrm{lb} . \$ 3.50$.
Succession. A splendid second-early, round-headed sort, with enormous heads of exceedingly tender quality. Pkt. I5c., $1 / 4 \mathrm{oz} .40 \mathrm{c} ., 1 / 2 \mathrm{oz} .60 \mathrm{c} ., \mathrm{oz} . \$ \mathrm{I}, \mathrm{I} / 4 \mathrm{lb} . \$ 3.50$. Early Summer. Pkt. I5 cts., 1/2oz. 40 cts., oz. 65 cts ., $1 / 4 \mathrm{lb} . \$ 2$.

## RED CABBAGES

Mammoth Rock Red (Sprague type). This is by far the best, largest and şurestheading Red Cabbage ever introduced. The plant is handsome, with numerous spreading leaves. The head is large, round, very solid. Pkt. I5 cts., $1 / 40 z$. 40 cts ., $1 / 2 \mathrm{OZ} .60 \mathrm{cts} ., \mathrm{OZ} . \$ \mathrm{I}, 1 / 4 \mathrm{lb} . \$ 3.5 \mathrm{o}$.
Zenith Red. (See Novelties, page I4.) Pkt. I5 cts., $1 / 4 \mathrm{Oz} .40 \mathrm{cts} ., 1 / 2 \mathrm{oz} .60 \mathrm{cts} .$, oz. \$I, 1/4lb. \$3.50.

## SAVOY CABBAGES

Early Dwarf Ulm. A small, quick-growing variety for early use. Pkt. I5 cts., $1 / 4 \mathrm{Oz} .40 \mathrm{cts} ., 1 / 2 \mathrm{Oz} .60 \mathrm{cts} ., \mathrm{oz} . \$ \mathrm{I}, 1 / 4 \mathrm{lb} . \$ 3.50$.
American Drumhead Savoy. None of the late-growing varieties can begin to equal in flavor this sort for family use; heads large. Pkt. I5 cts., $1 / 2 \mathrm{Oz} .35 \mathrm{cts}$., oz. 60 cts., $1 / 4 \mathrm{lb}$. \$1.75.
Early Cone Savoy. (See Novelties, page I4.) Pkt. 20 cts., $1 / 40 z .45$ cts., 1/2 Oz .75 cts ., oz. \$1.25, $1 / 41 \mathrm{~b}$. $\$ 4$.

## PE-TSAI, CHINESE or "CELERY" CABBAGE

Pe-Tsai produces beautiful, crisp, celery-like heads that somewhat resemble Cos lettuce. Pkt. 15 ets., $1 / 20 z .30$ ets., oz. 55 cts., $1 / 41 \mathrm{lb}$. $\$ 1.50$.


American Drumhead Savoy Cabbage

## GARROT

One ounce will sow 100 feet of drill

Culture.-To produce the finest crop, the land should be thoroughly manured the previous season; forked roots will result if the seed is sown on freshly manured soil. Sow the early sorts in March and April, in drills I inch deep and 14 inches apart; thin out to 4 inches. For main crop sow in May or beginning of June. Care should be taken, at all times, to see that soil is firm over the seeds, either by means of the feet, roller, or garden drill.

## BEST EARLY KINDS

Early French Forcing. The earliest variety and the one largely grown for forcing purposes. It makes a small, almost globe-shaped root of an orange-red color. Pkt. 15 cts ., oz. 40 cts., $1 / 4 \mathrm{lb}$. $\$ \mathrm{I} . \mathrm{Io}, \mathrm{lb} . \$_{3}$. Early Half-Long Scarlet Nantes. The skin is smooth, flesh red, and without any core or heart. It is excellent for forcing, and for fine quality and perfect shape can hardly be surpassed. Pkt. $15 \mathrm{cts} .$, oz. 40 cts., $1 / 4 \mathrm{lb}$. $\$$ I. $10, \mathrm{lb} . \$ 3$.
Oxheart, or Guerande. It is intermediate between Half-long and Horn varieties, and perfectly distinct. The shape is nearly oval and the color and quality all that can be desired. Pkt. Io cts., oz. $30 \mathrm{cts} ., 1 / 4 \mathrm{lb} .75 \mathrm{cts}$., lb. $\$ 2$.
Selected Chantenay. A very splendid type of the half-long, stump-rooted Carrot. Averages blunt end. The flesh is rich $5^{1 / 2}$ to 6 inches in length, broad at the neck, narrowing gradually to a quality. Pkt. 10 cts., oz. 30 cts., $1 / 4 \mathrm{lb} .75$ cts., lb. $\$ 2$.
Early Scarlet Horn. Favorite for early crop but not large. Considered a good, general-purpose. allseason variety, since, sown late in the season, the roots are firm enough for winter storage. Sometimes used for forcing. Pkt. ro cts., oz. 35 cts., 1/4lb. 90 cts.. lb. $\$ 2.50$.
S. \& W. Co.'s Melting Marrow. (See Novelties, page 15.) Pkt. I $5 \mathrm{cts}$. oz. $55 \mathrm{cts} ., 1 / 4 \mathrm{lb}$. $\$ 1.50, \mathrm{lb} . \$ 4$.

## LATE SORTS $\begin{gathered}\text { Particularly Suitable } \\ \text { for Winter Use }\end{gathered}$

Selected Danvers. A handsome, cylindrical-shaped Carrot of good size and stump-rooted. It is of a rich, dark orange color, grows to large size, is smooth, and has little core. It is a first-class Carrot for all soils, yields a greater weight per acre than any other variety; and is more easily harvested than the old long varieties. This selected stock we are now offering has been specially grown for market-gardeners and is sure to give satisfaction. Pkt. 10 cts., oz. 30 cts., $1 / 4 \mathbf{1 b} .75 \mathrm{cts} ., \mathbf{1 b} . \$ 2$.
S. \& W. Co.'s Improved Long Red Surrey. A great improvement on the various by a careful selection for successive years, of the best-formed types of Long Orange Carrot obtained better-flavored, of a deeper orange color, and more certain to produce a crop than any type of long Carrot; flesh very sweet and tender; very productive, and never becomes hard or woody at the heart. The roots grow very regular and smooth; they are of good size, being from 6 to 8 inches in length and 2 inches in diameter at the top, tapering gradually from the shoulder to the tip of the roots. In color, shape or size, this is the ideal sort for market-gardener's late crop. Pkt. 10 cts., oz. 35 cts., $1 / 4 \mathbf{l b} . \$ 1, \mathbf{l b} . \$ 3$.
Selected Long Orange Improved. One of the most desirable for either garden or field culture; it grows to a large
size, fair specimens averaging 12 inches in length and 3 inches in diameter at the top. Pkt. 10 cts., oz. 25 cts., 1/4lb. 65 cts., lb. $\$ 1.75$.
S. \& W. Co.'s New Red Intermediate. This is certainly the best main-crop Carrot. It is one of the most uniform in shape that we know, and where the soil is favorable, it will always grow clean and free from side roots. The core is small and very tender, and there is no indication of woody character at any stage of its growth. It is also entirely free from any coarse, rank flavor so common with many sorts. For private purposes it is ideal, and its yielding capacity is enormous, which, with its handsome color and fine appearance, makes it invaluable to truckers. Pkt. no cts., oz. 35 cts., $1 / 41 \mathrm{~b}$. 90 cts., lb. $\$ 2.50$.

## TWO CARROTS FOR PRIZE-WINNING

Exhibition Chantenay, Exhibition Danvers. Two fine strains of these standard varieties that have been specially grown and selected for exhibition purposes. Each, pkt. 15 cts., oz. $55 \mathrm{cts} ., 1 / 4 \mathrm{lb} . \$ 1.5 \mathrm{o}, \mathrm{lb} . \$ 4$.
Grow More Root Crops. There is a wealth of satisfaction in being able to go to your root cellar or on the garden during the winter months and dig up vegetables that sell on the market at 10 to 25 cents for a bunch of five. Their liberal use is most essential to our physical welfare. And they are so easy to grow that they may play quite


## CAULIFLOWER

Culture.-Sow the first week in May and prick out on a rich piece of ground; transplant in July. For wintering under glass sow in the second and last weeks in September; transplant thickly into a cold pit or frame; give plenty of air in mild weather, and cover up well when conditions are severe. Again sow in February in a hotbed and transplant in April For Cauliflower the ground shouid be well prepared by trenching, incorporating at the same time a good share of rotten manure. Select new ground, if possible, as Cauliflower rarely succeeds on soil which has been cropped year after year with other kinds of vegetables. Plant in rows 20 inches apart and 2 feet between the rows. To be successful with this vegetable, rich soil and abundant moisture at all stages of development are absolutely essential. Cauliflower does not form solid heads in hot, dry climates.

## The Best Early Cauliflower, S. \& W. Co.'s Best of A11.

The easiest grown and surest heading Cauliflower offered today. In habit the plant is very dwarf, stocky, and erect. It has very few outer leaves and, as a consequence, the young Cauliflower plants may be planted less than 2 feet apart each way. All that is necessary is to select suitable soil, when every plant will form a large, solid, perfect head of the finest table quality and of handsome appearance. Pkt. 25 cts., $1 / 8 \mathrm{oz}$. $\$ 1,1 / 4 \mathrm{oz}$. $\$ 1.75,1 / 2 \mathrm{oz}$. $\$ 3.25$, oz. $\$ 6$.

S. \& W. Co.'s Best of All Cauliflower.


Early Snowball. An all-the-year-round Cauliflower, being suitable alike for forcing, for spring use out-of-doors, and for latest fall crops

Early Snowball. This wonderful, sure-heading variety is of characteristic dwarf habit, the outer leaves being small, hence Snowball is the most prowing under glass during winter and spring Snowball is the most popular Cauliflower grown in America today, and the S. \& W. strain is used so largely by commercial growers because of the solidity and purity of its head, its large size, and its uniform reliability. Pkt. 20 cts., $1 / 8$ oz. 70 cts., $1 / 4 \mathrm{oz} . \$ 1.25,1 / 20 z . \$ 2.25$, oz. $\$ 4$.
Danish Dry Weather. Especially adapted to sections subject and of delicious flavor. It will prove valuable for growing in the southern states, where the climate is hot and long seasons of dry weather are experienced. Pkt. 20 cts., $1 / 80 z .85$ ets., $1 / 40 z . \$ 1.50$, 1/2oz. \$2.50, oz. \$4.50.
Extra-Early Dwarf Erfurt. This Cauliflower is an extra-early sort, of dwarf habit, and desirable for forcing or planting in the open ground. Pkt. 20 cts., $1 / 8 \mathrm{oz} .70$ cts., $1 / 4 \mathrm{OZ} . \$ 1.25,1 / 2 \mathrm{oz} . \$ 2, \mathrm{oz} . \$ 3.50$.
Autumn Giant. This is a larger and later type than the above varieties. It is popular in South America and the warmer parts of this country, though many growers in this section also find that it suits their requirements. Autumn Giant is tall and sturdy, needing in consequence more room to develop than the early types. Pkt. 10 ets., $1 / 4 \mathrm{oz} .40 \mathrm{cts} ., 1 / 20 \mathrm{oz} .60 \mathrm{cts} .$, oz. $\$ 1$.

## Suggestions for Soil Improvement

Plow under a green crop for Cauliflower and other plants that need added humus in the soil. It will retain plant-food, hold moisture, and is the best adjunct to-or substitute for-animal manure. Do not allow even the smallest amount of land to remain idle, but sow a cover crop as soon as a space becomes available, preferably allowing the cover crop to stand over the winter, and plowing or digging it under in the spring.

Suitable crops to plant for turning under, used either alone or in combination, are:

| SPRING SEEDING | Quantity per acre when sown alone | Quantity per 100 sq. yds. |  | subject to changes io lbs. | market 100 lbs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Crimson Clover | . . 20 lbs . | I lb. | \$0 30 | \$2 50 | \$20 00 |
| Spring Vetch. | . ioo lbs. | 2 lbs. | Qt. | I 25 Pk. | $\begin{aligned} & \text { Io oo } \\ & \text { Bus. } \end{aligned}$ |
| Spring Rye. SUMMER SEEDING | . 2 bus. | 2 qts. | \$0 25 | \$1 25 | \$375 |
| Soy Beans. | . 2 bus. | 2 qts. | 30 | I 50 | 425 |
| Cowpeas, Whippoorwill | . 2 bus. | 2 qts . | 30 | 150 | 500 |
| Japanese Buckwheat... EARLY FALI, SEEDING | .2 bus. | 2 qts . | 20 | 90 | 300 |
| Winter Rye............ | . 2 bus. | 2 qts. | 25 | I 00 | 325 |
| Winter Wheat. | . 2 bus. | 2 qts . | 25 | Y 35 | 4 0 0 lbs. |
| Winter or Hairy Vetch. | I00 lbs. | 3 lbs . | \$0 35 | \$3 00 | \$25 00 |

## STUMPP \& WALTER CO.'S SELECTED SEEDS

## CELERY

One ounce will produce 3,000 plants

Culture.-Sow the seed in a coldframe or dry border as early as the ground can be worked, in drills 8 to 10 inches apart, covering the seed $1 / 4$ inch deep. When fairly out of the seed-leaf, they may be transplanted to a nother bed or thinned out to 5 or 6 inches apart, and allowed to grow until wanted for transplanting out into the beds or trenches. Early in July is the proper time to set out the plants in the trenches, or as soon after early July as possible. Rows or double rows should be 3 feet apart and the plants set about 8 inches apart in the row. As the plants grow, they should be boarded or earthed up to blanch them. For keeping over the winter, they can be banked up with earth and covered over with litter to protect from frost where they have grown, placing boards on top to keep out the rain.

## SELF-BLANCHING VARIETIES

New Golden Plume and New Earligreen.
These two exclusive Stumpp \& Walter introductions are both fully described on page 15 . GOLDEN PLUME. Originator's Stock. Pkt. 25 ets., $1 / 80 z . \$ 1.10,1 / 40 z$. $\$ 2,1 / 20 z$. $\$ 3.50$, oz. $\$ 6$.

EARLIGREEN. Pkt. 25 cts., 6 pkts. $\$ 1.25$.
Improved White Plume. One of the most it is not necessary to bank up as with other Celerise It is tender and of the very best flavor. Pkt. 15 cts., $1 / 202$. 60 cts., oz. $\$ 1,1 / 4 \mathrm{lb} . \$ 2.75,1 \mathrm{lb} . \$ 7.50$.
Paris Golden Self-Blanching. The plant is compact and stocky, with light, golden green leaves. It produces stalks which are solid, brittle, and possess a fine nutty flavor. The plant blanches quickly to a beau tiful golden yellow. Our stock is grown in France by the originator, and is free from plants of the green type. A splendid early Celery, for the family garden, and widely used by the commercial grower. Pkt. 25 cts., $1 / 2$ oz. $\$ 1, \mathbf{o z} . \$ 1.75,1 / 4 \mathbf{1 b} . \$ 5,1 b . \$ 14$.

## WELL-KEEPING WINTER VARIETIES

New Easy-Blanching. This variety is somewhat suggestive of Golden arger plant; the leaves blanch Sel -blanching, but it is green in color and a $t$ is as good a keeper as and late sort, though maturing but two weeks later than New Easy barticularly attractive and good keeping properties. Seed grown by the originator, one of the leading Celery growers for the New York market. Pkt. 25 ets., $1 / 40 z .75$ ets., $1 / 20 z$. $\$ 1.25$, oz. $\$ 2,1 / 41 \mathrm{~b}$. $\$ 6.50$.
Winter Queen. Medium large, light green in color. Solid, crisp; blanches well and keeps well. Pkt. Io cts., $1 / 2 \mathrm{oz} .45 \mathrm{cts} .$, oz. 80 cts., $1 / 4 \mathrm{lb} . \$ 2.20$, lb. $\$ 6$.
Giant Pascal. A deep green selection from the Golden Self-blanching Celery The stalks are very large, thick, solid, and crisp. It has a fine, nutty flavor. Pkt. Io cts., $1 / 4 \mathrm{oz} .30$ cts., $1 / 2 \mathrm{oz}$. 50 cts., oz. $\$ \mathrm{I} .75,1 / 4 \mathrm{lb} . \$ 6$.
Covent Garden Red. A splendid dark rose variety; large and of nutty flavor. Pkt. 25 cts., 1/20z. 75 cts., oz. \$1.25, 1/4lb. \$3.50, lb. \$io.
Cutting Celery. (For Soup Greens.) A loose-growing type from which stalks may be cut continuously. Merely grow in good soil kept free from weeds: do not earth or blanch. Pkt. io cts., oz. 35 cts., $1 / 4 \mathrm{lb} . \$ \mathrm{I}$.
Celery Seed. For flavoring soups, etc. Oz. I 5 cts., I/4lb. $30 \mathrm{cts} ., \mathrm{lb} .75 \mathrm{cts}$.
CELERIAC, LARGE SMOOTH. A variety of celery with turnip-shaped roots, which are white fleshed, tender and possess the flavor of celery stalks. Pkt. 10 ets., oz. 35 cts., $1 / 4 \mathrm{lb} . \$ 1,1 \mathrm{l} . \$ 3$.


Celeriac may be served cooked or as a salad


New Easy-Blanching may be whitened in a shorter time than any other Celery; will blanch up, in fact, in cold storage. It keeps better than most late varieties.

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## SUGAR CORN

## One pound will plant 200 feet of drill or 200 to 300 hills

Culture.-Plant for succession of crop every three weeks, from April to July, in hills 3 feet apart each way, and six seeds in a hill; cover about half an inch; thin out to three plants. If ordered alone, add for mailing, 5 cts . per $1 / 2 \mathrm{lb}$., 10 cts . per lb ., 15 cts . per 2 lbs .


Golden Bantam. The standard for quality by which others are judged

## EARLY SORTS

Early Mayflower. Is fully a week or 10 days earlier than White Cory; and when we say that in size of ear, tenderness and sweetness of the kernels it is very noticeably superior to White Cory, we think we have said enough to indicate that the variety has distinct merits. The ears are long and well filled from tip to butt with large, tender, fineflavored, white kernels. $1 / 2 \mathrm{lb} .25$ cts., 1 lb .40 cts., 2 lbs. 75 cts., 5 lbs. $\$ 1.75$, 15 lbs. $\$ 4.75$. Golden Bantam. Perhaps the sweetest Corn grown; the standard for quality by which others are judged. Plant attains a height of only 3 to 4 feet, usually bearing two or more cars to the stalk. The ears are compactly filled with kernels which when ready for the table are cream-yellow. Golden Bantam is one of the hardiest varieties of Corn grown, therefore it can be planted with safety earlier than other varieties. This characteristic also adapts it to localities having cool summer weather, a continuous supply being maintained by successive plantings. (See illustration of a typical ear.) Pkt. 10 cts., $1 / 2 \mathbf{l b} .25$ cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. \$2, 15 lbs. \$5.50.
Metropolitan. Combines the three essentials of a good Sugar Corn, namely, earliness, productiveness, and unusually superior flavor. The io-rowed ears are 8 to 9 inches long and they are crowded with tender, melting grains. In our opinion the best early white corn. $1 / 2 \mathrm{lb} .25$ cts., 1 lb .40 cts., 2 lbs. 75 cts., 5 lbs. $\$ 1.75,15$ lbs. $\$ 4.75$.
De Lue's Golden Giant. One of the parents of this fine variety is Golden Bantam, but Golden Giant more than retains the sweetness of its ancestor. It is quite as early, averages more ears to the stalk, and the ear has three times the bulk and weight, averaging 8 inches in length. Golden Giant has a i2 to 2o-rowed ear against the 8 -rowed ear of Bantam. $1 / 2 \mathrm{lb} .30$ cts., 1 lb .50 cts., 2 lbs. 90 cts., 5 lbs. $\$ 2.10,15 \mathrm{lbs} . \$ 5.75$.
Howling Mob. Is ready for use only 3 to 5 days later than the extra-early Cory when both but the ears are much larger in size, while the grains are much whiter and sweeter. As an early variety of large size, we cannot too highly praise Howling Mob. Pkt. 10 ets., $1 / 2 \mathrm{lb} .25$ ets., lb. 45 cts., 2 lbs. $85 \mathrm{cts} ., 5 \mathrm{lbs} . \$ 2,151 \mathrm{bs} . \$ 5.50$.
Golden Rod. A staunch, tall-growing variety, yield ing two large ears to each plant. The bright golden color of the ear makes it good to look upon, and it is as good as it looks. $1 / 2 \mathrm{lb} .30$ cts., lb. $50 \mathrm{cts} ., 2$ lbs. 90 cts., $5 \mathrm{lbs} . \$ 2.10$, I 5 lbs. $\$ 5.75$. White-Cob Cory. A standard first-early variety. For a quick-growing sort the ears are large, and Crosby's Early.

Ears good size; fine quality. 1/2lb. 25 c . 1 lb . 4oc., 2 lbs. $75 \mathrm{c} ., 5 \mathrm{lbs}$. $\$$ I. 75 , I5 lbs. $\$ 4.75$.
Black Mexican. Very swect; grains black. I/2 1b. 25 c ., 1b. 40 oc ., 2 lbs. 75 c ., 5 lbs. $\$ \mathrm{I} .75, \quad 15 \mathrm{lbs}$. $\$ 4.75$.
New Wonder Bantam. (S e e Novelties, page 15.) Pkt. I5c., 1/2lb. 30c., 1 b . 55 cts., 2 lbs. $\$ 1$, 5 lbs. $\$ 2.25,15$ lbs. $\$ 6.25$
S. \& W. Co.'s Midget. Dwarf variety with tiny ears. (See Novelties, page 15. ) Pkt. I 5 cts., oz. $35 \mathrm{cts} ., 1 / 4 \mathrm{lb} . \$ \mathrm{I}$.

## EUROPEAN CORN BORER

Our Seed Corn is grown in the West, in territory that is free of this pest; our customers may therefore plant our seed with the fullest confidence.


Earliness, productiveness, and superior flavor are combined in Metropolitan Sugar Corn

## SUGAR CORN, LATE SORTS

Country Gentleman. Retains cate flavor and tenderness even when little old, as the ears are encased in a heavy husk, which tends to keep the ear "in the milk" for several days longer than other varieties. The cob is unusually small and the pearly white kernels of great depth. Pkt. 10 cts., $1 / 2 \mathbf{1 b}$. 25c., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $\$ 1.75$, 15 lbs. \$4.75.

Stowell's Evergreen. Now recognized everywhere as a standard variety, both for home use and market, and is the general favorite. The ears are of large size,
 grains deep, exceptionally tender and sugary; and have the advantage of remaining longer in the green state than any other. Our stock has been carefully grown and selected to avoid the tendency to a shorter grain and deterioration in the evergreen character of this best of all late sorts. Pkt. 10 cts., $1 / 2 \mathbf{l b} .25 \mathrm{cts} .$, lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $\$ 1.75,15$ lbs. $\$ 4.75$.
Late Mammoth. Immense ears and very sweet. $1 / 2 \mathrm{lb} .25 \mathrm{cts} ., 1 \mathrm{lb} .40 \mathrm{cts} ., 2 \mathrm{lbs} .75 \mathrm{cts} ., 5 \mathrm{lbs} . \$ \mathrm{I} .75, \mathrm{I} 5 \mathrm{lbs} . \$ 4.75$.
Long Island Beauty. A favorite among New York market-growers. $1 / 2 \mathrm{lb} .25 \mathrm{cts}$. , lb. $40 \mathrm{cts.} ,2 \mathrm{lbs} .75 \mathrm{cts},. 5 \mathrm{lbs}$. \$i.75, i5 lbs. \$4.75.

## Gather Corn Daily from June to October

## WE OFFER THE FOUR MOST SATISFACTORY SORTS IN A SPECIAL "COLLECTION"

Our conception of the most reliable and sweetest varieties is represented in these Collections. They are prepared during November and December before our real spring selling season commences. We are thus able to give you the benefit of lower operating costs, and the purchase of these Collections is thus a real economy, the prices of the Collections being sensibly under the total cost were each sort purchased separately. The object of the Collection is defeated if changes are made, and we request that you do not ask us to make alterations.

The following four varieties are included in the assortment:

## GOLDEN BANTAM STOWELL'S EVERGREEN

## HOWLING MOB <br> COUNTRY GENTLEMAN

We suggest that sowings of each of these varieties be made every two weeks from May io to July 15. This will ensure a continuous supply of delicious Sweet Corn from the latter part of June through until frost.

An explanation may be in order as to the meaning of the word "late" as applied to Sweet Corn and other vegetables. It does not mean that the variety should be sown late; it means that it takes longer to grow from seed than "early" sorts. It is quite the correct thing to sow "late" varieties early, and it is good gardening to sow "early" sorts late, the speed with which they mature, enabling them to be used at a date when so-called "late" varieties would not have time to produce a crop.

## COLLECTIONS:

One pkt. each of the above varieties, 40 cts . postpaid.
$1 / 2 \mathrm{lb}$. each of the above varieties, 90 cts.
1 lb . each of the above varieties, \$1.60.
2 lbs . each of the above varieties, \$3.


Stowell's Evergreen Corn

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York



Culture.-The first planting should be made early in May, on partly spent hotbeds; inverted sods form an excellent medium for both planting in and carrying the young plants to their permanent location, or small paper pots can be used. Such plants are usually ready for transplanting to the open ground in from three to four weeks, and are seldom troubled with the striped bug. Transplanting, when practicable, should be done in the evening, into hills 4 feet apart each way. Thin out to about four plants to a hill when established. The seed may be planted in hills late in May, thus giving a succession. For pickles, plant during the last two weeks of June. Bug Death, or an infusion of hellebore powder in water, will destroy the striped bug.

New Davis Perfect. In color, a dark, glossy green; shape slim and symmetrical, with an average length of ro to 12 inches. (See illustration.) Quality fine, as the seeds are very soft when fit for table use. Flesh tender and brittle, and of good flavor. Pkt. 10 cts., oz. 30 cts., $1 / 41 \mathrm{~b} .75 \mathrm{cts} ., 1 \mathrm{lb} . \$ 2$.
Improved Early White Spine. The fruits are nearly cylindrical in form, slightly pointed at the ends, perfectly smooth and of deep, rich coloring marked with distinct white lines at the blossom end. Will retain its color longer after pickling than most varieties, and is splendid as a table Cucumber. Pkt. 10 cts., oz. 25 ets., $1 / 4 \mathrm{lb} .65 \mathrm{cts} ., 1 \mathrm{lb} . \$ 1.75$. Cool and Crisp. An excellent pickling or slicing Cucumber, exceedingly prolific. Pkt. 10 ets., oz. 30 cts., $1 / 4 \mathrm{lb} .75$ cts., $1 \mathrm{lb} . \$ 2$.
New Klondyke. This is a hybrid sort of the White Spine n.w. type which holds its dark green color longer than most other sorts. Averages 6 to 7 inches in size; ends are quite square and it is about 2 inches thick. Its extreme earliness, combined with its prolific and hardy qualities, make it a very desirable variety for either market or private use. An excellent sort for slicing. When small, this variety is also an excellent pickling sort. Pkt. 10 cts., oz. 30 ets., $1 / 41 \mathrm{lb} .75$ cts., $1 \mathrm{~b} . \$ 2$.

Extra-Long Green. A well-known standard variety about a foot in length, of most excellent quality, and when young makes the best of pickles. When ripe it is the best of any for sweet pickles. Vines vigorous and very productive. Our strain of this valuable sort is unsurpassed by any, being carefully selected from the best fruits. Pkt. Io cts., oz. 25 cts., 1/41b. 65 cts., 1b. $\$ \mathrm{I} .75$.
Japanese Climbing. Well adapted for pickling, as well as for slicing for salads. The great advantage of this variety lies in the fact that it can be trained on a pole or fence. The Cucumbers are a foot or more in length, with a smooth, dark green skin which turns brown and is netted when ripe. Pkt. so cts., oz. 35 cts., $1 / 4 \mathrm{lb}$. 90 cts., 1b. $\$ 2.50$.


## CUCUMBERS FOR GROWING UNDER GLASS

S. \& W. Co.'s Improved Telegraph. By special arrangement, we have secured a selected strain of this variety, and have no hesitancy in saying we consider it equal to, if not better than, all other varieties. A very dark green type which we have found from numerous tests to be the finest strain obtainable. Pkt. (10 seeds) 25 ets., 5 plits. $\$ 1$.

S. \& W. Co.'s Forcing. A new type for growing under glass

New York Improved Eggplant, much reduced. Fruits average 7 inches deep and 5 inches in diameter.

## EGGPLANT

## One ounce will produce about 1,000 plants

Culture.--One of the most delicious vegetables grown, yet it is not cultivated to the extent it would be if its superior table qualities were better known. Sow during March, in a warm hotbed in light rich soil, or fill a shallow box with a similar mixture and after sowing place in the full light of a warm window. Transplant or thin so that the young plants stand 3 inches each way or, better still, put out individually into small pots. Always keep the young plants warm and do not plant out until settled fine weather has arrived. They need to stand 2 feet apart each way when put outside where they are intended to fruit.
New York Improved Spineless. This variety is grown than any other and is a favorite both for the market garden and for family use. The fruits are large, round-oval, of a rich deep purple-black color and splendid quality. The stems and calyx are entirely free from spines. In spite of their large size, the fruits are produced continuously and freely; each strong, spreading, bushy plant may be expected to yield from six to ten splendid "eggs." We offer a markedly superior strain of this fine variety. Pkt. 15 ets., $1 / 2$ oz. 40 cts., oz. 75 cts., $1 / 4 \mathrm{lb} . \$ 2.25$.
Long Purple. In this type the fruits are 6 to 8 inches in color they are a handsome dark purple. The variety is early and prolific. Pkt. 15 ets., $1 / 2 \mathrm{oz} .40$ ets., oz. $75 \mathrm{c} ., 1 / 41 \mathrm{~b} . \$ 2.25$.
Black Beauty. Is very much on the style of New York, but it is darker in color and has a higher polish. It is also broader and thicker. Pkt. 20 cts., $1 / 2 \mathrm{Oz} .60 \mathrm{cts}$., oz. \$I, $1 / 4 \mathrm{lb}$. $\$ 2.75$.

## COLLARDS, GEORGIA

## One ounce will produce about 3,000 plants

A cabbage-like plant with a large, loose head. In the South it is widely used as a cooked vegetable, being prepared in a manner similar to spinach. The seed may be started under glass during March and transplanted, being treated like early cabbage. For a late crop, sowings in the open ground during July or August are usual. Plants should be at least 3 feet apart each way. Collards are used as a substitute for cabbage in those sections where cabbage cannot be raised. Pkt. 10 cts., oz. 30 cts ., $1 / 4 \mathrm{lb} .75 \mathrm{cts} ., \mathrm{lb}$. $\$ 2$.

## CORN SALAD

One ounce will sow 150 feet of drill
Culture.-Seed may be sown thinly in drills 18 inches apart in early spring, and sowings may be made


Corn Salad. Widely used in winter in place of Lettuce
length and 2 to 3 inches in diameter. In later for succession as re-


Long Purple Eggplant. A very quired, although in hot prolific and early sort weather it is difficult to obtain satisfactory results, hence late summer and early fall seedings are preferred. The young plants from the latest sowings are covered with a light mulch and wintered exactly as spinach is often managed. Rich soil is necessary. Among artificial fertilizers to be recommended is S. \& W. Co.'s General Garden Fertilizer. This may be dug into the ground before seeding and later hoed frequently between the rows during growth, thus mixing it thoroughly with the soil.
Large-leaved. Tested seed of high vitality. Pkt. Io cts., oz. 30 cts., $1 / 4 \mathrm{lb} .75 \mathrm{cts} ., \mathrm{lb} . \$ 2$.

## DANDELION

One ounce will sow about 100 feet of drill
Culture.-Sow early in the year in drills I foot apart, covering the seed no more than $5 / 4 i n c h$. Thin the plants to stand 4 inches apart. Dandelion may be blanched like endive, for salad purposes, or it may be sown later in the season, plants covered lightly with salt hay, and the following spring they will be fit for use as early greens.
French Garden. Pkt. 20 cts., 1/20z. 45 cts., oz. 75 cts., $1 / 4 \mathrm{lb} . \$ 2$.


Green Curled Rose-Ribbed Endive. The most attractive of all autumn and winter salads

## ENDIVE, continued

Green Curled. The hardiest and most vigorous variety. The leaves are bright green, finely cut and crinkled, giving the plant a handsome appearance. Blanches easily a creamy white. Pkt. io cts., oz. 30 cts., $1 / 4 \mathrm{lb} .75 \mathrm{cts} ., 1 \mathrm{lb} . \$_{2}$.
White Curled. A variety which blanches readily and is very tender when young. It is similar to Green Curled, but the leaves are naturally of a light golden tint, and it is not essential that they be tied up to blanch them for table use. The flavor is very good. Pkt. io cts., oz. $35 \mathrm{cts} ., 1 / 4 \mathrm{lb} . \$ \mathrm{I}, \mathrm{lb} . \$ 3$.
Broad-leaved Batavian (Escarolle). The leaves are broad and thick, more or less twisted and waved, with round ends and are of a bright deep green with a nearly white midrib. They are much larger in size, thicker and more fleshy than those of the preceding sorts. The inner leaves form a fair head which blanches a creamy white. In its natural state Escarolle forms an excellent salad with an appetizing piquiancy. It may be gathered fresh from the ground well into winter, thus furnishing salad at a season of the year when it is most welcome. Escarolle is also frequently served as spinach, when its flavor and health-giving properties render it of high value. Pkt. 10 cts., oz. 30 ets., $\mathbf{1 / 4} \mathbf{1 b}$. 75 cts., $\mathbf{1 b}$. $\$ 2$.

## ENDIVE

## One ounce will sow 200 feet of drill

Culture.-One of the most attractive of all autumn and winter salads. It is commonly known in restaurants as Chicorée, and is especially refreshing when served as lettuce with plain French dressing. Sow seed from middle of June till last of August. When the plants are fully grown, tie all the outside leaves together over the heart, to blanch the inner leaves, which will take about a week. Do not tie up when the leaves are wet, as they will then decay.
Green Curled Rose-Ribbed (Self-blanch(Sy). Quicker to mature and more upright in growth than the ordinary type. Grown 6 inches apart, in good, rich soil, the plants quickly crowd one another to such an extent that the dense centers of the plants blanch themselves. The flavor is refined to a degree. Pkt. 15 ets., oz. 55 cts., $1 / 4 \mathrm{lb}$. $\$ 1.50,1 \mathrm{lb}$. \$4.



Earliest Selected Kohlrabi. Useful alike for forcing and for general culture

## KALE $\begin{gathered}\text { One ounce will produce } \\ \text { about } 300 \text { plants }\end{gathered}$

Culture.-Sow in May in shallow drills; when large enough, transplant singly into rows, allowing 24 inches between the plants.
Dwarf Green Curled Scotch. This withstands frost better than cabbage. In fact, it is not at its best until cold weather has set in. The leaves are curled like fine parsley. As boiled "greens," Scotch Kale is tender and of remarkably fine flavor. Pkt. 10c., oz. 30c., $1 / 4 \mathrm{lb} .75 \mathrm{c} ., \mathbf{l b} . \$ 2$. Siberian Kale or Sprouts. Is not so densely curled as the Scotch, but is also hardy and yields a heavy bulk of produce. Widely known as "German greens." Seeds should be sown in September and treated like spinach; it is fit to cut early in spring. Pkt. ro cts., oz. 30 cts ., I/4lb. $75 \mathrm{cts} ., \mathrm{lb}$. $\$ 2$.
Dwarf Brown Kale. A beautiful curled variety, with spreading foliage; very hardy and of fine flavor. Pkt. Io cts., oz. $30 \mathrm{cts} ., 1 / 4 \mathrm{lb} .75 \mathrm{cts} ., \mathrm{lb} . \$ 2$.

## KOHLRABI ${ }^{\text {One ounce will sow about }}$ 200 feet of drill

Culture.-This is a very delicious vegetable, and is increasing in popularity rapidly; combines the good qualities of the turnip and cabiage, but excels both in nutritive and productive qualities. Cooked the same as turnips, they are very tender and palatable. Sow in spring in rows 18 inches apart, and thin away the plants to 6 inches. Earliest Selected (for frames). A variety with few and small leaves; can be Earliest Selected planted very closely; very useful for general culture and indispensable for forcing. Pkt. 20 cts., oz. 65 cts., $1 / 4 \mathbf{l b}$. $\$ 1.75$, $\mathbf{1 b} . \$ 5$.
Early White Vienna. The earliest and best for either market or family use. Pkt. roc., oz. 35 cts., $\mathrm{I} / \mathrm{llb}$. $\$ \mathrm{r}, \mathrm{lb} . \$ 3$.
Early Purple Vienna. Similar to the preceding, except in color, which is of a bluish purple. Pkt. ro cts., oz. 35 cts ., $1 / 4 \mathrm{lb}$. 1 , lb . $\$ 3$.

## LEEK

One ounce will sow about 100 feet of drill
Culture.-Sow the seed very early in a seedbed in a sheltered place, if possible. When plants are about 6 inches long transplant them to trenches 6 inches deep, with very rich soil at the bottom. Fill up the trenches as the plants grow, and later draw soil up to them. As a result you will have fine, large Leeks blanched half a foot long, which may be kept all winter if dug up with the roots on and stored in moist sand in the cellar.
S. $\mathcal{E}$ W. Co.'s Exhibition. This is by far one of the best, long, blanched varieties we hibitors in vegetable classes this past fall was pronounced quite the best they have grown. Pkt. 25 cts., 5 pkts. $\$ 1$.
Large American Flag. A large-growing type, desirable in every way. On account of its dependability and ease of culture, is the most widely used variety for both family and market use. Pkt. 10 cts., oz. 35 cts., $1 / 4 \mathbf{1 b} . \$ 1, \mathbf{l b} . \$ 3$.
Musselburgh. (Winter.) A very hardy variety of extra-large size. The leaves are fan-shaped, of a dark green color. The edible stem is 6 to 8 inches long and 3 inches in diameter. Pkt. Io cts., oz . 30 cts ., $\mathrm{I} / \mathrm{lb}$. 75 cts ., lb . $\$ 2$.


MARTYNIA
The foliage of this plant actually is very decorative, and it may be used to advantage for the center of flower-beds or in mixed flower borders. The thick, succulent stems bear lilac-purple flowers, and these are followed by curved seed-pods. The pods are gathered when young and are pickled sweet, in the same manner as cucumbers. Sow the seed when frost is over, and thin the plants or transplant them to stand 3 feet or more apart; or, if preferred, sowings may be made under glass early in the season and the plants afterward planted in the open ground. Pkt. 15 cts., oz. 55 ets., $1 / 41 \mathrm{lb} . \$ 1.50,1 \mathrm{lb}$. $\$ 4$.

Martynia. The immature pods are used for pickles

## MUSTARD

One ounce will sow 75 feet of drill
Curture.--Sow frequently through the spring, in drills from 8 to 12 inches apart.
Fordhook Fancy. A variety possessing densely ing, in consequence, a handsome feathered appearance. Cooked and served as spinach, the flavor is inviting, while the plant possesses healthful tonic properties. Pkt. 10 cts., oz. 30 cts., $1 / 41 \mathrm{lb} .75 \mathrm{cts}$., 1 lb . $\$ 2$.
Giant Southern Curled. The plant grows 3 feet tall, and the broad succulent leaves are cut and frilled. Pkt. 10 cts., oz. 20 cts., $1 / 4 \mathrm{lb}$. 55 cts., lb. \$1.50.
THE USE OF MUSTARD. The large leaves of the above two varieties are boiled, forming a most palatable, piquant, and healthful type of "greens." White London is sown quite thickly in fine soil and not covered but pressed lightly down. In little more than a week the overcrowded seedlings are about 2 inches long; cut them with scissors close to the soil, wash and use for sandwich material. Curled Cress (see page II) may be grown and used in the same manner. Both are suitable for growing in the house throughout the year in boxes of soil, sand, or even on moistened cloth.
WHITE LONDON MUSTARD. Pkt. Ioc., oz. 20c., $1 / 4 \mathrm{lb} .55 \mathrm{c} ., \mathrm{lb}$. \$I. 50.

## Four Aids to Successful Gardening $\underset{\text { which should beincluded }}{\text { Wither order }}$

## GARDEN FERTILIZER

Use at the rate of 10 pounds for a space 15 by 15 feet, or 500 pounds per acre. May also be dusted between the rows during growth.

We pay freight to your station in $100-\mathrm{lb}$. lots or over when cash accompanies your order. In lesser quantities the purchaser pays delivery charges.

## SEMESAN

Place a little Semesan with seeds in a jar and shake vigorously; bacteria and fungus spores adhering to the seeds will be killed.
2 ozs. ........... $\$ 060$ | 4 ozs. ........... $\$ 100$ | $1 / 2 \mathrm{lb} . . . . . . .$. . $\$ 160$


American Flag Leek. The standard variety for general use

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## THCNTCTM $\begin{gathered}\text { One ounce will sow } \\ 150 \text { feet of drill }\end{gathered}$

Because the number of good sorts of Lettuce is so great as to prove bewildering to the majority of home-gardeners, we have selected for them the following, which, in our many years of experience, have never disappointed where the cultural directions were followed.

Culture.-About the middle of March sow either Big Boston, May King or Wayahead in the hotbed. When seedlings are about 2 inches tall, transplant them 4 inches apart each way in a coldframe. By May I, after properly hardening them, set out in the garden, I foot apart in the row, with a 2 -foot path between the rows. These plants should give you firmly folded, well-developed heads by Decoration Day. As soon as the ground can be worked outdoors, plant seeds of any of the early sorts in rows, $1 / 4$ inch deep. As soon as seedlings are 3 to + inches tall, thin them to stand 4 inches apart in the row. Later on remove every other one and do this again until the plants finally stand 16 inches apart in the row. Then hoe between the plants as well, in order to secure good heads. After the middle of May, do not sow seeds of early kinds, but select sorts like All Seasons and Iceberg instead. Make repeated sowings of short rows to have a crisp product available constantly.

## EARLY LOOSE-LEAVED LETTUCES

## Early Curled Simpson.

A splendid curly-leaved sort. seed sown in the coldframe April will supply th Pkt. 10 位 Pkt. 10 ets., oz. 30 ets., $1 / 4 \mathrm{lb} .80$ ets., lb. $\$ 2.25$.
Black-seeded Simpson (Loose Head). A popular curly-leaved sort, similar to Curled Simpson, except that it is larger in size. Pkt. Io cts., oz. 30 cts., $1 / 4 \mathrm{lb}$. $75 \mathrm{cts} ., \mathrm{lb} . \$ 2$
Grand Rapids. There is no better forcing variety among Rapids, and it is quit the curly-leaved sorts than the Grand 75 cts., lb. \$2.

## TEN FINE LETTUCES

A suggestion in one of our prominent garden periodicals has given Ten Fine Lettuces for the amateur gardener to grow, whose garden space is small, and where crisp Lettuce is desired from April to October
Golden Queen. A small variety of compact habit, forming yellowish green heads. Seed may be sown about the middle of April outPkt. 10 cts., oz. 30 cts., $1 / 4 \mathrm{lb} .75$ ets., lbe $\$ 2$. cts., $1 / 4 \mathrm{llb} .75$ ets., lb. \$2.
Wayahead. Large and fine. Very similar to May King described below. If seed is sown about the same time as Golden Queen, it will May King. likely mature a few days sooner, but usually makes a looser head. Pkt. 10 ets., oz. $\mathbf{3 0}$ ets., $1 / \mathbf{1 / \mathbf { l b } . 7 5} \mathbf{\text { ets., }} \mathbf{1 6}$. $\$ 2$.
May King. heads of bright green, the edges of the center leaves tinged reddish brown; the heart is clear yellow and of ideal flavor. If sown
 the same time as Wayahead, May King will be ready about four to five days later. Hers fall use. Pkt. 10c., oz. 35c., $1 / 4 \mathbf{l b}$. $\$ 1, \mathbf{l b}$. $\$ 3$.
California Cream Butter. The largest and latest of the early varieties of time outdoors as the three precedin whill type named in this list. If sown the same

Big Boston. A splendid head Lettuce, perhaps the most generally and favorably in the spring and is nown of the ten mentioned here. Forced in frames to great extent mer use but as a and of fine flavor. Pkt. 10 cts., oz. $35 \mathrm{cts} ., 1 / 4 \mathrm{lb} . \$ 1, \mathbf{l b} . \$ 3$.
Black Seed Big Boston. By far the most heat-resisting sort of this type. he plants are of a uniriormy darker shade of strains of Big Boston, before running to seed. Pkt. 10 cts., oz. 30 cts.,

All-Seasons May be described as a black-seeded Deacon. A moduce fine good heat-resister. If sown early in May will produce fine, buttery Lettuce from the latter part of June to the latter part of July. Pkt. 10 ets., oz. 35 cts., $1 / 4 \mathrm{lb}$. $\$ 1,1 \mathrm{lb} . \$ 3$.
Iceberg. (California Simpson.) A splendid, crisp-head sort: Few Lettuces resist the heat better. Has strong center ribs, which bend toward the heart of the plant, keeping it thoroughly blanched. Repeated sowing from early May, of this sort and New York or Wonderful, at intervals of three weeks, should supply the table well up to September r. Pkt. 10 ets., oz. 30 cts., $1 / 4 \mathrm{lb} .75$ cte., lb. $\$ 2$.
New York, or Wonderful. This s grows considerably larger than Iceberg and matures about ten days later. The outer foliage is a distinct, dark green as compared with the yellowish green of Iceberg. Pkt. 15 cts., oz. 50 cts., $1 / 4 \mathrm{lb} . \$ 1.40, \mathrm{lb} . \$ 4$.
Crisp as Ice. Perhaps the least known of varieties. The hardie remarkable crisphead varieeties. Thie hardiest of all the Lettuces, some times remaining in the garden until Thanksgiv-
ing. Heads somewhat globe-shaped; dark green and bronze; the heart, however, is splendid. Pkt. 10c., oz. 35c., $1 / 4 \mathrm{lb}$. $\$ 1$, lb. $\$ 3$.


Big Boston. Everybody's Favorite for outdoor use and forcing

## OTHER GOOD HEAD LETTUCES

## Mammoth Black-Seeded Butter. A very large type. The

 , heart is of fine flavor and melting. Mammoth Black-seeded Butter is advised for late spring and summer planting, as it is a good hot-weather variety, being one of the last to "bolt" to seed. Pkt. $10 \mathrm{c} ., \mathbf{o z} .35 \mathrm{c} ., 1 / 4 \mathrm{lb} . \$ 1,1 \mathrm{~b} . \$ 3$.Hanson Improved. The round head is large and well-formed, and is so solid it blanches almost white. The outer leaves are curled and shining, giving the Lettuce a very handsome appearance. This variety is recommended because of its absolute reliability. Pkt. Io cts., oz. 35 cts., $1 / 41 \mathrm{lb}$. $\$ \mathrm{I}$, lb. $\$ 3$.
Mignonette. A densely heading curled Lettuce of medium size and one that is very solid, compact, and hard. It is medium brown in color, with a dark greenish tinge. Mignonette is very popular in many sections on account of its high quality and its wonderful resistance to heat, it being one of the last varieties to run to seed. Pkt. Io cts., oz. 35 cts., $1 / 4 \mathrm{lb} . \$ \mathrm{I}, \mathrm{lb} . \$ 3$.
Black-seeded Tennisball. Forms a close solid hard head of a buttery texture: not over large in size and of a medium green color. The leaves are crumpled. Tennisball enjoys wide popularity, chiefly because it is a sure header during spring, summer and fall. Pkt. Io cts., oz. 30 cts., $1 / 4 \mathrm{lb} .75 \mathrm{cts} .1 \mathrm{lb} . \$ 2$.
Salamander Perfected. An excellent summer variety. Grows to large size, with tightly folded leaves covering the center, which blanches a light golden. Pkt. Io cts., oz. $35 \mathrm{cts} ., \mathrm{I} / 4 \mathrm{lb}$. $\$ \mathrm{I}, \mathrm{lb} . \$ 3$.

Unrivaled Summer. Forms uniformly large heads similar to Big Boston but lighter in color. Ready about a week earlier than Big Boston when sown at same time. May be sown throughout the season. Pkt. Iocts., oz. 35 cts., $1 / 4 \mathrm{lb} . \$ \mathrm{I}, \mathrm{lb} . \$ 3$.

## A MINIATURE LETTUCE S. \& W. Co.'s Tom Thumb.

This miniature sort is just what the gardener wants for greenhouse or frame culture. The small, firm, cabbage-shaped heads are of excellent buttery quality, while the leaves are dark green and very crumpled. The owner of the small garden likes the tiny plants, which occupy but little space. Outdoors it is suitable for spring and fall use. The plant is practically all head. Pkt. 15 cts., oz. 45 cts., $1 / 41 \mathrm{~b}$. $\$ 1.25$, lb. $\$ 3.50$.


Paris White Lettuce, or Romaine. Crisp, tender, and sweet

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## MUSKMELON

## One ounce will sow about 80 hills

Culture.-Sow the seed in April under hand glasses, and in the open air in May in hills 6 feet apart each way. Plant in each hill from 8 to 10 seeds, covering half an inch deep. When the plants have produced their rough leaves, thin out to three plants. The hills should be prepared by trenching in rotten manure and sand. As soon as the plants make their appearance above ground, dust them with soot, charcoal dust or Bug Death, to prevent the ravages of the bug.

## GREEN-FLESHED KINDS

## S. \& W. Co.’s Selected Stock, Rocky Ford.

This famous variety is the finest early green-fleshed melon in cultivation. The fruits are remarkably uniform in size, weighing from I $1 / 4$ to I $1 / 2$ pounds each. They are quite thick meated, with very thin rinds; skin light green, regularly ribbed and heavily netted, turning to a golden yellow as the melon ripens. Flesh light green in color, firm but melting, and of uniformly fine flavor. Pkt. 10 cts., oz. 30 cts., $1 / 4 \mathrm{Ib}$. 75 cts., lb. $\$ 2$.
Honey Dew. This variety, with its clear light yellow skin, is becoming quite familiar in the best markets. No other melon is quite so sweet as this, and it is not surprising that it should become so popular. The flesh is green, very thick, and unlike some Melons it ripens uniformly to the rind. Pkt. Ioc., oz. $35 \mathrm{c} ., 1 / 4 \mathrm{lb} . \$ \mathrm{I}, \mathrm{lb} . \$ 3$.
Jenny Lind. Small, but very early; green flesh. Pkt. io cts., oz 30 cts., 1/41b. 75 cts., lb. $\$ 2$.
Extra-Early Hackensack. Large, round and of fine quality; a standard variety. Pkt. Io cts., oz. 25 cts., $1 / 4 \mathrm{lb} .65$ cts., llb. $\$ \mathrm{I} .75$. 10/25 Salmon-Tint. (See Novelties, page i6.) Pkt. Io cts., oz. 35c., 1/4lb. \$I, lb. $\$ 3$.

## GOLDEN or ORANGE-FLESHED SORTS

## Admiral Togo. This is an orange-fleshed Rocky Ford. The

 fruit is small, with very thick flesh of splendid quality. It possesses the fine netting, shape, size, and shipping quality of Rocky Ford. Admiral Togo is an ideal table and basket melon. Pkt. 10 cts., oz. 35 cts., $1 / 4 \mathrm{lb} . \$ 1$, lb. $\$ 3$.Banana. Narrow, curved, and as much as 30 inches in length, this old-time variety is well named. The flesh is a deep salmon, sweet, and of good quality. Pkt. Io cts., oz. 30 cts., $1 / 4 \mathrm{lb} .75$ cts., lb. $\$ 2$.
Selected Emerald Gem. The skin is a rich deep green, and smooth; flesh salmon color and of delicious flavor. A very early and prolific variety and one that is very extensively grown for family use. Pkt. Io cts., oz. 30 cts., $1 / 4 \mathrm{lb}$. $75 \mathrm{cts} .$, lb. $\$ 2$.


S. \& W. Co.'s Selected Stock, Rocky Ford. The most popular green-fleshed Muskmelon

Hearts of Gold, or Improved Hoodoo. A new orange-fleshed variety, ideal as a shipping melon and of the very finest quality Fruits uniformly of medium size. Rind thin yet very firm. Flesh very thick, firm, of fine texture and delicious flavor. Pkt. io cts., oz. 35 cts., 1/4lb. 90 cts., lb. $\$ 2.50$.
Osage, or Miller's Cream. This is a large-fruited, dark-skinned Melon, the appearance of which is much enhanced by the shallow grey netting which covers it so evenly. The very thick red flesh is of pleasing flavor. A very popular main-crop variety. Pkt. 10 cts., oz. 35 cts., $1 / 4 \mathrm{lb} . \$ \mathrm{I}$, lb. $\$ 3$.
Tip-Top. The most productive melon known; having a sweet, juicy, fine flavor; solid flesh (but not hard) and edible to the outside coating. The fruit is of large size, nearly round, evenly ribbed and moderately netted. Pkt. Io cts., oz. 30 cts., 1/41b. 75 cts., lb. $\$ 2$. Paul Rose. This new red-fleshed Melon is sweet and highly flavored, and in it are combined all the good qualities of the Netted Gem and Osage, the varieties from which it originated. Pkt. Ioc., oz. 30c., 1/41b. 75c., lb. $\$ 2$. Supreme. Its color is a deep emerald-green outside, with more or less netting, while the flesh is a fine deep salmon of unusual thickness. It has a rich and most delicious flavor, tender and melting; it is also highly aromatic. Pkt. 25 cts., 5 for $\$ \mathrm{I}$.

## Cassaba Muskmelon

To the lover of Muskmelons, it is a matter of disappoint ment that the varieties ordinarily grown will not keep for any length of time after ripening. Cassabas, however, will keep, and they are true winter melons. Cultivate similar to muskmelons. Pkt. 15 cts., oz. 45 cts., $1 / 41 \mathrm{lb} . \$ 1.25$.

## FORCING MELONS

Sedgewick Gem. (New.) A very large melon of English origin. The yellow skin is heavily netted, and the thick orange flesh is of excellent flavor. Pkt. 50 ets.
Royal Jubilee. A splendid, oval, green-fleshed melon, raised white, handsomely at the Royal Gardens, Windsor. Skin almost quisite flavor. Pkt. 50 ets.
King George. Thick red flesh. Pkt. 50 cts.


Kleckley Sweets. The sweetest or all Watermelons

## WATERMELON

One ounce will plant about 50 hills

Culture.-Treat the same as muskmelon, except that they should be planted 8 to 10 feet apart, according to variety.

Cole's Early. A most delicious and productive variety for the family garden, succeeding in northern states, where melons were never matured before. The flesh is of a beautiful bright red color, crisp and extremely delicate in texturethat granulated, cool, sparkling appearance that is so captivating to the eye; in flavor it is lusciously sweet and refreshing, no pithiness or stringiness. Pkt. 10 cts., oz. 30 cts., $1 / 4 \mathrm{lb} .75 \mathrm{cts} ., 1 \mathrm{lb} . \$ 2$.
Kleckley Sweets. The sweetest of all the Watermelons. Fine-flavored and grained, tender meat. Fruits are large size; rind very thin and green, very brittle; flesh scarlet and firm; and a variety everyone should grow. Pkt. 10 cts., oz. 30 cts., $1 / 4 \mathbf{1 b} .75$ cts., lb. $\$ 2$.

Early Fordhook. The quickest-maturing, large-fruited Watermelon grown, and therefore suitable for the more northern parts of the country. The fruits are short and "stubby" in form, though large. The dark green skin is occasionally flecked with faint stripes of a lighter color, and the bright scarlet flesh is crisp and of such splendid quality as to warrant our recommending it to our customers. It is a variety which ships well. Pkt. Ioc., oz. $30 \mathrm{c} ., 1 / 4 \mathrm{lb} .75 \mathrm{c} ., \mathrm{lb} . \$ 2$.
Tom Watson. A large, long melon with a tough rind. Vines vigorous and productive; flesh rich red, sweet, and tender. Pkt. so cts., oz. 20 cts., $1 / 4 \mathrm{lb} .55$ cts., lb. $\$ \mathrm{I} .50$.
Citron. Round and handsome; used for preserves. Pkt. Io cts., oz. 25 cts., 1/4lb. $65 \mathrm{cts} ., \mathrm{lb} . \$ \mathrm{I} .75$.

## MUSHROOM SPAWN Ten bitcs. wirl gamn 100 square feet

CulTURE.-"I have the fresh horse droppings saved until a sufficient quantity accumulates to fill the beds, occasionally turning the manure and watering it slightly if it appears not to be moist enough. Then I leave the mass for three days, after which I again turn it, adding more water if necessary. After turning, I firm the manure, and in three days again repeat the operation. The most particular part is to get the manure moist enough and yet not too moist. After the second turning the manure is generally ready for the bed. My beds are only 10 inches in depth. I press in the manure very firmly, and cover slightly with salt hay or straw, which tends to retain the moisture in the bed. When the temperature of the bed drops to $85^{\circ}$. I insert 'Pure Culture' Spawn in pieces about the size of an egg. I foot apart one way and 9 inches the other. I insert the Spawn just deep enough to cover with a little manure. I keep the temperature of the house between $55^{\circ}$ and $60^{\circ}$, and occasionally dampen the walls, etc., as required; also occasionally 'dew' over the hay covering the bed with warm water. If the Spawn runs properly,


Bed of S. \& W. Co.'s Pure Culture Mushroom Spawn a white, frothy substance will be observed in about ten days or
t wo weeks. I then remove the hay and cover with one-inch thickness of sifted soil, preferab ly good pastureloam, firming it down. Mushrooms will generally appear in from six to eight weeks. I always have a little finely sifted soil on hand, and fill all the holes up after gathering the Mushrooms-that is, the holes made by removing the stalks. With good care the bed will last made by removing the stalks. With good care the bed will last three months. Should it appear dry, water thoroughly with
water heated to $90^{\circ}$, in which a pinch of nitrate of soda dissolved watl be found very beneficial. In conclusion, I may say I think most of the failures in mushroom-growing arise from the manure being too dry." -Joseph Robinson.

## American Pure Culture Spawn

Ten bricks will spawn 100 square feet
This type produces larger Mushrooms than the English, coming into bearing somewhat earlier, and continuing to crop for a long time. This spawn is produced by selecting spores from individual specimen Mushrooms, and is propagated and transferred to the bricks of manure, which, when planted, produce Mushrooms all of one type.
Per Brick (about I $1 / 2$ lbs.) 35c. Per 10 Bricks, $\$ 3.25$. Per 25 Bricks, $\$ 7$.

Per 100 Bricks, $\$ 25$.
English Mushroom Spawn. As most growers of
Mushrooms recognize the superiority of the American Pure Culture over the English, we have decided to discontinue handling the latter.

## STUMPP \& WALTER CO., 30 AND 32 BARCLAY ST., NEW YORK

## ONIONS

## One ounce for 100 feet of drill; 5 to 6 pounds per acre

Culture.-Sow in rich, sandy soil, in drills i foot apart, as early as possible in the spring, cover with fine soil and firm well, either with roller or back of spade. When plants are strong enough, thin out to 3 or 4 inches. The finest Onions are produced by sowing the seed in a hotbed early in February and transplanting seedlings to the open ground 6 inches apart.

## MILD, WHITE VARIETIES

## S. \& W. Co.’s Southport White Globe. Yieldsabun-

 dantly, producing handsome and uniformly globe-shaped bulbs. The flesh is firm, fine-grained and of mild flavor. To produce the beautifully white Onions, so much sought in every market, one must, first of all, have good seed. Second, grow them well on rich land. Third, exercise great care in harvesting and curing the crop. In Southport, they "cord" up the Onions in long rows, the bulbs on the inside, and cover with boards so that the bulbs in the open air are well protected from rain or dew which would be sure to discolor them. We have, by years of careful selection and breeding, developed a strain which has no equal in uniformity and beauty of shape and color. Pkt. 15 cts., $1 / 2$ oz. 35 ets., oz. 60 ets., $1 / 4 \mathrm{lb}$. $\$ 1.60, \mathrm{lb}$. $\$ 4.50$.White Pickling. When matured, the tops die down, leaving beautiful and perfect little bulbs. The color is pure white, flavor mild and delicate, perfectly adapted for pickling and table use; and makes a pretty bunch Onion, especially if grown by the transplanting method. A valuable variety. Pkt. $15 \mathrm{cts} ., 1 / 20 \mathrm{z} .30 \mathrm{cts}$., oz. 50 cts., $1 / 4 \mathrm{lb}$. $\$ \mathrm{I} .35, \mathrm{lb} . \$ 3.75$
White Portugal, or Silverskin. A mild-flavored varifor pickles. The Onions are tender and altogether fine. Pkt. 10 cts. $1 / 202.30$ cts., oz. 55 cts., $1 / 41 \mathrm{~b}$. $\$ 1.50$, 1 b . $\$ 4$.


White Portugal Onions

## LEADING YELLOW KINDS

S. © W. Co.'s Southport Yellow Globe. The enormous quantities of this Onion annually sent to market prove its popularity, and it is more largely grown than any other sort. We can confidently claim superiority for our strain of seed; it produces large and uniformly spherical bulbs with very small necks. The largest diameter is below the center
 Ideal Yellow Globe. An Onion of the Southport type, but, as the years, representing all that a general-purpose Onion should be. We recommend other and larger sorts for exhibition purposes, but where the requirements are high quality, mildness of flavor, maximum keeping qualities, and maximum yield over a given area, here is the Onion for you to grow. Pkt. 15 cts., $1 / 2$ oz. 30 cts., oz. 55 cts., $1 / 4 \mathrm{lb}$. $\$ 1.50$, lb. $\$ 4$.
Yellow Globe Danvers. Of more globular shape than the Southport; a splendid keeper, producing well-rounded bulbs about $21 / 2$ inches in diameter; skin light golden yellow; flesh white, crisp, and mild in flavor. One of the best-known Onions, and recommended strongly for the general crop. Pkt. Io cts., $1 / 2 \mathrm{Oz} .25 \mathrm{cts} ., \mathrm{oz} .45 \mathrm{cts} ., \mathrm{I} / 4 \mathrm{Ib} . \$ \mathrm{I} .3 \mathrm{O}, \mathrm{lb} . \$ 3.5 \mathrm{O}$.

## EXTRA LARGE-GROWING KINDS

## S. \& W. Co.'s Selected Ailsa Craig. This Onion continues to

 be one of the largest. It is a very handsome, oval-shaped variety with pale straw-colored skin. Two of these Onions have been exhibited in England that weighed 8 pounds, and in some parts of Massachusetts it attains a weight of 3 pounds 4 ounces. For exhibition it is unexcelled. To attain its largest size it should be sown in the greenhouse in January and transplanted to the open in April. For a large Onion it is a splendid keeper, and for those who like an Onion raw we recommend it highly on account of its mild flavor and crystal wax-like appearance. Pkt. 15 ets., $1 / 2$ oz. 40 cts., oz. 65 cts., $1 / 41 \mathrm{lb}$. $\$ 1.75,1 \mathrm{lb}$. $\$ 5$.Ailsa Craig. (Originator's stock grown in England.) Pkt. 50 ets.
Gigantic Gibraltar. See Novelties, page 16. Pkt. $20 \mathrm{cts},. 1 / 2 \mathrm{Oz} .45 \mathrm{cts}$., oz. $75 \mathrm{cts} ., 1 / 4 \mathrm{lb}$. $\$ 2$, lb. $\$ 5.50$.
Prizetaker. Uniform in shape; of immense size, measuring from 12 to 16 inches in circumference, while under special cultivation specimen bulbs have been raised to weigh from 2 to 3 pounds each; its pure white flesh is fine-grained, mild, and delicate. Pkt. 15 cts., $1 / 202.30 \mathrm{cts}$., oz. $55 \mathrm{cts} ., \mathrm{x} / 4 \mathrm{lb} . \$ \mathrm{I} .5 \mathrm{o}, \mathrm{lb} . \$ 4$.

## STUMPP \& WALTER CO.'S SELECTED SEEDS

## LONG-KEEPING RED ONIONS

S. \& W. Co.'s Southport Red Globe. Very similar to Wething a deep red skin, but differing in shape, being almost a perfect globe. Size large, flesh fine-grained, mild and tender. Pkt. 15 cts., $1 / 20 z .30$ ets., oz. 55 ets., $1 / 4 \mathrm{lb}$. $\$ 1.50, \mathrm{lb} . \$ 4$.
Large Red Wethersfield. This is the standard red variety, and immense crops are grown for shipma favorite onion in the East, where immense crops are grown for shipment. Bulb large, somewhat flattened, oval shape; skin deep purple-red; flesh purplish white, moderately fine grained and stronger flavored than any of the other kinds. Very productive, the best keeper, and one of the most popular for general cultivation. It is more inclined to form large necks if planted on unsuitable soil than the Danvers, but is the best variety on poor or dry soil. Pkt. $10 \mathrm{cts} ., 1 / 2 \mathrm{oz} .25 \mathrm{cts} ., \mathrm{oz}$. 40 cts., $1 / 41 \mathrm{lb} . \$ 1.25$, lb. $\$ 3.25$.


Okra

## BERMUDA ONIONS

These are large, flat, quick-growing types, with a pleasant, mild flavor. We offer new-crop imported seed.
Red Bermuda. Pkt. 20 cts ., $1 / 20 z .60 \mathrm{cts}$. . oz. \$1, 1/41b. \$2.50, 1b. $\$ 7.50$.
White Bermuda. Pkt. 20 cts., 1/2oz. 60 cts., oz. \$1, $1 / 4 \mathrm{lb} . \$ 2.50$, 1b. $\$ 7.50$.

## ONION SETS

Sets will produce green, bunch or fullgrown onions much quicker than will seed. Multipiiers, Potato Onions, and Shallots divide and increase in the soil. Egyptian Onions are hardy perennials, yielding green onions every spring.


## Garlic Sets

## One pound will plant <br> 200 feet of drill

Culture.-Garlic is used for a variety of flavoring purposes. Break up the sets or bulbs into the smaller scale-like portions and plant these 6 inches apart in rows $I$ foot apart. As soon as the leaves have turned, the crop is matured, and may be harvested like the onion.
Garlic Sets. Lb. 50 cts., 5 lbs. $\$ 2.25$.

## OKRA, or GUMBO Onc ance will sow sbout 100 feet of drill

Culture.-Sow when the weather is warm and settled, in drills i inch deep and 4 feet apart; thin out to 12 inches apart in the drills. Okra requires 9 or 10 weeks from seed to maturity. Usual sowing period for New York, May 25 to June io.
Lady Finger. A new variety from the South, very productive; extra-long, slender pods of fine round form. Pkt. Io cts., oz. $20 \mathrm{cts} ., 1 / 4 \mathrm{lb} .45 \mathrm{cts} ., \mathrm{lb} . \$ \mathrm{I} .25$.
Kleckley's Favorite. One of the best varieties. Pkt. 10 cts., oz. $20 \mathrm{cts}$. , $1 / 4 \mathrm{lb} .45 \mathrm{cts} ., 1 \mathrm{~b}$. \$1. 25 .
Long Green. Long ribbed pods; very productive. Pkt. io cts., oz. I 5 cts., $1 / 4 \mathrm{lb} .40 \mathrm{cts} ., \mathrm{lb}$. $\$ \mathrm{I}$.
White Velvet. Very distinct in appearance; pods are perfectly round, smooth and of a white velvety appearance and of superior flavor. Pkt. io cts., oz. $20 \mathrm{cts} ., 1 / 4 \mathrm{lb} .55 \mathrm{cts} ., 1 \mathrm{~b} . \$ \mathrm{I} .50$.


## PARSLEY Onc ounce will sou sobut 150 feet of drill

Culture.-Parsley requires a rich, mellow and deep soil. Soak the seed for a few hours in tepid water, and sow early in the spring in drills I foot apart and $1 / 2 \mathrm{inch}$ deep. Thin out the young plants to 4 inches. Hamburg Parsley should be treated the same as carrots. Extra Double Curled. A standard market variety, used for garnishing and flavoring. The leaf is finely cut and curled and a vivid green in color. Handsome. Pkt. Io cts., oz. 20 cts., $1 / 4 \mathrm{Ib} .45$ cts., 1 b . $\$ \mathrm{I} .25$. Champion Moss Curled. A particularly beautiful type. As its name implies, a bed of this has the appearance of fine moss. Pkt. Io cts., oz. 20 cts., $1 / 1 \mathrm{~b}$. 55 cts ., 1 ib . $\$ \mathrm{I} .50$.
Exhibition Curled. See Novelties, page 16. Pkt. 25 cts., 5 pkts $\$$ r. Fern-leaved. This is a distinct variety, very different from the foregoing. We have the true type. Pist. Io cts., oz. 30 cts ., $1 / 4 \mathrm{lt}$. 75 cts., 1b. \$2.


Extra Double Curled Parsley


Champion Moss Curled and Plain Parsley compared

## PARSLEY, continued

Plain. Known widely as Italian Parsley. Used for flavoring. (See illustration.) Pkt. Io cts., oz. 20 cts., 1/41b. 55 cts., 1b. $\$ \mathrm{I} .50$.
Hamburg or Rooted. The roots of this type resemble parsnips. They are served similarly or used for flavoring soups. Pkt. Io cts., oz. 25 cts., I/4 lb. 65 cts., lb. \$I. 75.

## PEANUTS

Culture.-These require similar soil conditions to garden corn, and they take about as long to grow. Remove the outer shell carefully, taking care not to damage the kernels, and sow the latter in driils $21 / 2$ feet apart and $51 / 2$ inches deep. Allow 9 inches between one "nut" and the next in the row.
Improved Spanish. Though small, this is a quick-growing sort and is therefore particularly suitable for northern gardens. Pkt. I 5c., lb.45c. California Long Red. Larger than the above but slower to mature. Plant this variety south of the latitude of New York. Pkt. I5 cts., 1b. 45 cts.

## PARSNTD One ounce will sow about 200 feet of drill; 5 to 6 lbs . for an acre

CUlTURE.--Sow as early in spring as the ground can be worked, in drills 18 inches apart, covering with fine soil to the depth of $1 / 2 \mathrm{inch}$. The soil should be rich and deeply dug. The quality of the roots is much improved after a severe frost; in fact, they may be allowed to remain in the ground throughout the winter, as they are perfectly hardy.
S. $8^{\circ} \mathrm{W}$. Co.'s Improved Hollow-Crown. A great improvement over the present Hollow-Crown variety; clean, well shaped every housewife preparing it for the table will acknowiedge. Excellent for table or exhibition. Pat. 10c., oz. 25c., $1 / 4 \mathbf{1 b}$. 65c., 1b. $\$ 1.75$.
S. $\mathcal{F}$ W. Co.'s New Intermediate. The root is somewhat flattened and top-shaped, about 6 inches long and 4 inches across the , binach or lettuce; or if put in when long parsnips are sown, may be pulled soon after midsummer. Particularly suitable for shallow land which ordinarily produces misshapen or fanged root-crops. Pkt. 10 ets., oz. 35 cts., $1 / 4 \mathbf{1 b}$. $\$ 1, \mathbf{l b}$. $\$ 3$.
Selected Exhibition. A type produced expressiy for the grower for exhibition. Pkt. 25 cts ., 5 pkts. $\$ \mathrm{t}$.



Perfection Pimiento. A fine variety, unique in shape and in its fine qualities

## PEPPER

## One ounce will produce about 1,000 plants

Culture.-Peppers are more sensitive to frost than most vegetables, and they should not be planted out until settled warm weather has arrived. The seed should be sown in a hotbed, coldframe, or if no better convenience is available, a box in a window; transplant later into rows 20 inches apart each way, and keep the soil clean and well stirred.

## EIGHT SPLENDID SWEET PEPPERS

Perfection Pimiento. One of the best for the home-garden, both green and ripe. It is so smooth and uniform in shape that the skins can be easily slipped off after heating over a hot fire a few seconds or by boiling a few minutes in hot water. It can also be pared like an apple by using a sharp knife. The green Peppers can be pared best in this way. The hull or meat is from 2 to 3 times as thick as that of the Bell types, and yields about a half more edible product to the same measurement. The quality is very sweet and delicious and entirely free from pungency. In color, when ripe, it is a beautiful scarlet-red. It is very productive, yielding heavy crops until cut off by frost. This Pepper will be much sought and grown by canners for pimientos, pickles and pulp. Pkt. 15 cts., $1 / 2$ Oz. 50 cts., oz. 85 cts., $1 / 4 \mathbf{I b}$. $\$ 2.50$.
Chinese Giant. This is the standard large sweet Pepper. It is quite early to Chinese ripen and very productive for so large a variety. Productiveness may be increased by pinching the first or "king" blossoms which appear. They grow 4 or 5 inches broad at the top, and are of equal length. Quite uniform in size. The flesh is mild and unusually thick and makes an excellent salad sliced and served like tomatoes. Color green, changing to a glossy scarlet when ripe. Pkt. 15 cts., $1 / 202.65$ cts., oz. $\$ 1.10,1 / 4 \mathrm{lb}$. $\$ 3$.

## Neapolitan (Jersey Sweet; White Cap). The two qualities

 which this Pepper possesses are its earliness and its extraordinary yielding properties. It is an upright-growing variety, that is, its fruits grow upwards and are not pendent. They are bright red, sweet, fine, and very tender. Commercial growers favor this Pepper, and find that it is in particular demand with pickling establishments Pkt. 15 ets., $1 / 2$ oz. 45 cts., oz. 75 ets., $1 / 4 \mathrm{Ib}$. $\$ 2.25$.Early Dwarf Red Squash (Cheese Pepper). A sweet variety that is increasing in popularity. The pendent fruits are similar in shape and color to bright red tomatoes. The flesh is thick and mild. Pkt. I 5c., $1 / 2 \mathrm{Oz}$. 50 c ., oz. 85 c ., $1 / 4 \mathrm{lb}$. $\$ 2.5 \mathrm{o}$.

## A WONDERFUL LONG SWEET PEPPER

Anaheim Chili. A long type that is classed as a sweet Pepper; it has just sufficient suggestion of pungency to make it delicious. The fruits are very meaty, measuring 7 inches or more in length, with a diameter of I inch. It is highly valued as a green chili, canned chili made from it is a revelation, while ripe and red, served as a salad, it is excellent. Pkt. I5 cts., $1 / 202.65$ cts., oz. $\$ \mathrm{I}$. Io, $1 / 4 \mathrm{lb}$. $\$ 3$.

## THREE HOT PEPPERS

Long Red Cayenne. Fruits about 4 inches long and I inch thick, bright red in color; very prolific; very hot. Used for pickling, both when green and when ripe. Pkt. I5 cts., $1 / 2 \mathrm{oz}$. 60 cts ., oz. $\$ \mathrm{I}$, $1 / 4 \mathrm{lb}$. $\$ 2.75$.
Tobasco. For the market and for making the well-known Tobasco sauce. A small and very pungent type. Pkt. 20 cts., $1 / 2 \mathrm{Oz} .65 \mathrm{cts}$., oz. \$I.10, $1 / 4 \mathrm{lb}$. $\$ 3$.
Cherry Red. Small, round fruit, rich scarlet in color, and extremely piquant. Pkt. I5 cts., $1 / 2 \mathrm{oz} .60 \mathrm{cts} .$, oz. $\$ \mathrm{I}$, 1/4lb. $\$ 2.75$

## FOR THE VEGETABLE GARDEN, USE STUMPP \& WALTER CO.'S GENERAL GARDEN FERTILIZER <br> 5 lbs. 50 cts., 10 lbs .90 cts., 25 lbs. $\$ 1.75,50 \mathrm{lbs} . \$ 3.25$

Ruby King. The handsome fruits are $4^{1 / 2}$ to 6 inches long, 4 inches thick, and bright red. Ruby King is used very largely for pickles, and it is equally suitable for slicing. The flavor of the fruits is mild and pleasant, with just a slight suspicion of piquancy, making them very tempting when served like cucumbers or tomatoes. (See illustration below.) Pkt. 10 cts., $1 / 2$ oz. 45 cts., oz. 75 cts., $1 / 4 \mathrm{lb}$. $\$ 2.25$.
Large Bell, or Bull Nose. A large, early variety of pleasant fiavor, though mild. This is the variety for green stuffed Peppers. Ripens into a bright red. Pkt. Io cts., $1 / 2 \mathrm{oz} .45$ cts., oz. 75 cts., $1 / 4 \mathrm{lb}$. $\$ 2.25$.
Sweet Mountain. Fruits 6 inches long by 4 inches thick, shining deep green when young and a handsome red when ripe. Flavor mild. Pkt. r 5 c ., $1 / 2 \mathrm{oz}$. 50 c ., oz. 85 c ., $1 / 4 \mathrm{lb}$. $\$ 2.50$.
Topepo (The New Tomato-like Pepper). This splenTopepo did novelty, in appearance like a large golden Tomato, is described on page 17 . Pkt. 50 ets., 5 pkts. $\$ 2$.

S. \& W. Co.'s Selected Ruby King Pepper


Laxtonian Pea. A wonderful medium dwarf variety that is unusually prolific.
Full description on opposite page.

One pound will plant 100 feet of drill

## PEAS

## NORTHERN GROWN

If ordered without other seeds, add 5 cts . per $1 / 2 \mathrm{lb} ., 10 \mathrm{cts}$. per $\mathrm{lb} ., 15 \mathrm{cts}$. per 2 lbs . to the prices listed CULTURE.-For early crops sow as early in spring as practicable, and again two weeks later. Use several varieties at each seeding to insure a succession throughout the season. Plant in single or double rows, 4 feet apart and 2 inches deep. In dry weather soak the Peas over night before planting. In the vicinity of New York the extra-early Peas, if planted from the I5th to the last of August, will produce a moderate crop for late picking when they will be found most acceptable. Varieties marked* are wrinkled Marrows, and should be sown more thickly than the round Peas, and not until the ground has become warm, as they are more liable to rot. All wrinkied sorts are much superior in flavor to the round Peas.

## EARLY SMOOTH-SEEDED SORTS

## First of All, or Pedigree Extra-Early. The char-

 this variety are extreme hardiness and earliness. The first planting of Peas should be with First of All. It is a smooth-seeded variety, a splendid cropper; Peas very tender, of good flavor and carried in long, tightly filled pods. Height $21 / 2$ feet. $1 / 2 \mathbf{l b} .25$ cts., lb. 40 cts., 2 lbs. 75 cts., 5 lbs. $\$ 1.75$, 15 lbs. $\$ 4.75$.Early Bird. A Pea which combines the hardiness of the roundMarrowfats seeded types with the quality of the later wrinkled requires th. The plant grows 4 to $41 / 2$ feet high, and therefore suppor of brush, wire, or strings. Throughout it fave flavor. Early Bird is a few days earlier than Gradus when sown at the same time, but you may safely plant it ten days ahead of Gradus. $1 / 2 \mathrm{lb} .25$ cts., 1 lb .45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2$, 15 lbs. $\$ 5.50$.
Eight Weeks. $\}$ See Novelties, page 16. Pkt. I5 cts., $1 / 2 \mathrm{lb} .30 \mathrm{cts}$,


## EARLIEST WRINKLED SORTS

*World's Record. Among early main-crop Peas of medium height, Gradus, or Prosperity, takes first place; happily named, indeed, on account of its high yield and superb flavor. In World's Record these points are more than maintained; the yield is as high and the quality, if anything, is enhanced. The great point in favor of the new sort is its earliness, the period from seed to maturity being less by a week than that of the standard Gradus. $1 / 2 \mathrm{lb}$. 30 ets., lb. 50 ets., 2 lbs. 90 cts., 5 lbs. $\$ 2.10,15$ lbs. $\$ 5.75$.
*Gradus, or Prosperity.
Undoubtedly one of the most valuable sorts introduced up to the present time. The vine has heavy stems, with large, light green leaves and grows about 3 feet high. It produces uniformly large pods, measuring from 4 to $41 / 2$ inches in length, nearly round and well filled with very large, handsome Peas of the finest flavor; very early, ready for picking after First of All is through, and leaves little to be desired. Height 3 feet. Pkt. 10 ets., $1 / 2 \mathbf{l b} .25$ cts., lb. 45 ets., 2 lbs. 85 cts., 5 lbs. $\$ 2,15$ lbs. $\$ 5.50$.
*Little Marvel. A first-early Pea of the finest quality, better The vines of than American Wonder or Nott's Excelsior heavily set with fine even growth, average 18 inches high, and are heavily set with fine pods, usually in pairs. The pods average $31 / 2$ inches in length, are square at the bottom, and are well filled with quite large, deep green Peas. The Peas are ready for picking fully as early as American Wonder, but the pods are larger and the vines bear a much heavier crop. All who desire a fine crop of an early, choice variety of Peas will be delighted with Little Marvel. Begins to bear just as Gradus is at its best. Fkt. 10 cts., $1 / 2 \mathrm{lb} .25$ cts., lb. 45 cts., 2 lbs. 85 cts., 5 ibs. $\$ 2,15$ lbs. $\$ 5.50$.
*Thomas Laxton. A remarkably fine, early, wrinkled Pea, Lin Laxton. and we think destined to supersede Gradus. In many characteristics it resembles that excellent sort, but the pods differ in shape, and are certainly more numerous. The Peas are of extra-fine quality, tender and of a flavor not excelled by any other. It grows about 3 feet in height, but does not need brushing. Ready for picking at the same time as Sutton's Excelsior. It is a remarkably profitable market Pea, as it is always in demand and brings the best prices. Height 3 feet. $1 / 2 \mathrm{lb} .25$ cts., 1 lb .45 cts., 2 lbs. 85 cts., 5 lbs. \$2, 15 lbs. $\$ 5.50$.
*Sutton's Excelsior A variety that calls for highest commendation; equal to Gradus in quality Gradus and Little Marvel. Height 18 inches. $1 / \mathbf{2 l b} .25$ cts., $\mathbf{1 b} .45 \mathrm{cts} .$, 2 lbs. 85 cts., 5 lbs. $\$ 2$, 15 lbs. $\$ 5.50$.

NOTE.-The American Seed Trade generally has adopted the cental system of pricing Peas, Beans, and Corn. We therefore offer by weight instead of measure. One pound of Peas is equal to about 1 pint; 2 pounds to about 1 quart.

## STUMPP \& WALTER CO.'S SELECTED SEEDS

## PEAS

## NORTHERN GROWN

If wanted by mail, add 5 c . per $1 / 2 \mathrm{lb}$., 10 c . per 1 lb ., 15 c . per 2 lbs ., to the prices listed

## EARLIEST WRINKLED SORTS, Continued

*Laxtonian.
A very fine dwarf early Pea. Unusually large pods, borne on longgrowing, sturdy vines. Unlike many of its class, the large pods are filled with large, luscious Peas. It is ready for use about a week later than the very early sorts. The plant grows about $I^{1 / 2}$ feet high, and is of a rich dark green color, which proves it to be of vigorous constitution, and this enables it to resist the extreme conditions to which Peas are subjected in many sections of the United States. (See photograph on opposite page.) $1 / 2 \mathrm{lb} .30 \mathrm{ets} ., \mathbf{l b} .50 \mathrm{cts.} 2 \mathrm{lbs} .90 \mathrm{ets} .,$, 5 lbs. $\$ 2.10$, 15 lbs. $\$ 5.75$.
*Early Morn.
This grand introduction maintains its position as one of the best early marrowfat Peas ever raised. Although so early, the seed should not be sown until the soil is in a fit condition to receive it in April, as it is a rapid grower. The pods are very large and well filled, and are of ten ready to pick several days after Gradus. Height about 4 feet. $1 / 2 \mathbf{l b} .30$ ets., lb. 50 cts., 2 lbs. 90 cts., 5 lbs. $\$ 2.10,15$ lbs. $\$ 5.75$.
*American Wonder. A very early wrinkled Pea that will bear about the same time as Little Marvel, but is not so large or prolific. Height 1 foot. $1 / 2 \mathrm{lb} .25 \mathrm{cts} ., \mathrm{lb}$. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2$, 15 lbs. $\$ 5.50$.

## MIDSEASON AND MAIN-CROP

*Admiral Beatty. See Novelties, page 16. Pkt. 20c., $1 / 2 \mathrm{lb}$. 35c., 1b. 60c., 2 lbs. $\$ 1.10,5$ lbs. $\$ 2.50,15$ lbs. $\$ 7.25$. *Alderman. A distinctly different Pea in habit from those described in the Early list. On generous soils it grows to a height of 5 to 6 feet, and should be supported with brush or trellises. The pods contain seven large, elongated, dark green Peas of the highest quality, and follow in the wake of Thomas Laxton. The plants bear very profusely and the Peas bring the highest price in market. Height 5 feet. $1 / \mathbf{2}^{1 b} .25$ cts., $\mathbf{1 b} .45$ cts., 2 lbs. 85 cts., 5 lbs. \$2, 15 lbs. $\$ 5.50$.
*Quite Content. One of the largest-podded Peas in existence Quite Cont. and in season similar to Alderman. This variety is preferred by many growers to Alderman on account of its large pods. Height 5 feet. $1 / 2 \mathbf{1 b} .30$ ets., lb. 55 ets., 2 lbs. $\$ 1,5$ lbs. $\$ 2.25,15$ lbs. $\$ 6.25$.

## *Boston Unrivaled, or Telephone.

This variety is
 Alderman, with vines fully as tall, pods slightly smaller, and bears right up to the season of the very late sorts. The yield of pods is not so great and they are not so well filled as Alderman. The Peas are every bit as tender, but darker green in color and sweet. Height 5 feet. Pkt. 10 cts., $1 / 2 \mathrm{lb} .25$ cts., lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2,15$ lbs. $\$ 5.50$, *Potlach. Really an improved Stratagem and, without a doubt, the best dwarf, extremely late Pea. Healthy bluish green vines, bearing loads of deep green pods; frequently an average of eight pods in pairs containing an average of seven fine, large Peas of superfine flavor. A continuous bearer from July I to 15 in most seasons. Height 2 feet. Pkt. 10 ets., $1 / 2 \mathrm{lb} .25$ cts., 1 lb .45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2,15$ lbs. $\$ 5.50$.
*Champion of England. Vines grow 4 to 5 feet high. Peas of excellent quality and delicious flavor. $1 / 2 \mathrm{lb} .25 \mathrm{cts} .$, lb. 45 cts., 2 lbs. 85 cts., 5 lbs. $\$ 2$, 15 lbs. $\$ 5.50$.

## EDIBLE-PODDED SUGAR PEAS Used in the same manner

Luscious Melting Sugar. Large, broad pods, which are so brittle that they snap without any string. Height 5 feet. 1/2lb. 30 cts., lb. 55 cts., 2 lbs. $\$ \mathrm{I}, 5 \mathrm{lbs}$. $\$ 2.25$, 15 lbs. $\$ 6.25$.
Very Dwarf White Sugar. Unusually dwarf; very similar in habit to the American Wonder. The pods are of excellent melting quality. $1 / 2 \mathrm{lb}$. 30 cts ., lb. 55 cts., 2 lbs. $\$ 1,5 \mathrm{lbs}$. $\$ 2.25$, $15 \mathrm{lbs} . \$ 6.25$.

## Collections of Garden Peas

These collections embody our ideas of the best and most representative varieties. They are considered by experienced growers to be the most reliable sorts for both the amateur and professional gardener. We suggest that two sowings be made of each varietythe first as soon as the ground is ready and the weather is right, and the second two weeks later. The result will be a maximum yield, and the grower should be able to gather Peas daily over a period of five weeks.

## The Following Five Varieties Comprise the Collections

Market Surprise. A wonderful, round-seeded variety, yielding in about 70 days from seed. Height 3 feet.
*Gradus. The standard early wrinkled Pea, yielding generally in 80 days. Height 3 feet.
*Little Marvel. A wrinkled sort, $\mathrm{I}^{1 / 2}$ feet high. Requires about 85 days from seeding to maturity.
*Telephone. The standard late tall wrinkled Pea. Produces its pods in about 90 days from seed. It grows 5 feet high.
*Potlach. An extremely late wrinkled variety, yielding in 95 days from seeding. Height 2 feet.

## THE COLLECTIONS

Quite Content Une of the largestpodded Peas in cultivation.

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## POTATOES

## FOR SEED

Culture.-Any good, weil-drained, fibrous loam will produce Potatoes under right climatic conditions. For early Potatoes, which mature in eight to ten weeks from planting, the soil must be particularly rich. A rich clover sod, manured and broken the year before and planted to corn, beans, peas, oats, etc., is in best shape for giving a good yield of nice, clean Potatoes. Stable manure had better be applied to the land the year before. S. \& W. Co.'s Potato Manure, at the rate of up to $\mathrm{r}, 000$ pounds to the acre if applied broadcast, or 400 to 600 pounds if applied mostly in the rows, may be used directly for the Potato crop. Open furrows 3 feet apart and 3 to 4 inches deep. Apply the fertilizer and run the furrower or small plow again in the furrow to mix the fertilizer with the soil and leave a mellow seed-bed. Then plant good-sized pieces, each containing not less than two or three eyes, I5 inches apart in the furrows for early Potatoes, and 18 inches apart for late ones. Return the soil with a coverer, small plow or other suitable tool. Spray with Pyrox as a protection from flea beetle, potato beetle and blight. About II bushels, or 4 barrels, will plant an acre.

Prices subject to change without notice.


## BEST EARLY POTATOES

Early White Albino. This wonderful new e.rly Potato is a good cropper. The skin and fiesh are extremely white, of exceptionally good cooking quality and very prolific, fully as early as the old Early Rose in maturing, and particularly valuable for the early market by reason of its fine shape and early maturity. The vines grow e ect, and it is one of the best early vaileties to withstand blight and disease. Plant this Potato early in good soil, give it good cultivation, and pleasing results will be sure at harvesttime. One grand thing in favor of this early Potato is its great keeping quality which makes it a valuable sort for the home- or niarketgarder. $1 / 2$ ph. $\$ 1.35$, pk. $\$ 2.25,1 / 2$ bus. $\$ 3.50$, bus. $\$ 6$, bbl. $\$ 13$.

Irish Cobbler. A variety that is more largely used as an early
 bbl. \$i1.
Early Bovee. (Selected.) Somewhat earlier than Early Rose. A medium-sized Potato; very productive. The dwarf growth of vines permits easy cultivation, insuring a good yield. 1/2pk. \$1.25, pk. $\$ 2,1 / 2$ bus. $\$ 3.25$, bus. $\$ 5.50$, bbl. $\$ 12$.
Early Rose. (Selected.) A variety which has been grown extensively in some sections. A Potato of good size and fine quality. $1 / 2 \mathrm{pk}$. $\$ \mathrm{I}, \mathrm{pk} . \$ \mathrm{I} .75$, $1 / 2 \mathrm{bus} . \$ 3$, bus. $\$ 5$, bbl. $\$ \mathrm{II}$.

## BEST MAIN-CROP POTATOES

Russet. Considered the finest Potato extant. The haulm is dark green and very distinct, while the variety seems to be as near blight. proof as a Potato can be. The tubers are round to oblong, very large, and from 6 to ro are ordinarily obtained from a hill; the flesh is pure white and the skin has a roughened russet appearance. $1 / 2 \mathbf{p k} . \$ 1.25, \mathbf{p k} . \$ 2,1 / 2 \mathbf{b u s} . \$ 3.25, \mathbf{b u s} \mathbf{\$ 5 . 5 0 , ~ b b l . ~} \$ 12$.

Gold Coin. A splendid main-crop variety of remarkabie productiveness and finest table quality; slightly oblong form; light golden skin; flesh pure white, fine-grained; cooks very dry. 1/2pk. \$r.25, pk. $\$ 2,1 / 2$ bus. $\$ 3.25$, bus. $\$ 5.50$, bbl. $\$ 12$.

Green Mountain. (Selected Stock.) A late, heavy cropper of excellent quality; skin smooth and white; shape roundish flat; eyes few and shallow; a good keeper. $1 / 2 \mathrm{pk}$. \$r, pk. \$1.75, $1 / 2$ bus. $\$ 3$, bus. $\$ 5$, bbl. $\$$ II.


Large Cheese Pumpkin

## PUMPKINS

One ounce will plant 50 hills

Culture.-Plant in April or May, among corn, or in the garden, in hills 8 to 10 feet apart, and otherwise treat in the same manner as melons.
Large Cheese. A most popular variety. Fruit flattened, the diameter meing two or three times more than the length; skin mottled light green and yellow, changing to rich cream-color as it matures; flesh tender and of excellent quality. Pkt. 10c., oz. 25c., $\mathbf{1 / 4 1 b}$. 65c., 1b. $\$ 1.75$. Sweet, or Sugar (New England Pie). The fruits are medium to small in size, of a bright orange color, and in shape are round, flattened at the ends. The flesh is of remarkably good cooking quality, very thick, and deep yellow in color. Pkt. Io cts., oz. 25 cts., $1 / 4 \mathrm{lb}$. $65 \mathrm{cts} ., 1 \mathrm{~b} . \$ \mathrm{r} .75$.
Winter Luxury. This we recommend as one of the best pie Pumpkins; an excellent keeper and enormously productive. It is very finely netted and in color it is a golden russet. Pkt. Io cts., oz. $35 \mathrm{cts} ., 1 / 4 \mathrm{lb} .90 \mathrm{cts} ., \mathrm{lb} . \$ 2.50$.
Mammoth Tours. This Pumpkin is of interest on account of its enormous size. The skin is pale grey-green in color, marbled deeper green, smooth and slightly ribbed. The flesh is yellow and of fair cooking quality. Pkt. ro cts., oz. 35 cts., $1 / 4 \mathrm{lb}$. $\$ \mathrm{I}, \mathrm{lb} . \$ 2.75$.
King of the Mammoths. Recommended where size is the chief consider-ation-200 pounds or more being not an unusual weight for a single specimen. The fruit is flat-round; the skin is yellow, as also is the thick flesh. Pkt. yo cts., oz. $35 \mathrm{cts} ., 1 / 4 \mathrm{lb} . \$ \mathrm{l}, \mathrm{lb} . \$ 2.75$.
Connecticut Field. Grown for stock purposes. Pkt. Io cts., oz. 20 cts., 1/4 lb. 45 cts., lb. \$1.25.

## STUMPP \& WALTER CO.'S SELECTED SEEDS

## RADISH

One ounce will sow about 100 feet of drill

As early in the spring as the soil can be worked, sow any of the early round or olive-shaped varieties in rows, $1 / 2$ inch deep, with a foot to 18 inches between the rows. ,Sow thinly. If seedlings appear closer than one inch apart, they should be "thinned out." Hoe frequently to encourage rapid growth which insures high quality. The early spring sorts serve the purpose until June 15, when Icicle and Cincinnati Market are at their best. The summer sorts are good until frost from repeated planting. The winter varieties should be pulled after light frosts and stored like beets. Both summer and winter Radishes should be "thinned" to stand from 4 to 6 inches apart in the row. After the middle of May, do not sow the flat, round, and olive-shaped spring sorts. Sow White Icicle, Cincinnati Market, and Chartier. These resist hot weather well. About July I, sow the winter varieties.

## EARLY ROUND AND OLIVE-SHAPED VARIETIES



White Icicle Radishes

Early Scarlet Turnip. Within 25 days from date of flat roots, $3 / 4$ inch in diameter by $1 / 2$ inch deep through. Pht. 10 cts., oz. 20 cts., $1 / 4 \mathrm{lb} .45$ cts., $1 \mathrm{lb} . \$ 1.25$.
Sparkler. Of rich carmine-scarlet color, with a very pronounced tip of the purest white. The roots, even when fully developed, are solid, crisp and sweet. It is equally well adapted for forcing in frames or growing in the open ground. While the leaves are small, they are sufficiently large for bunching. Pkt. 10 cts., oz. 25 cts., 1/41b. 65 cts., lb. $\$ 1.75$.
Early Scarlet Globe. The best general-purpose variety in this class, perfecting handsome Of distinct shape, brilliant color, short-leaved, crisp and white; an excellent variety for forcing. Pkt. 10 cts., oz. 25 ets., 1/41b. 65 cts., 1b. \$1.75.
White Box. An almost globe-shaped sort, slightly flattened, with pure white skin and crisp flesh. Unlike most other early sorts, it remains in fine table condition until quite overgrown. Ready in from 35 to 40 days. Pkt. 10 cts., oz. 20 cts., $1 / 41 \mathrm{lb} .55$ cts., $1 \mathrm{lb} . \$ 1.50$.
Olive-shaped Scarlet. Flesh bright and crisp. Pkt. io cts., oz. 25 cts., 1/4lb. 65 cts., lb. \$1.75.
Olive-shaped White. Pkt. Ioc., oz. 25 c ., I/4b. 65 c ., lh. $\$ \mathrm{I} .75$.
French Breakfast. The olive-shaped counterpart of Sparkler among the early round sorts, as described abovê. Mild and crisp. Pkt. Io cts., oz. 20 cts ., 1/41b. 45 cts., lb. $\$ \mathrm{I} .25$.
Twenty-day Leafless. (See Novelties, page 17.) Pkt. I5 cts., oz. 45 cts., $1 / 4 \mathrm{lb}$. $\$ \mathrm{I} .30$, lb. $\$ 3.50$.

## BEST EARLY LONG SORTS

White Icicle. The "best all-round" Radish for all purWhite Icle. poses in the home-garden; also fine for market and splendid for growing under glass. Within 30 days from sowing seeds, the roots attain a length of 4 to 5 inches, by $3 / 4$ inch in diameter at the thickest part. The skin is thin, the flesh crisp and mild. It remains in fine table condition longer than any other early sort, regardless of shape. (See illustration.) Pkt. 10 cts., oz. 20 cts., $1 / 41 \mathrm{lb} .55$ cts., lb. $\$ 1.50$.
Cincinnati Market. By far the best strain of the long, scarlet, short-top Radishes. Roots 6 to 7 inches long, an inch thick through, are produced within 35 days after sowing and they remain in perfect condition for the best part of a week. Skin rosy scarlet, blending into pure white at the tip. It is well to remember that the long sorts require a deep, rich soil, free from stones and of a loose, sandy nature, in order to develop perfectly. Pkt. 10 cts., oz. 20 cís., $\mathbf{1 / 4} \mathbf{1 b} .55$ ets., lb. $\mathbf{\$ 1 . 5 0 .}$

## SUMMER VARIETIES

Long Scarlet Chartier, or Shepherd. This might be considered "the connecting link" between the foregoing sorts and the very much later kinds that follow. Long Scarlet Chartier is ready in about 45 days after sowing. The color at the top is crimson, running into pink about the middle, and from thence downward is a pure white. Pkt. io cts., oz. 20 cts., $1 / 4 \mathrm{lb}$. 55 cts., lb. \$1. 50 .
Early Golden Yellow Oval. Absolutely unsurpassed in heatresistance. When ready for use, the Radishes average $11 / 2$ to 2 inches in diameter and have a beautiful, golden yellow skin, which should be removed when preparing roots for table. Flesh pure white, mild, crisp, and solid. Pkt. ro cts., oz. 30 cts., 1/41b. 75 cts., lb. $\$ 2$.
White Strasburg. Shape tapering; skin and flesh both white; excellent summer variety. Pkt. Ioc., oz.20c., 1/4b. 45 C ., lb. $\$ \mathrm{I} .25$.


## LONG-KEEPING WINTER RADISHES

Sakurajima. A Japanese sort which reaches truly remarkable size. The circumference of some is 43 inches, the length 2 I inches. The skin is white and the flesh is always crisp and tender. The taste is more delicate than our American varieties, and we believe that this variety will become popular. Pkt. Ioc., oz. 35 cts., 1/41b. \$I, lb. $\$ 3$.
California Mammoth White Winter. A white-fleshed Radish of excellent quality. Pkt. Io cts., oz. 35 cts., $1 / 4 \mathrm{lb}$. 90 cts., 1b. $\$ 2.50$.
Rose China. Bright rose color; flesh firm and piquant; fine for winter use. Pkt. Ioc., oz. 20c., 1/4b. 55c., lb. \$1.50.
Long Black Spanish. The popular winter sort. Pkt. Io cts., oz. 25 cts., 1/4lb. 65 cts., lb. \$I. 75 .
Round Black Spanish. Thick black skin and pure white flesh. Pkt. io cts., oz. 25 cts., $1 / 4 \mathrm{lb}$. 65 cts ., lb. \$1. 75.

## RHUBARB

Culture.-Plant the roots in well-manured land. 3 feet apart. Sow seed in spring in drills a foot apart; transplant the following season 3 feet apart. One ounce of seed should produce about 1,000 roots. Rhubarb Roots. 15 cts. each, $\$ 1.50$ per doz.; extra-strong clumps, 25 cts . each. $\$ 2.50$ per doz.; forcing clumps, 50 cts . each, $\$ 5$ per doz.
Rhubarb Seed. The variety Victoria; has given good results for many years. Pkt. 10 cts., oz. 35 cts., 1/4lb. \$1, lb. \$3.

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York



## SALSIFY (Vegetable Oyster)

## One ounce will sow about 50 feet of drill

Culture.-Sow the seed early in spring, in drills 12 inches apart and $I$ inch deep, thinning out the young plants to 6 inches. The roots will be ready in October, when a supply should be taken up and stored like carrots. Those remaining will suffer no injury by being left in the ground until spring.
Mammoth Sandwich Island. Tender and delicious. Superior to all other sorts. Pkt. Io cts., oz. 35 cts ., $1 / 4 \mathrm{lb}$. $\$ \mathrm{I}, \mathrm{lb}$. $\$ 3$.

## SCORZONERA

(Black Salsify)
One ounce will sow about 50 feet of drill Culture.-Cultivate the same as salsify. The roots should not be scraped, but simply washed, boiled tender, then peeled and served like asparagus.
Improved. Pkt. 15 cts., oz. 65 cts. $1 / 4 \mathrm{lb}$. $\$ \mathrm{I} .75, \mathrm{lb} . \$ 5$.

## SPINACH

One ounce will sow about 100 feet of drill

Culture.-Sow in March or April in drills an inch deep and 14 inches apart; again in August or September. Spinach delights in very rich soil-in fact, it is of no use sowing in a poor one.
S. $\mathcal{E}^{\mathrm{O}}$ W. Co.'s New York Market. This Spinach grows rapidly and produces unusually large, thick, crumpled leaves of beautiful green. Properly cultivated and manured, the plants very often measure 2 feet across, and stand the winter better than any other sort of Spinach. Pkt. 10 ets., oz. 20 ets., $1 / 4 \mathrm{lb} .55$ cts., lb. $\$ 1.50$.
S. $\mathcal{F}$ W. Co.'s Savoy-leaved. A variety highly valued alike by market-growers and home-gardeners. Savoy cabbage. The variety is profitable on account of the heavy yield of produce, and it is particularly hardy. Pkt. 10 ets., oz. 15 cts., $1 / 41 \mathrm{lb} .30$ ets., 1 lb .75 cts.
S. $\mathcal{E}$ W. Co.'s Large Thick-leaved. A splendid variety for the market-grower and trucker. The leat is large and very thick. The fact that Thick-leaved is a type that is slow to run to seed makes it a favorite for late spring and early fall seedings. Pkt. 10 cts., oz. 15 cts., 1/41b. 30 cts., lb. 75 ets.
Long Season. A distinct variety, standing from two to three weeks longer than any of the other sorts in this climate without going to seed. Pkt. Io cts., oz. I5 cts., $1 / 4 \mathrm{lb} .30 \mathrm{cts} ., \mathrm{lb} .75 \mathrm{cts}$.
Monstrous Viroflay. A fine selection of the old lettuce-leaved Spinach. Excellent for summer use. Pkt. io cts., oz. 15 cts., $\mathrm{I} / \mathrm{llb} .30 \mathrm{cts} ., 1 \mathrm{l} .75 \mathrm{cts}$.


Victoria Long-Standing. A variety suitable alike for spring and fall seeding. It is of low, compact habit; leaves shining dark green and heavily crumpled, forming a dense, flat rosette with very short petioles. Victoria is a great favorite with the market-grower on account of the slowness with which it shoots to seed. Pkt. Io cts., oz. $15 \mathrm{cts} ., 1 / 4 \mathrm{lb} .30 \mathrm{cts} ., 1 \mathrm{l} .75 \mathrm{cts}$.
Prickiy, or Winter. The hardiest Spinach, and a variety of actual merit. Used chiefly for latest fall seedings. Pkt. Io cts., oz. I5 cts., I/ 4 lb .30 cts ., 1 lb .75 cts .
S. \& W. Co.'s Emerald Standing. See Novelties, page 17. Pkt. Io cts., oz. 20 cts., 1/4lb. 45 cts., lb. $\$$ r. 25.

Perpetual Spinach. (See Novelties, page 17.) Pkt. 15c., oz. 55 cts., $1 / 4 \mathrm{lb}$. $\$ \mathrm{I} .5 \mathrm{o}$, lb. $\$ 4$.


Mammoth Sand wich Island Salsify

## NEW ZEALAND SPINACH

## (Tetragonia expansa)

A half-hardy annual cultivated for its young leaves which form an excellent substitute for Spinach. The plants grow very vigorously, do not run to seed, and withstand drought much better than Spinach. New Zealand Spinach should therefore find a place in every garden, to furnish a summer supply of green boiled vegetables. It is recommended for use, also, on soils too poor to carry Spinach of the true type, as it grows naturally on dry upland situations.
Culture.-Sow during May, in drills which should be at least 2 feet apart, as the plants spread rapidly. Thin to 9 inches between the plants in the row Keep the surrounding soil well stirred and pinch off the young leaves and shoots freely as required, when others will be produced quickly in their place right through the summer. One seeding will suffice for a whole season, as the plants produce continuously until frost.
Imported Seed of high vitality and best quality. Pkt. Io cts., oz. 20 cts ., 1/4 1 b .55 cts ., lb. \$I.50.


## SEA KALE

## One ounce will produce about 300 plants

Sow an inch deep in drills 2 feet apart, thin out to 6 inches, and the next spring plant in hills 3 feet apart. Sea Kale is cultivated somewhat like asparagus and, like it, the crop is not available until the third year from seed, after which the bed will bear for a number of years. The blanched leaf-stalks are boiled and served with cream sauce. A very usual method of cultivation is to dig the roots and "force" them during winter in the same way as Witloof is grown. Pkt. 20 cts., $1 / 2 \mathrm{oz} .50$ cts., oz. 90 cts., $1 / 4 \mathrm{lb} . \$ 2.40,1 \mathrm{lb} . \$ 6.50$.

## SORREL

## One ounce will sow about 100 feet of drill

Culture.-Sow early in the spring in drills 6 to 8 inches apart. Garden. Used for salads, and much esteemed on account of its pleasant acid flavor. Also widely used in many sections of the country as a boiled vegetable. The plant is perennial, and will yield for several years if left undisturbed. Pkt. 20 cts ., oz. 65 cts., I $/ 4 \mathrm{lb}$. $\$ \mathrm{I} .75, \mathrm{lb}$. $\$ 5$.

## TOBACCO

One ounce of seed will produce sufficient plants for one acre
Sow under glass during February and plant out, 3 feet apart each way, during early June.
Connecticut Seed-Leaf. A variety which can be used for cigar wrappers and for general purposes. Pkt. Io cts., oz. 75 cts .
Narrow-Leaf Oronoko. This is widely used in Virginia for cigar fillers and as a cigarette tobacco. Pkt. Io cts., oz. 75 cts.
Quesnel. Very extensively grown in the Province of Quebec, Canada, and used for pipe smoking; strong, pungent flavor. Pkt. ro cts., oz. \$r.


## The Practical Book of Outdoor Rose Growing

To go out into the garden at any time of the year and gather roses is the ambition of the amateur gardener. This book tells in simple language how this may be done. The author, Mr. G. C. Thomas, is an authority on this flower, and his book is most comprehensive. De luxe edition, is colored plates, 224 pages, $\$ 1.25$, mailed free.

## Garden Guide

## The Amateur Gardeners' Handbook

A complete handbook for the amateur gardener. Has wonderful chapters devoted to the Vegetable, Flower, and FruitGarden, with practical planting plans. It tells you how to prepare and fertilize your ground, how to deal with insect pests, how to prune, propagate, spray; in fact, covers every step from spading to preserving the harvest. 384 pages, $\$ 1$, mailed free.


## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York



## SQUASH One ounce of Vegetable Marrow will plant about 50 hills

Culture.-The Squash succeeds best in good rich soil. It is not advisable to plant before May i5. Sow in hills in the same manner

## SUMMER VARIETIES

Long Island White Bush. A selection of the Old White mush Scalloped, and a vast improvement upon it, having less prominent ridges and being much deeper, so that a single Squash actually contains nearly twice as much weight for the same cubic measurement as the old sort. In addition to this, it is of finer quality and very prolific. Plkt. 10 cts., oz. 30 cts., $1 / 4 \mathrm{lb} .75$ cts., $1 \mathrm{lb} . \$ 2$.

## Giant Bush Summer Crookneck.

 surpasses in quality any of the summer variaties, class of Squash號 e have the delicious buttery favor of the original sort, but of just double the size. Pkt. 10c., oz. 25c., $1 / 4 \mathrm{ib}$. 65c., $1 \mathrm{lb} . \$ 1.75$.Delicata. Early and very prolific; of oblong shape. Ground color orange-yellow, splashed and striped with very diark green. Although of smail size, the Squashes are solid and heavy, while the quality is rich and dry. Pkt. Io cts., oz. 35 cts., $5 / 4 \mathrm{lb}$. $\$ \mathrm{I}, \mathrm{lb} . \$ 3$.
Fordhook. Although a summer Squash, Fordhook will also keep well for winter use. The fruits are pointed, nearly a foot long, and about 5 inches in diameter; the rich, buttery flavor is quite distinct and very fine. Pkt. Io cts., oz. 30 cts., $1 / 4 \mathrm{ib} .75$ cts., $1 \mathrm{~b} . \$ 2$.
Golden Custard. Mammoth strain of the Early Yellow Scalloped Bush. Quality excellent. Pkt. Io cts., oz. 30 cts., $1 / 4 \mathrm{~b}$. 75 cts ., Ib. $\$ 2$.

## FALL OR WINTER VARIETIES

Chicago; or Warted Hubbard. A selection of the largest and best rough-skinned specimens of Green Hubbard. Ideal for the home market. Vines
of strong, robust growth; fruits large, heavily warted, splendid shape and dark green; flesh rich and dry. Pkt. 10 cts., oz. 30 cts., $1 / 4 \mathrm{lb} .75$ cts., $1 \mathrm{lb} . \$ 2$.
Golden Hubbard. For the private garden. The fruits are of Colden the same shape as the Green Hubbard, except that they average one-half to one-third less in size. Flesh deep gold, much richer in color than Hubbard. Cooks dry and of rich flavor. Plkt. 10 ets., oz. 30 ets., $1 / 4 \mathrm{lb} .75$ cts., 1 lb . $\$ 2$.
Hubbard. Bluish green color, occasionally marked with brownish . Will keep from September to May. Pkt. 10 cts., oz. 30 ets., $1 / 4 \mathrm{lb} .75$ ets., lb. $\$ 2$.
Boston Marrow. A very popular Squash for fall or winter use. Bright orange color, flesh yellow; oval in form. A splendid keeper and excellent for pies. Pkt. Iocts., oz. 30 cts., $1 / 4 \mathrm{lb} .75 \mathrm{cts} ., \mathrm{lb} . \$ 2$.
Delicious. No Squash approaches it in its remarkable combination of fineness and compactness of grain, dryness, sweetness, and exceeding richness of flavor. It grows to weigh from 5 to 10 pounds, and is in its prime in mid-autumn and early winter. Pkt. Io cts., oz. 35 cts., $1 / 4 \mathrm{lb}$. 90 cts., lb. $\$ 2.50$.

## VEGETABLE MARROW

A type of Squash that always occupies an important place in European gardens, and one which is considered superior in many respects to our American varieties of Summer Squash. Cultivation is similar, although to obtain quickest and largest yields it is often grown on spent hotbeds or in a few inches of soil placed on a manure-pile. The Marrows are gathered before they ripen-usually in about a similar stage of maturity to that of Cucumbers when gathered for slicing. They are peeled, divided, and the seeds are removed; then cut into 3 -inch squares, boiled until tender and served as a melting and delicious side dish with cream sauce.
Long Green Trailing. The fruits are about 20 inches in length and 3 or 4 inches in diameter. The skin is dark green, marbled with a paler shade. Plst. 10 cts., oz. 35 cts., $1 / 41 \mathrm{~b} . \$ 1,1 \mathrm{~b} . \$ 3$.


Long White Trailing Vegetable Marrow

Long White Trailing. The fruit is a little shorter than the Long Green Trailing, but otherwise it is similar in shape. The skin is smooth and of a yellowish white. The flesh is remarkably tender. Pkt. 15 ets., oz. 35 cts., $1 / 4 \mathrm{lb}$. $\$ 1,1 b$. \$3.
Moore's Cream. An improved small-fruited variety; the fruits are oval in shape, cream-colored and of a very delicate flavor. Pkt. I5 cts., oz. 45 cts., $1 / 4 \mathrm{lb}$. $\$$ I. 30 , ib. $\$ 3.50$.
Italian. Vegetable Marrow $\begin{gathered}\text { (Cocozelle Squash). A non- } \\ \text { trailing type producing oblong }\end{gathered}$ fruits a foot in length and about 5 inches in diameter; handsomely mottled dark green and light. A great favorite. Pkt. 10 ets., oz. 35 ets., $1 / 41 \mathrm{~b}$. $\$ 1,1 \mathrm{~b}$. $\$ 3$.
Mixed Vegetable Marrow. Trailing and non-trailing, all varieties in combination. Pkt. 15 cts., oz. 35 cts., $1 / 4 \mathrm{lb} .90 \mathrm{cts} .$, 1b. $\$ 2.50$.

## STUMPP \& WALTER CO.'S SELECTED SEEDS



Early White Milan Turnip. One of the earliest varieties in cultivation

## TURNIP

One ounce will sow about 150 feet of drill
Culture.-For early Turnips, sow as soon as the ground opens in spring. Rutabagas should be sown from any time in July to first of August; but the other kinds, for winter use, may be sown from the middle of July to the end of August. Turnips are generally sown broadcast, but much larger crops are obtained (particularly of the Rutabagas) by cultivating in drills I8 inches apart, and thinning to 6 inches in the drill. Sow in drills, one pound to the acre; broadcast, two to three pounds to the acre.

## FINE WHITE-FLESHED TYPES

## Early White Milan. As early as

Min qualities. The entire "bulb," inside and out, is clear ivory-white in color; the outer surface is perfectly smooth. It grows so quickly that even the outer surface of the "bulb" is quite tender. Its table qualities are unequaled, being of the most delicate flavor and tempting appearance. Pkt. $10 \mathrm{c} ., \mathbf{o z} .30 \mathrm{c} ., 1 / 4 \mathrm{lb} .75 \mathrm{c} ., 1 \mathrm{lb} . \$ 2$.
Purple-Top White Globe. This variety may be grown to quite a large size, without developing signs of coarseness. It is of spherical shape, the skin white with the upper one-third colored reddish purple. The flesh is pure white, firm, finegrained, and of superior flavor. A handsome looking bulb, rapidly taking the lead of all other varieties of early Turnips for market and home-gardening purposes. It is one of the best sorts to store for winter, and, in addition to its fine table qualities, it is excellent and economical for stockfeeding. Pkt. $10 \mathrm{cts} .$, oz. $20 \mathrm{cts},. \mathbf{1} / 4 \mathrm{lb} .55 \mathrm{cts} ., \mathbf{l b} . \$ 1.50$


Snowball. A particularly refined table Turnip

Snowball. An excellent first-early, globe-shaped root; smooth, clean, and free from all coarseness. A variety that is recommended rarRed ticularly to the home-gardener on account of its splendid table qualities. Pkt. 10 cts., oz. 20 cts., $1 / 4 \mathbf{l b}$. 55 cts., $\mathbf{l b}$. $\$ 1.50$. Red-Top Strap-Leaf. A very popular type, maturing in about two months from sowing. The roots are flat, marked with reddish purple on the upper portion; the flesh is pure white and of fine quality. Pkt. io cts., oz. 20 cts., $/ 1 / \mathrm{lb}$. 45 cts., lb. $\$ \mathrm{I} .25$.
Early Purple-Top Milan. An excellent smooth-skinned flat Turnip; the upper portion is tinted purple, but the flesh is pure white, delicate, and sweet. Pkt. Io cts., oz. 25 cts ., 1/41b. 65 cts ., 1b. $\$ \mathrm{I} .75$.
Long White, or Cow Horn. A quick-growing, long-shaped variety; flesh fine-grained
 White French, or Sweet German. A delicate-flavored variety; an excellent keeper and fine for table use. Pkt. Io cts., oz. $20 \mathrm{cts} ., 1 / 4 \mathrm{lb} .55 \mathrm{cts} ., \mathrm{lb} . \$ \mathrm{I} .50$.

## YELLOW-FLESHED TYPES

Golden Ball, or Orange Jelly. This is the most distinct yellow Turnip we making it one of the best table varieties. Its beautiful color and fine flesh have earned for it the synonym of "Orange Jelly," which well describes its appearance when ready for the table. The bulb is of medium size, with small tap-root, and is early in maturing. Pkt. 10 cts., oz. 25 cts., $1 / 4 \mathrm{lb}$. 65 cts., lb. $\$ 1.75$.
Yellow Aberdeen. A very hardy and productive variety of fine form and excellent quality. It has a purple top, keeps remarkably well, and is excellent both for the table and for stock. Pkt. Io cts., oz. 20 cts., $1 / 1 \mathrm{lb} .45 \mathrm{cts} ., 1 \mathrm{lb} . \$ 1.25$.
Yellow Stone. In shape a perfect globe, uniform, and of medium size; the color is pale yellow, and the quality is of the best. being very melting and buttery. A favorite variety that is to be recommended. Pkt. Io cts., oz. 20 cts., $1 / 4 \mathrm{lb} .45$ cts., lb. \$1.25.

## AN ALL-LEAF TURNIP

## Seven Top.

 In this variety there is but little cevelopment of root. The leaves, however, are very numerous and large, and the vegetable is recommended to those who esteem "Turnip-tons, ' as a particularly healthful and palatable green cooked vegetable, many considering it superior to spinach. Pkt. 10 ets., oz. 25 cts., $1 / 4 \mathrm{lb}$. $65 \mathrm{cts} ., 1 \mathrm{lb} . \$ 1.75$.
## RUTARA تA (Russian or Swedish Turnip)

S. \& W. Co.'s Long Island Improved. This special strain of Rutabaga is grown on Long Island y a dity of a remarkaby uniform shape and fine quality, and is also a splendid keeper. It grows to a large size, the skin is smooth, and flesh is beautiful yellow and fine-grained. Pkt. 10 cts., oz. 20 cts., $1 / 4 \mathrm{lb} .45 \mathrm{cts} ., 1 \mathrm{lb} . \$ 1.25$.


Purple-Top White Globe Turnip

STUMPP \& WALTER CO., 30 and 32 Barclay St., New York


Chalh's Early Jewel Tomato
CHALK'S EARLY JEWEL. About a week later than Eariiana. It is of uniformly large size; of brightest red, deep fruited and solid. Bears splendid, large-sized Tomatoes throughout the season, and for quantity and quality of fruit it is easily without a rival among the best extra-earlies. Pkt. Io cts., $1 / 20 \mathrm{z} .40 \mathrm{cts}$., oz. 65 cts ., I/4b. $\$ 1.75$, lb. $\$ 5$.
MATCHLESS. The color is rich cardinal-red. The skin is so tough that it is a splendid keeper and shipper, and is less liable to crack in wet weather than any other large Tomato. Unsurpassed for market or for table. The plant is a strong grower, and is very productive, bearing with undiminished vigor until frost. The fruit is free from core, and the seed-spaces are comparatively smail. In flavor among the best. Pkt. Io cts., $3 / 2 \mathrm{Oz} .40 \mathrm{cts}$., oz. 65 c ., 1/41b. $\$ \mathrm{I} .75, \mathrm{ib} . \$ 5$.
S. \& W. CO.'S EXHIBITION STRAIN OF NEW GLOBE. By far the best type of Globe Tomato, solid, firm, delicious, and the most satisfactory shipping variety. Pkt. 20 cts., $1 / 202.60 \mathrm{cts}$., oz. $\$ \mathrm{I}$, 1/41b. \$3.25, lb. \$io.

## TWO DWARF, COMPACT TOMATOES

They need little or no support
DWARF CHAMPION. Distinct in foliage and habit of growth, being compact and upright; fruits medium size and resemble the Acme in appearance, the coior being a purplish pink; smooth and symmetrical. Pkt. I5 cts., $1 / 2$ oz. 40 cts., oz. 65 cts., $1 / 4 \mathrm{lb}$. $\$ \mathrm{I} .75$, lb. $\$ 5$.
DWARF STONE. The fruits are produced in clusters of three to five, and, as the growth is close-jointed, each plant produces a large number. The Tomatoes average 4 inches in diameter and $21 / 2$ inches in depth. Its dwarf, compact habit suggests its use to all amateurs. Pkt. I5 cts., $1 / 2 \mathrm{Oz} .40 \mathrm{cts}$., oz. 65 cts ., $1 / 4 \mathrm{~b}$. $\$ \mathrm{I} .75, \mathrm{lb} . \$ 5$. $1 / 4 \mathrm{lb}$. $\$ 1.75, \mathrm{lh}$. \$5, ib. $\$ 6.50$.

## TOMATO

One ounce will produce about 1,000 plants

Culture.-The seed may be sown in a hotbed from about the second week in February up to the end of April, in drills 5 inches apart and $1 / 2$ inch deep. When the plants are about 2 inches high they should be transplanted about 4 inches apart, or planted in 4 -inch pots, allowing a single plant to a pot. About May I5, the plants may be set out in the open ground, 3 feet apart. Water freely at the time of transplanting. Sufficient plants for a small garden may be started by sowing a few seeds in a shallow box or flower-pot and placing it in a sunny window. For a final seeding it is not too late to sow seed during June, using early varieties and sowing in the open ground. The fruit is greatly improved in quality if the vines are tied to a trellis or to stakes.

Stone. By far one of the best and most reliable of the main-crop red Stone. Tomatoes and the standard and general favorite with truckers and canners. The plant is very vigorous and the deep red fruits are produced freely; they are uniform, large, round, smooth, meaty, and possess very little core. The flavor is fine and non-acid. Stone is superior to any other main-crop Tomato for its heavy yield and high quality. We offer a specially selected stock. Pkt. 15 cts., oz. 50 cts., $1 / 4 \mathrm{lb} . \$ 1.40,1 \mathrm{lb}$. $\$ 4$.

## Earliana. The Earliest Red Tomato. The plants are of compact

 growth, with short. close-jointed branches, setting the fruit very freely in the center. The Tomato is of uniform size, averaging 3 inches in diameter, and from 2 to $2 \frac{1}{2}$ inches in depth; solid, with few seeds, making a splendid variety for shipping. Pkt. 10 cts., $1 / 2$ oz. 40 cts., oz. 65 cts.,Ponderosa. Enormous size is the chief characteristic of this variety. Few Tomatoes equal it in this respect, and while slightly ribbed, it is very solid and luscious, making it fine for the family garden. The fruit is deep purple, oblong in form, ridged or ribbed, and with small seed-cells. They frequently weigh one pound or more each. The flavor is good, and we recommend Ponderosa for the home-garden. Pkt. 15 cts. , $1 / 2 \mathrm{oz} .60 \mathrm{ets} ., \mathrm{oz} . \$ 1,1 / 4 \mathrm{lb} . \$ 3.25,1 \mathrm{lb}$. $\$ 10$.
Crimson Cushion, or Beefsteak. The largest of the bright red Tomatoes. Crimson Cushion is more symmetrical in shape than Ponderosa and is much thicker through from stem to blossom end; in fact, so marked is this characteristic that it is frequently almost round. The coior is brilliant scarlet-crimson, untinged with purple, and the fruit ripens up almost to the stem. The flesh is firm and "meaty," and of superb quality. rkt. 15 ets., $1 / 2 \mathrm{oz}$. 50 ets., oz. 90 cts., $1 / 4 \mathrm{lb}$. $\$ 2.40$,
Bonny Best. Considered among the best of the early sorts. The fruits Bonny Best. Considered among the best of the early sorts. The fruits in large quantities. Pkt. 10c., $1 / 2 \mathrm{oz}$. 40c., oz. 65c., $1 / 4$ 1b. $\$ 1.75$, 1b. $\$ 5$.



John Baer Tomato. The plants have been trained to a single stem

## A Remarkable Tomato

John Baer. An early, bright red Tomato of wonderful quality. - But little later than Earliana, it far surpasses that variety in size and quality; it is, further, one of the heaviest-yielding sorts we know. The flesh is solid, possessing a fine flavor, free from acid. The fruits contain remarkably few seeds, and in this connection it is interesting to note that for seed purposes we find it requires over seven bushels of hand-selected, perfect fruits to produce one pound of seed. This fact was somewhat of a surprise to us when harvesting our 1920 crop, and our supplies of this variety are short. The limited quantity which we have to offer is of a private stock and has been grown under our personal supervision. Pkt. 20 ets., $1 / 20 z .60$ ets., oz. $\$ 1,1 / 4 \mathrm{lb}$. $\$ 3$, lb. $\$ 10$.

## The Best Yellow Tomato

Golden Ponderosa. The best large golden yellow Tomato. Smooth in appearance, of excellent quality, enormous size and ripens early. In shape very much like the Scarlet Ponderosa, but of a bright yellow color. Golden Ponderosa, served sliced and accompanied by a high-class scarlet variety, similarly sliced, presents an appetizing combination difficult to resist. Pht. $15 \mathrm{cts} ., 1 / 2 \mathrm{oz} .60 \mathrm{ets} ., \mathrm{oz} . \$ 1,1 / 4 \mathrm{lb} . \$ 3, \mathbf{1 b} . \$ 10$.

## Small-Fruiting Tomatoes

The fruits of these are much used for making fancy pickles, preserves, etc., while their size, shape, color, and flavor make them desirable additions to salads. The plants are extremely productive. King Humbert. In shape and size, King Humbert is suggestive of a hen's egg. The fruits are bright scarlet in color and are frequently produced in enormous clusters. Pkt. I5 cts., $1 / 2 \mathrm{Oz} .45$ cts., oz. 75
cts., $1 / 4 \mathrm{lb} . \$ 2.75$.

## Yellow Cherry

Red Cherry
Red Currant

## Peach

## Red Pear

Yellow Pear
Red Plum
Above eight varieties: Pkt. 10 cts., $1 / 2 \mathrm{oz} .35$ cts., oz. 60 cts., $1 / 4 \mathrm{lb} . \$ 1.75$
Strawberry or Husk Tomato. The plants are of dwarf, spready growth and very productive. The fruit is yellow, about the size of a good-sized strawberry and is enclosed in a husk. Pkt. Io cts.,
$1 / 2 \mathrm{Oz} .35 \mathrm{cts}$., oz. $60 \mathrm{cts} ., 1 / 4 \mathrm{lb} . \$ \mathrm{I} .75$.
COLLECTION of Small-fruited Tomatoes: One packet each of the above 10 varieties, $\$ 1$

## Forcing Tomatoes

Varieties recommended for cultivation under glass, yielding during winter and spring.
S. © W. Co.'s Best of A11. A variety of matchless form smooth, round and wonderfully prolific setting very freely in bunches. Equally good for outdoor culture as for forcing. Pht. 20 cts., $1 / 40 z .50$ cts., oz. $\$ 1.50$.
Comet. Grown very largely by both private and market-gardeners. It is very short-jointed, fruiting close up to the stem. The Tomatoes are of medium size; deep scarlet. See illustration below. Pkt. 15 ets., $1 / 40 z .30$ ets., oz. $\$ 1$.
Stirling Castle. A very superior variety for either forcing or medium size, smooth and round. Color a clear red. Remarkable for its free setting qualities and delicious flavor. Pkt. 15 cts., $1 / 40 z$. 30 ets., oz. \$1.
Sunrise. A fruit of fine quality, medium in size, perfectly round, sidered by many growers to be the best indoor Tomato grown, and the best outdoor variety where a small "whole-salad" type of fruit finds favor. Sunrise has won many awards and prizes. Pkt. 20 cts., $1 / 4 \mathrm{oz}$. $40 \mathrm{cts} ., \mathrm{oz}$. $\$ 1.25$.

## A New Book of Great Value by an Expert

THE GARDENER. By L. H. Bailey. Consists of brief directions for the actual growing of vegetables, the common fruits and flowers in the garden and around the house. The material is arranged in alphabetical order to facilitate speedy reference. The instructions are very clear, and it is one of the most "readable" books we have seen for some time. Cloth is one of the most "readable books we have seen for some time. Cloth bound, 260 pages, profusel


Greenhouse grown Tomatoes as shipped during the winter months into the New York market
Uniform containers holding ro pounds are used, and the individual fruits are wrapped in tissue paper. A suitable Tomato weighs 4 ounces. and in shape a deep globe; the color bright scarlet. Comet is a variety largely used for growing under glass.

## STUMPP \& WALTER CO., 30 AND 32 BARClAY ST., NEW YORK

## Vegetable Roots and Plants

Artichoke Roots, Jerusalem. Used for feeding stock and pickling. Tubers resemble potatoes. Qt. 35 cts., pk. $\$ 2$.
Asparagus Roots. For full description, culture and prices, see page i8
Chives. Used for flavoring. We supply large, growing clumps, 25 cts. each, $\$ 2.50$ per doz.
Horse-Radish Roots. Will produce good Horse-Radish, fit for use in one season's growth. Plant the root so that the top will be 2 inches under the ground. 25 cts. per doz., $\$$ I. 50 per ioo.
Mint Plants. Selected pot-plants. Used for Mint sauce and juleps. 25 cts. each, $\$ 2.50$ per doz.
Rhubarb Roots. The roots we offer are of the Giant Crimson Victoria variety. They may be planted in any good garden soil in the early spring. Divided roots, 15 cts . each, $\$ \mathrm{I} .50$ per doz., $\$ 10$ per roo; extra-strong clumps, 25 cts. each, $\$ 2.50$ per doz., $\$ 20$ per ioo.
Sweet Potato Plants. Red or Yellow variety. Ready in June. 75 cts. per ioo, $\$ 5$ per r,000.
Tarragon Plants. Used for seasoning. Strong pot-plants, 35 cts. each, $\$ 3.50$ per doz.

## Vegetable Roots for Winter Forcing

## Send for circular giving descriptions and cultural treatment

Asparagus. Extra-large clumps of Barr's Mammoth and Conover's Colossal. \$r.50 per doz., \$10 per 100, $\$ 90$ per 1,000 .
Rhubarb Roots. Extra-large clumps of Giant Crimson Victoria. Excellent for forcing in the cellar or greenhouse during the winter months. 50 cts . each, $\$ 5$ per doz., $\$ 35$ per roo.
Seakale Roots. Selected roots for forcing. \$I.75 per doz., \$12 per ioo.
Witloof Chicory Roots. Extra-selected roots for forcing. 75 cts. per doz., $\$ 5$ per 100, $\$ 40$ per 1,ooo.

## Aromatic, Medicinal and Pot Herbs

Anise (Pimpinella Anisum). Seeds aromatic and carminative.......................... $\$ 0$ Io $\$ 0$ or 30 Arnica (Arnica montana). Valuable medicinal qualities. 20
Balm (Melissa officinalis). For culinary purposes
Basil (Ocymum basilicum). Sweet. Culinary herb used for flavoring soups, etc..


Sicilian Fennel or Finocchio

Bene (Sesamum orientale). The leaves used for dysentery
Borage (Borago officinalis). Leaves used as a salad... $1 / 4 \mathrm{lb}$. \$1.50, ib. $\$ 5 \ldots$ Burnet (Poterium Sanguisorba). Used in the manufacture of cooling drinks. . Caraway (Carum Carvi). Used in flavoring liquids and bread. . $5 / 41 \mathrm{lb}$. 65c.. Catnip (Nepeta calaria). Has medicinal qualities
 Cumin (Cuminum Cyminum). Known also as Fennel Flower. Seeds are used as an ingredient in curry powder, pickles, soups, and pastry...... ro Dill (Antheum graveolens). Seed used for flavoring vinegar..... $1 / 4 \mathrm{lb} .65 \mathrm{c} .$. . Io Fennel (Sicilian). Tiue variety; rounded thickened leaf-bases. . $1 / 4 \mathrm{lb}$. 80c... Io Horehound (Marrubium vulgare). Has medicinal qualities................. I 5 Hyssop (Hyssopus officinalis). Has medicinal qualities.
Lavender (Lavandula vera). True. For oil and distilled water
Marjoram (Origanum Majorana). Sweet. Used in seasoning. Rosemary (Rosmarinus officinalis). Yields an aromatic oil and water.. Rue (Ruta graveolens). Said to have medicinal qualities.
Saffron (Carthamus linctorius). Used for medicine and also in dyeing.
Sage (Salvia officinalis). Common. A culinary herb; also used in medicine.
Savory (Satureia horiensis). Summer. Used as a culinary herb
Savory (Satureia montana). Winter. Employed in the kitchen for seasoning. Thyme (Thymus vulgaris). English Broad-leaved Winter. Employed for seasoning; the oil is sometimes used in perfumery.
Thyme (Thymus vulgaris). French. A small-leaved, less hardy type than the above. Used for the same purposes.
Woodruff (Asperula odorata) ................................................................. 155
Wormwood (Artemisia absinthium). Has medicinal qualities ................ I 5


## S.\&W.C0.'S SELECTED STRAINS OF FIELD CORN

The various Field Corns offered on this page have had our personal inspection in their production. They are grown especially for us in territory that is free of European Corn Borer; our customers may therefore plant our seed with the fullest confidence. Prices are subject to change without notice.

## New Golden Eureka Dent <br> (IMPROVED LEAMING)



A field of S. \& W. Co.'s New Golden Eureka Yellow Dent Corn (Improved Leaming) showing vigorous growth

We offer a specially select stock of this fine Corn, grown on our Long Island seed farms. It is a tremendous yielder. We have had reports of yields of over 150 bushels of shelled Corn to the acre. The plants grow from 12 to 15 feet high, a great proportion of them bearing two ears to the stalk, the ears averaging I2 to 15 inches long, with 18 to 22 rows of deep rich yellow grains and small cob. Seventy pounds of ears frequently yield 60 pounds of shelled Corn. While not so quick to mature as a Flint Corn, where 100 days of "Corn weather" are assured, it is the best Corn to grow. A very fine variety for ensilage, and frequently produces 25 tons of good Corn silage per acre. Qt. 25 cts., postpaid, 40 ets.; pk. $\$ 1.50$, bus. $\$ 5,10-$ bus. lots, $\$ 4.50$ per bus.

## Early Smoky Dent

The earliest Dent Corn in cultivation. Many growers claim that it has every variety of Corn surpassed for early maturity, large size of ears and splendid quality; ears are 8 to 10 inches long and have 12 to 16 rows of kernels on the cob. Stalks average, on good ground, 8 feet or more, and it matures generally in about 90 days from date of planting. It is thus a splendid dual-purpose Corn, valuable both for crib and silo purposes. Qt. 25 cts., postpaid, 40 cts.; pk. $\$ 1.50$, bus. $\$ 5,10$-bus. lots, $\$ 4.50$ per bus.

## Jumbo Silage

A first-class ensilage variety. Grows 12 to 15 feet high, with mammoth stems in proportion, and an enormous growth of leaves. Under favorable conditions it will produce ears a foot or more long, yielding two of them to a plant. Jumbo Silage Corn is recommended for rich, low lands, where it yields heavy fod ler. Qt. 30 cts., postpaid, 45 cts.; pk. $\$ 1.50$, bus. $\$ 5.25$, 10-bus. lots, $\$ 4.75$ per bus.

## Luce's Favorite

The favorite for Long Island, eastern New York, and northern New Jersey. A Dent Corn which is as early as the Flint varieties, yet one that yields two to three ears per plant. The ears are crowded with 8 to 12 rows of broad dented golden kernels. The plant is a strong grower, and the leaves are broad and long, making it an excellent sort for fodder and the silo. Qt. 30 ets., postpaid, 45 cts .; pk. $\$ \mathbf{1 . 5 0}$, bus. $\$ \mathbf{5}$, 10-bus. lots, $\$ 4.50$ per bus.
Improved Early Horsetooth. Same as Southern Horsetooth, but better selected and earlier. Small stalks; much foliage, but rarely produces ears in northern U. S. Qt. 25 cts., post paid, 40 cts .; pk. $\$$ I. 35 , bus. $\$ 4$, io-bus. lots, $\$ 3.50$ per bus.

Evergreen Fodder. A variety of the Sweet Corn especially valuable as green fodder. Sow broadcast, 2 bushels to the acre; in drills 3 feet apart, one bushel per acre. Qt. 35 cts., postpaid, 50 cts ; pk. $\$ \mathrm{I} .75$, bus. $\$ 6$, io-bus. lots, $\$ 5.50$ per bus.


Longfellow Flint Corn

## Longfellow Flint

This beautiful eight-rowed Flint often yields two good ears to the stalk. Ears sometimes 15 inches long. Cobs small, kernels of good size. Safe for planting as far north as Massachusetts. Our stock of seed is of the best selection and has given a yield, this past season, of over ioo bushels to the acre. Selected stock, qt. 25 cts., postpaid, 40 cts.; pk. $\$ 1.50$, bus. $\$ 5,10$-bus. lots, $\$ 4.50$ per bus.

## Pop-Corn

Treatment is similar to that of field or sweet corn. Care given in curing determines the popping qualities: place the ears under cover in thin layers with free access to the air. Sow 5 pounds per acre, in hills.
White Rice. Rough kernel. Recommended as the best general-purpose variety on account of its keeping better than others. Lb. 25 cts., postpaid, 35 cts .; Io lbs. \$1.75, Ioo lbs. \$I4.
White Pearl. The kernels of this variety are small and smooth. Lb. 25 cts ., postpaid, 35 cts ; 10 lbs . \$1.75, ioo lbs. \$I4,

## ROOT CROPS FOR STOCK-FEEDING



Pedigreed Ideal. Forty years' breeding has increased the dry matter and sugar in this Mangel by 50 per cent.

We recommend strongly to the cattle breeder, dairy farmer, and poultry raiser, Mangels, Carrots and Rutabagas. A palatable, easily stored, easily digested, and nutritious food is yielded in large quantities per acre. They stimulate the flow of milk of high grade; their cultivation ensures the thorough cleaning of the land; and they may be stored into the winter in root-cellars or outdoor "pits" with but little trouble.

## MANGEL-WURZEL

Culture.-Sow in drills during May or June, about 2 feet apart; thin out to 9 to 12 inches in the rows. The long varieties are best suited to a deep soil, and the globe sorts succeed better than the long sorts on shallow land. 6 to 8 pounds are required for one acre.
Pedigreed Ideal. The food value of a Mangel depends upon the quantity of sugar and dry matter contained in its flesh. Forty years of patient breeding has so increased the sugar and dry matter in Pedigreed Ideal Mangel that it contains 50 per cent more than ordinary roots; in other words, one ton of Pedigreed Ideal is equal as food to one and a half tons of non-pedigree Mangels. It is formed like a cylinder, grows high out of the ground, and has but a single tap-root. It may thus be lifted at harvest-time with little effort, and it is suitable for growing in shallow soils. The root has a yellow skin, covering flesh which is white, crisp, and with a flavor that is exactly what stock desire: it is high in vitamines and its use promotes an increased flow of untainted milk. We offer seed produced in Europe by the originator. Oz. 20c., $\mathbf{1 / 4 1 \mathbf { l b } . 5 5 c . , 1 b .} \mathbf{\$ 1 . 5 0 , 1 0} \mathbf{1 b s} . \$ 12.50$. Mammoth Long Red. This is the giant among Mangels. The and clean, with but small top-growth. The skin is bright, rich red, and the roots, which frequently exceed 2 feet in length, grow from one-half to twothirds above the ground. The maximum tonnage per acre is produced by this variety. Oz. 15 cts., $1 / 4 \mathrm{lb}$. 30 ets., $\mathbf{1 b} .85$ ets., 10 lbs. $\$ 8$.
Red Eckendorff. This variety is suited to soils of medium depth. Red Eckendorf. It is of high feeding value, and its tonnage yield per acre is enormous when cultivated with average care. Its peculiar shape enables the grower to lift the crop with little difficulty. $1 / 4 \mathbf{1 b} .40 \mathrm{cts} ., \mathbf{1 b} . \$ 1$, 10 lbs. $\$ 9$.
Champion Yellow Globe. Occupies the same position among among cattle. The skin is a rich, deep yellow; the flesh is fine, white, and solid. Not only does its shape lend itself to easy lifting, but two-thirds of the root grows above ground, hence it is a good variety where the soil is shallow. Its feeding value is high and it is a good keeper. $1 / 4 \mathbf{l b} .40$ ets., lb. $\$ 1,10$ lbs. $\$ 9$.
BARRE'S SLUDSTRUP. Has been recommended as holding the record for dry-matter content. This Mangel has been awarded a First-Class Certificate several times by the Danish government, the highest honor in Denmark, where Mangels are as important as corn is here. Sludstrup is a long, reddish yellow, ovoid root, growing more than half above the ground. Easily haryested and is considered to excel most varieties in both weight and feeding value. $5 / 4 \mathrm{lb} .30 \mathrm{cts} ., 1 \mathrm{lb} .85 \mathrm{cts} .$, io lbs. $\$ 8$.
GOLDEN TANKARD. Smooth, yeilow flesh; small, yellow-stemmed top; length 15 inches, diameter 5 inches, shape cylindrical. Usually grows half out of the ground. Easily pulled, good yielder; very hardy and nutritious. $1 / 4 \mathrm{lb} .40 \mathrm{cts} ., \mathrm{lb}$. $\$ \mathrm{I}$, Io $\mathrm{lbs} . \$ 9$.
MAMMOTH LONG GOLDEN. The root is long and cylindrical, tapering gradually at each end. The skin is golden yeliow, with a greenish shade above ground; flesh is white, sweet, and firm. A deep soil in which analysis shows the presence of a fair proportion of lime suits this variety. In spite of the large size of the root, its shape and the fact that a large proportion of it grows out of the ground enables it to be lifted without difficulty. $1 / 4 \mathrm{lb}$. 40 cts ., lb. \$I, Io lbs. \$9.
HALE-SUGAR ROSE. A variety combining the best qualities of sugar beets and Mangels. They are about the same shape as Long Red, but have white skin at the bottom, rose at top. Easier to harvest than sugar beets. I/4lb. $30 \mathrm{cts}$. , lb. 85 cts., $10 \mathrm{lbs} . \$ 8$.

## SUGAR BEET

Klein Wanzleben. This variety is cultivated on a Sugar Beet. Root is conical, straight and even, large at top and rapidly tapering. Contains a heavy percentage of saccharine matter. Oz. 15 cts., $1 / 4 \mathrm{lb}$. 30 ets., lb. 85 cts., 10 lbs. $\$ 8$.

## A USEFUL BOOK FOR THE FARMER

Fertilizers and Crops. By Lucius L . Van Slyke, Chemist of
Champion Yellow Globe. A refined type, of convenient shape and high nutritive value.


Mammoth Long Red. The Giant among Mangels


## Stock Carrots

Carrots are very valuable for all kinds of domestic animals, and are better for horses than any other root-crop. When fed alternately with oats to work-teams on the farm, the value of Carrots has been found to equal the oats they displace. Succulent food, in part, will always prove beneficial. Sow 4 pounds to the acre, from the middle of May to July Ifor main crop. Allow I foot apart between rows, and thin out to 7 inches in the rows.
Danvers Half-Long. Deep orange color, half-long, tapering uniformly to a blunt point. Flesh solid and although of medium length, this strain will give a large yield to the acre. $1 / 4 \mathbf{1 b}$. 55 cts., lb. $\$ 1.50,10$ lbs. $\$ 14$.
Long Orange. A very desirable type for field culture where the soil is thoroughly and deeply tilled. A foot or more is the usual length, with a diameter of 3 inches at the top. Its economy is apparent. $1 / 41 \mathrm{lb} .55$ cts., 1b. $\$ 1.50,10$ lbs. $\$ 14$.
Mammoth White Belgian. We offer the best stock we know of this popular type. The root is about 16 inches long, a quarter of which is above ground. The skin is white below and is greenish where it grows above ground. Its narrow shape enables it to be grown closely together in rows with profit, and its yield is therefore enormous. Excellent as a winter ration for horses and cattle. $1 / 4 \mathrm{lb}$. 45 c ., lb. $\$ \mathrm{I} .25$, Io lbs. $\$ \mathrm{II} .50$.

## RUTABAGA (Russian or Swedish Turnip)

Sow 4 pounds to the acre, in June, in drills 2 feet apart.
Improved American Purple-Top. A particularly fine type dish purple top. It is almost spherical in shape, and in consequence is easily lifted. The yellow flesh shows on analysis a very high percentage of dry matter; in other words, its feeding value is remarkably good. In our opinion our strain of Improved American Purple-Top is the best type of Rutabaga on the market today. We recommend it for stock-feeding rather than for table use. $1 / 4 \mathbf{1 b} .40$ cts., lb. $\$ 1,10$ lbs. $\$ 9.50$.
S. \& W. Co.'s Long Island Im-
proved. This special strain of Rutabaga is grown on Long proved. Island by a very careful grower. It is of a remarkably uniform shape and fine quality, and is also a splendid keeper. It grows to a large size, the skin is smooth, and flesh is beautiful yellow and fine-grained. We recommend it both for table use and for stock. Pkt. 10 ets., oz. 20 ets., $1 / 4 \mathbf{1 b}$. 55 cts., lb. $\$ 1.50,10$ lbs. $\$ 12.50$.

## EXPERIMENT WITH FIELDROOTS

We do not suggest that Roots be grown instead of corn, but we urge that they be grown in conjunction with corn; and for those of our customers who have only grown Roots in small quantities we offer an opportunity to try them out on their land. We have prepared:

## Acre Collection of Field-Roots

Containing $1 / 2 \mathrm{lb}$. each of our leading varieties, as follows:

Mangel, Mammoth Long Red.
Red Eckendorft.
Champion Yellow Globe.
Mammoth Long Golden.
Golden Tankard.
Half Sugar Rose.
Collection, mailed anywhere in the United States or Canada for $\$ 5$
The total, amounting to 5 lbs , is the recommended total allowance of seed per acre. We invite orders for one or more of this Acre Collection


Improved American Purple-Top Rutabaga. A particularly fine type

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

Prices subject SWWD For grain, $2 \frac{1}{2}$ bushels to the acre; for forage, 3 to chame SEED OATS bushels, or with Canada Peas, 1 to $11 / 2$ bushels
Sold at the standard weight of 32 pounds to the bushel. Several varieties of Oats offered below weigh up to 40 pounds to the measured bushel, but all Oats are purchased and sold at the standard weight of 32 pounds to the bushel.
Storm King. An exceptionally fine grade of the Long's Taris long and stout, and does not easily lodge. Heads are from 8 to $101 / 2$ inches in length. Our grower in New Jersey reported a yield of over 100 bushels per acre. Suitable for all soils. Pk. 85 cts., bus. (32 lbs.) $\$ 2.50$; 10 bus. $\$ 22.50,100$ bus., $\$ 2$ per bus.
Welcome Oats. One of the heaviest, handsomest, and most stools heavily, with extra-strong, straight straw, standing well. Succeeds well in a wide range of climate, and under a great variety of soils and methods of culture. Pk. 65 cts., bus. (32 lbs.) $\$ 1.90$; 10 bus. $\$ 18,100$ bus., $\$ 1.65$ per bus.
White Tartar. This is a western Oat which, when grown in筑 well. Its yield was well in excess of he Swedish and Lincoln varieties. It is a heavy Oat, with long, stout straw, which stands up well without lodging. The heads are large; the grains are thick and very heavy, with a thin hull. Our seed is selected and grown especially for us. Pk. 85 cts., bus. ( 32 lbs.) \$2.50; 10 bus. $\$ 22.50,100$ bus., $\$ 2$ per bus.
White Cross (Wisconsin Pedigree No. 19). A new Oat; extra-early, heavy yielder, with a large kernel and white instead of yellow. First premium at Wisconsin State Fair, and headed the list of all varieties in yield per acre at the Wisconsin Experiment Station. Pk. 65 cts., bus. (32 lbs.) $\$ 1.90 ; 10$ bus. $\$ 18,100$ bus. $\$ 1.65$ per bus.

SEED PRESERVER insures your seeds. It prevents crows and other birds taking the seed; it protects against groundrot and smut. It is non-poisonous and does not retard germination.
Large can, enough for 2 bushels of seed corn....... \$1 50 Small can, enough for 1 bushel

## SPRING WHEAT

Marquis. The favorite sort in this locality, used on account of its prolific, vigorous growth and early qualities. Sow in April or May, $11 / 2$ to 2 bushels per acre broadcast or in drills. Qt. 30c., pk. $\$$ I. 50 , bus. $\$ 4.50 ; 5$ bus. and over, $\$ 4.25$ per bus.

## SPRING RYE

Used as a catch-crop to sow where winter grain failed. Qt. $25 \mathrm{c} ., \mathrm{pk} . \$ 1.25$, bus. $\$ 3.75,5$ bus. and over, $\$ 3.50$ per bus.


## BEARDLESS SPRING BARLEY

Its straw is good for green feed or, when cured, as hay. The grain in the hull is excellent poultry-feed and with the hull removed is used in the household. It is a quick-growing crop and very nutritious. Sow broadcast $11 / 2$ to 2 bushels to the acre from May i5 to July I. Our seed stock is carefully selected and grown especially for us in Genesee County, New York. Makes better straw than the bearded, and will yield 50 bushels of grain to the acre. Qt. 20 cts., postpaid, 36 cts.; pk. $\$ 1$, bus. $\$ 3.25,10$ bus., $\$ 3$ per bus.

## SORGHUMS

EARLY AMBER SUGAR CANE. Sow 50 pounds per acre. Most valuable for dairy farmers; a favorite in the Northwest. Lb. 20 cts., postpaid 30 cts.; io lbs. \$1.IO, ioo lbs. \$io.
SUDAN GRASS. A quick-growing hay and pasture crop. Sow 30 pounds per acre. Lb. 20c., postpaid, 30c.; io lbs. \$1.50, Ioo lbs. \$13.
JOHNSON GRASS. Sow 25 pounds per acre. Lb. 35 cts., postpaid, 45 cts ; $10 \mathrm{lbs} . \$ 3$, ioo lbs. \$25.
FETERITA. Sow 20 pounds per acre. Lb. 15 cts., postpaid, 25 cts ; 10 lbs. \$1.25, ioo lbs. \$io.
TEOSINTE. Sow 5 pounds per acre. Lb. $\$_{\mathrm{I}}$, postpaid, \$1.Io; io lbs. \$8.50.
BROOM CORN. Sow 20 pounds per acre. Lb. 40 cts., postpaid, 50 cts ; 10 lbs. $\$ 3$, ioo lbs. $\$ 25$.

## KAFFIR CORN

A substitute for corn in semi-arid regions. The grain is used for poultry, for feeding horses and fattening hogs and cattle, while, if the plants are cut for hay, a great deal of forage is obtainable. Kaffir Corn is not suitable for pasture. Culture is similar to field corn; use I5 pounds of seed per acre if grown in rows and 50 pounds if broadcast. Lb. 10 ets., postpaid, 20c.; 10 lbs. 85 cts., 100 lbs. $\$ 8$.

## MILO MAIZE

Used for soiling and fodder. Seed 15 pounds per acre. Lb. 15 cts., postpaid 25 c .; 10 lbs. $\$ 1.15,100$ lbs. $\$ 9$.

## MILLETS

These are recommended as catch-crops, that is, quick-growing varieties to take the place of corn, wheat, or other crops which may have failed. They are chiefly grown for feeding green, silage or hay; seed may be sown during May, June, and July.
Golden Millet. Grows 4 to 5 feet high and yields a heavy crop. Use 50 pounds of seed per acre. Lb. 20 cts., postpaid, 30 cts.; io lbs. \$1.io, ioo lbs. \$9.
Hungarian Millet. The crop is heavy, and is considered equal in value to timothy hay. Use 50 pounds of seed per acre. Lb. 20 cts., postpaid, 30 cts.; 10 lbs. $\$$ I. Io, Ioo lbs. $\$ 9$.
Japanese, or Barnyard Millet. Yields more heavily than almost any other forage plant. Grows 8 feet high. Use 15 pounds of seed per acre. Lb. 20 cts., postpaid, 30 cts.; io lbs. \$1.25, Ioo lbs. \$10.50.

All Clovers possess the property of transforming the free nitrogen of the air into soluble nitrates; in addition to the crop yielded, they all result in an improved condition of the soil.

Algot Red Clover. An improved strain produced by a taking effort. Algot Red Clover yields a heavier crop to the measured acre than the ordinary type. It will endure a greater degree of cold without injury and it is resistant to mildew. Most of all, it will thrive on land which would be "clover-sick" to common red clover. This is a distinct type, very uniform and flowering late. Lb. $\mathbf{\$ 1 . 2 5}, \mathbf{1 0} \mathbf{l b s} \mathbf{\$ 1 1 . 5 0}, 100 \mathbf{l b s} \mathbf{\$ 1 0 0}$.
Medium Red Clover. This is the most popular and is the Clover family. It makes regorded as the most valuable of usually cut when it is in blossom for hay; the last crop may be harvested for seed, cut for hay or plowed under to add fertility to the soil. It may be sown either in the spring or fall, and if no other grasses are used, at the rate of from twenty to twenty-five pounds to the acre. Hardy American-grown Seed. Lb. 65 cts., postpaid, $\mathbf{7 5}$ cts.; 10 lbs. $\$ 5.50,100$ lbs. $\$ 50$.
Mammoth Red Clover. Grows larger and lasts longer than the preceding variety, and by some is considered superior to it for forage. Americangrown Seed. Lb. 70c., ppd., 80c.; 10 lbs. $\$ 6,100$ lbs. $\$ 55$. Alsike, or Swedish Clover. This is one of the hardiest better on moist land than any otharieties known; it will do requently sown than any other variety of Clover. It is Time Timothy, and the quality of hay thus produced is excellent. It is finer and more leafy than Medium Clover, although it does not grow so high. Lb. 60 cts., postpaid, 70 ets.; 10 lbs. $\$ 5$, 100 lbs. $\$ 45$.
White, or Dutch Clover. This variety should be inpasture and it is the best sort for lawns; it forms a close herbage and remains green throughout the season. Lb. 80 ets., postpaid, 90 cts.; 10 lbs. $\mathbf{\$ 7 . 5 0 , 1 0 0} \mathbf{l b s}$. $\$ 60$.
Wild White Clover. Genuine Wild White Clover Seed Wild Wroduces wiry plants that are more permanent in character than those originating from commercial seed: the plants are smaller and they spread very much farther than the "cultivated" type Being more robust, they withstand clover-sickness and they thrive on soils that would be too poor to support ordinary White Clover. Wild White Clover plants assist other Clovers and grasses growing alongside them, and European experience shows that the inclusion of so small a quantity as one pound of seed per acre in mixture with other Clovers and grasses for hay-fields and pastures is followed by an increase in yield amounting in some cases to 50 per cent or more. On breaking up a pasture in which it is included, the increased benefit to the soil is very marked. $\mathbf{O z}$. $\$ 1,1 / 4 \mathbf{l b}$. $\$ 3, \mathbf{l b} . \$ 10$.
Alfalfa, or Lucerne. Alfalfa possesses a wonderful root quently it is a sreat droughtresister deep and strong, consequently it is a great drought-resister. Our seed is Americangrown, produced in those northern sections of the country where Alfalfa has endured the extreme cold of winter in high altitudes. Lb. 45 cts., ppd., 55 cts.; 10 lbs. $\$ 4,100$ lbs. $\$ 35$.
Grimm Alfalfa. There is some disagreement as to how there is no difference of opinion that it is hardy. Because of its root-system, it will grow well over a hardpan soil, and is adapted to a wetter soil than the common Alfalfa. We recommend 15 pounds of the seed, sown broadcast, to the acre, as its stooling habit requires less seed to be sown than the ordinary type. Lb. 80 cts., postpaid, 90 cts.; 10 lbs. $\$ 7.50,100 \mathrm{lbs}$. $\$ 65$.
Crimson, or Scarlet Clover. This is an annual plant. time from June to October, at the rate of fifteen to twenty pounds to the acre, and makes the earliest possible spring pasture, blooming the latter part of April or May, and for feeding as hay, should be cut just before coming into full bloom. Lb. 30 ets., postpaid, 40 cts.; 10 lbs. $\mathbf{\$ 2 . 5 0 , 1 0 0} \mathbf{l b s}$. $\$ 20$.

Sweet Clover, or Bokhara Clover. White Melilotus. ing this Clover to quite a considerable extent on light, sandy land, where other Clovers do not take well. They hope, by sowing Sweet Clover, to get a good growth to turn under to improve the land and also to inoculate the soil so that it will produce good crops of Crimson Clover and Alfalfa from seedlings of these to follow the Bokhara. For feed or forage it should be cut when quite young, for when it gets old, cattle do not relish it, and it is not of very high nutritive value. It is also largely used for sowing for bees. Lb. 35c., postpaid, 45c.; 10 lbs. $\$ 2.75,100$ lbs. $\$ 25$.
Yellow Sweet Clover. A yellow-flowered counterpart of 45 cts.; 10 lbs. $\$ 2.75,100$ lbs. $\$ 25$.
Hubam. Annual White Sweet Clover. Hubam is a variety Hubam. of Bokhara or White Sweet Clover which was discovered a few years ago by the Iowa Experiment Station; it has since been improved. While ordinary Sweet Clover, and most other Clovers, do not give a profitable return until the second year from seeding, Hubam will produce a bumper crop and attain mature growth in the first season. It will in six months yield a growth of from 3 to 7 feet, and in some cases 8 and 9 feet, this depending upon the locality, soil, and season. Hubam is even more drought-resistant than the ordinary type, and, like it, is the greatest bee-pasture known. We offer scarified seed. Lb. 60 ets., postpaid 70 ets., 10 lbs. $\$ 5,100$ lbs. $\$ 45$.
Sainfoin. A deep-rooting leguminous plant, which thrives on splendid results also on rood land Un Uually sown in spring as a one-year crop, although it is perennial in some sections. Sow 50 lbs. per acre, either alone or with a nurse crop. Lb. 35 cts., postpaid, 45 cts.; 10 lbs. $\$ 3.25,100$ lbs. $\$ 30$.
Melilotus indica (Annual Yellow Sour Clover). A legume excellent for building up soils deficient in vegetable matter. Sow 50 lbs. per acre. Lb. 25 cts., postpaid, 35 cts.; 10 lbs. $\$ 2.25,100$ lbs. $\$ 15$.
Japan Clover, or Lespedeza. A pasture and hay plant ern states, where it will give good results even on the poorest soils. Used quite largely for lawn purposes in the territory suited to it. Use 25 pounds of seed per acre. Lb. 40 cts., postpaid, 50 cts.; 10 lbs. $\$ 3.75,100$ lbs. $\$ 30$.
Mixed Clovers. For pasture and hay-fields. Use 25 pounds renovating existing fields, use io pounds. Lb. 60 cts., postpaid, 70 cts.; $10 \mathrm{lbs} \$ 5.50,100 \mathrm{lbs}$. $\$ 50$.



Vetch and Oats Sown Together

## VETCHES or TARES

Vetches are relished by live stock of all kinds; they are excellent for milk-production, and their fattening properties are of high order. You may feed them green, as hay or as silage. Being legumes, they are the finest possible land-renovators, and they are strongly recommended as a plow-under crop to manure the land. The Department of Agriculture estimates the value of an acre of Vetch plowed-under as being equal to commercial fertilizer at the rate of from $\$ 16$ to $\$ 40$ an acre. For best results, grow Vetches in combination with oats, wheat, or rye. The cereals support the Vetches, keeping them away from the ground, and much increasing the crop.
SPRING VETCHES (Vicia sativa). These are highly valuable for soiling or for green-manuring. They should be sown as early as the land is dry enough to be worked without injury. When sown alone, use I 50 pounds per acre broadcast, or 100 pounds in drills. If grown with oats, wheat, or rye, use $1 / 2$ bushel of the cereal and 75 lbs . of Spring Vetches. Lb. 20c., postpaid, 30c.; io lbs. \$1.25, ioo lbs. \$10.
WINTER VETCHES_SAND or HAIRY VETCHES (Vicia villosa). These are suitable for both spring and autumn seeding, and if intended to stand over the winter, they should be sown as long before winter as possible to enable them to become established firmly. If sown alone, use ioo pounds of seed to the acre, but it is best if 50 pounds of Hairy Vetch be sown with $1 / 2$ bushel of oats or other cereals, as shown in illustration at left. Lb. 35 c ., postpaid, 45 c .; io lbs. $\$ 3$, $100 \mathrm{lbs} . \$ 25$.

## FARMOGERM Seed Inoculant

When ordering be sure to state which crops you wish to inoculate. For vetches, field peas, cowpeas, and soy beans: field peas, cowpeas, and soy beans:
$1 / 2$-bu. size 35 c ., 1 -bu. 60 c ., 5 -bu. $\$ 2.25$. 1/2-bu. Size 35 c ., 1 -bu. 60 c ., 5 -bu. $\$ 2.25$. For clovers and alfalfa: $1 / 4$-bu. size 35
$1 / 2$-bu. 60 c., 1 -bu. $\$ 1,21 / 2$-bu. $\$ 2.25$.

## CANADA FIELD PEAS

INOCULATE THIS SEED WITH FARMOGERM

Canada Field Peas are a profitable crop in a variety of ways; if grown to maturity and threshed, a yield of from 30 to 60 bushels per acre of dried Peas may be expected. A combined crop of Peas and Oats is frequently grown; at maturity they may be threshed at one time and separated in cleaning. They are most widely grown in conjunction with oats and fed green, when a surprising amount of fodder is produced.

If sown alone, use 3 bushels of seed per acre; when sown with oats, use $11 / 2$ bushels of Peas and 2 bushels of oats, sowing the Peas first, plowing under 4 inches deep and then drilling in the oats. Qt. 30 cts., postpaid, 45 cts.; pk. $\$ 1.50$, bus. ( 60 lbs .) $\$ 5.25$, 10-bus. lots, $\$ 5$ per bus.

## COWPEAS

Used for improvement of soils by plowing under; also make valuable hay, when sown alone or with soy beans, during May, June or July, at the rate of two bushels to acre or one bushel of Soy Beans and one of Cowpeas.
New Era. The Peas are dull lead-colored, not quite so large as Whippoorwill, but vine is somewhat stronger; earlier than other varieties. Qt. 30c., postpaid, 45c.; pk. \$1.75, bus. \$5.50. Whippoorwill. An early, bunch-growing Pea; has brownspeckled seed. Qt. 30 c ., postpaid, 45 c. ; pk. $\$ \mathrm{I} .75$, bus. $\$ 5.50$.

## INOCULATE THIS SEED WITH <br> FARMOGERM

## SOY BEANS

Especially valuable for mixing with corn for silage, for the production of hay, and for use as pasture, especially for hogs. They are also valuable as a crop for plowing under for green manure.

Planted in rows $21 / 2$ feet apart, 6 to 8 plants to the foot of row, requiring three pecks to the acre, they yield fifteen to twenty tons of fodder.
Mammoth Yellow Soy Beans. Qt. 30 cts., postpaid, 45 cts.; pk. $\$$ I.50, bus. $\$ 4.25$, io-bus. lots, $\$ 3.75$ per bus.
Ito San. An early variety. Qt. 30 cts., postpaid, 45 cts.; pk. $\$$ I. 50 , bus. $\$ 5$, Io-bus. lots, $\$ 4.50$ per bus.
Wilson (Black). Qt. 35 cts., postpaid, 50 cts ; pk. $\$ \mathrm{I} .65$, bus. $\$ 5.5^{\circ}$, Io-bus. lots, $\$ 5.25$ per bus.


Soy Beans



A field of Japanese Buckwheat

## JAPANESE BUCKWHEAT

This is a superior variety and more prolific, and yields double the weight per acre of other sorts. The grains are nearly twice as large as those of Silver Hull, and of fine color. This variety is always in demand, millers preferring it to all other sorts, and it makes the finest flour. Sow about the middle of June, broadcast, I bushel to the acre. Qt. 20 ets., pk. 90 ets., bus. $\$ 3,10$ bus. $\$ 2.75$ per bus.

## THOUSAND-HEADED KALE

An exceedingly valuable food for sheep and lambs. The crop may be drilled in in rows 2 feet apart, and the plants hoed to stand a foot apart, or occasionally the seeds are sown in a nursery bed and the seedlings transplanted. In the first case 8 pounds of seed per acre are used, and in the second 4 pounds will be found sufficient. Lb. \$1.50.


Dwarf Essex Rape is an excellent sheep-feed

## SUNFLOWER, MAMMOTH RUSSIAN

Selected Seed. Specially Grown for Seeding
Highly valued as an excellent and cheap food for fowls. It is the best egg-producing food known. It can be raised cheaper than corn. Four pounds of seed will plant an acre. Lb. 35 cts., postpaid, 45 cts.; 10 lbs. $\$ 3$, 100 lbs. $\$ 25$.

## SPELTZ or EMMER

One of the types of the wheat family, remarkable for its hardiness. It is occasionally used for stock-food, both as grain or cut green. Its use appears to be on the increase in the northwestern sections of this continent. It is usual to sow 100 pounds per acre. Lb. 15 cts., postpaid, 25 cts.; 10 lbs. $\$ 1.10,100$ lbs. $\$ 9.50$.

## FLAX or LINSEED

This crop is grown primarily for the seed for which there is a constant demand for pressing for oil and the making of cake and meal. Sow 75 pounds of seed per acre. Lb. 20 cts., postpaid, 30 cts. $; 10$ lbs. $\$ 1.75,100$ lbs. $\$ 14$.

## BEGGAR WEED

A leguminous plant suited to the sandy soils of the South. Gives a large yield of excellent hay. About to pounds per acre is the usual seeding. Price on application.

## DWARF ESSEX RAPE

The true Dwarf Essex Rape is valuable as a fattening food for pasturing sheep in autumn and it is relished also by hogs and cattle. It is particularly adapted as a "catch-crop," for it grows best late in the season. In the northern states it can be sown at any time from May until the end of August, but in the southern states it should not be sown until September or October, for winter pasture. Its fattening properties are said to be twice as good as clover. Sow ten to twelve pounds to the acre broadcast, or four to five pounds per acre in drills 15 inches apart. The plant grows very vigorously, and feeding can commence about two months after the seed is sown. Stock are turned right into the standing crop, and the expense of harvesting is avoided. Successional seedings, to maintain a continuous supply, may well be made. Lb. $25 \mathrm{cts} ., 10$ lbs. $\$ 2,100 \mathrm{lbs} . \$ 15$.


Super-Giant Antirrhinums


Cardinal Climber


Long-spurred Aquilegia


Calendula, The Ball


Carnation, New Giant Chabaud

# S. \& W. Co.'s Novelties and 

## Super-Giant Snapdragons <br> Antirrhinum majus maximum

Each year we are greeted with numerous new varieties of this beautiful flower. Specialists vie with one another to produce finer strains. We have given trial to many of the recent introductions and find the following six varieties of excellent merit. The plants attain a height of 3 feet and the individual flowers are very large and the colors very distinct.
Apple Blossom. Apple-blossom-pink.
Canary Bird. Canary-yellow with deeper yellow lip.
Copper King. Bronzy copper color.
Old Gold. Rose on yellow ground.
Snowflake. Dazzling white.
Wallfower. Dark wallfower-red.
Any of the above varieties, pkt. 25 cts., 5 pkts. $\$ 1$

## Aquilegia Columbine

S. \& W. Co.'s Giant Long-spurred Mixed

The seed of this splendid strain of Columbine is grown for us by a specialist known for his painstaking efforts to produce a superior class. The plants are of strong thrifty growth and are perfectly hardy and bear long-spurred flowers of large size, varying in color through charming tones of cream, pink, lavender, blue, mauve, white, yellow, orange, scarlet, and bright rose-pink. Pkt. 25 ets., 5 pkts. $\$ 1$.

## Calceolaria, Albert Kent

This fine Calceolaria grows about $I \mathbb{I} / 2$ feet high and bears immense trusses of bloom from the beginning of May onward through the summer. The individual flowers are about $I T / 2$ inches across thus intermediate in size between the largeflowered greenhouse varieties and those used for outdoor bedding. They are graceful in shape, like a falling drop of water, and of a bright golden yellow color with a rich maroon-red blotch. A prominent feature of Albert Kent is that it can be utilized both indoors and out. It comes about 75 per cent true from seed. Pkt. 25 ets., 5 pkts. $\$ 1$.

## Calendula, The Ball

A special florists' strain of Orange Calendula. The very large, orange-yellow flowers have a lighter center, are borne on long stems, and come uniformly double. This is an exceptionally fine Calendula for greenhouse growing. Pkt. 25 cts., 1/40z. 75 cts., oz. $\$ 2.50$.

## Carnation, New Giant Chabaud.

A new acquisition in this popular French Carnation really a glorified type, coming into bloom six months from time of sowing and continuing to bloom throughout the summer. They form ten to twenty stalks, bearing huge flowers of fine form, coming 90 per cent double and quite true. We offer five distinct colors:
White King. Pure white.
Yellow King. Pure yellow.
Maroon King. Maroon.
Red King. Cardinal-red.
Rose King. Rose-pink.
Any of the above named varieties, pkt. 25 cts., 5 pkts. $\$ 1$

## Cardinal Climber

## Ipomoa Quamoclit hybrida

A rapid grower, often attaining the height of 30 feet or more. The deeply laciniated, fern-like foliage and fiery cardinal-red flowers are borne in profusion from July to frost. The flowers are about $I^{1 / 2}$ inches in diameter and are borne in clusters of five to seven blooms. Seed may be sown indoors during April, or outdoors in May. Soaking seeds in warm water before planting hastens germination. Pkt. 15 cts., 2 pkts. 25 cts.

## New Double Clarkias

This is a distinct advance in the Clarkias, which has resulted from careful selection of the tallgrowing varieties. Plants grow about 2 feet high, which makes them good subjects for pots or openground culture. A grand acquisition to the hardy annual section.
Purple King. Rich purple.
Scarlet King. Orange-scarlet.
Briliant King. Crimson-scarlet.
White King. Pure white.
Each, pkt. $15 \mathrm{cts} ., 4$ pkts., one of each, 50 cts .

## Chinese Woolflower

## Celosia Childsii

This is a unique form of the feathered Coxcomb, growing 2 to 3 feet high and about the same size in diameter. Each branch is terminated with a large head of rich crimson flowers that look as if made out of some silky wool material. A very effective annual for beds and borders. May be used to excellent advantage as a cut-flower as well.
Crimson. Very rich color.
Pink. Salmony pink.
Each, pkt. 15 cts., 2 pkts. 25 cts.


## Specialties in Flower Seeds

## Cherianthus Allionii

## Siberian Wallflower

The increasing interest in rock-gardens in America suggests the use of many perennial plants not commonly grown in most gardens. In presenting this beautiful little early-flowering perennial Wallflower with gorgeous orange flowers, we suggest it as a splendid little plant for the rock-garden or as a dwarf border plant. Will bloom throughout the summer if seed-pods are removed. May be sown in the open ground in September where required to flower the following spring, or will bloom first season from seed, if sown in a hotbed in March and transplanted outdoors in May. Pkt. 25 cts., 5 pkts. \$1.

## Double-flowering Cornflowers <br> Centaurea cyanus

This notable introduction from our friends in California is a distinct improvement on the former strains of this easily grown annual. The flowers are very double, requiring a much smaller number to make an attractive bunch or as a display for home decoration. They may be sown outdoors in April and successive sowings made up to midsummer. Plants should be thinned out to stand 8 inches apart in order to secure strong plants and larger blooms.

| Blue | Maroon |
| :--- | :--- |
| Rose-Pink | Mauve |
| White | Rosy Red |

Any of the above colors, pkt. 10 cts., $1 / 40 \mathrm{oz} .30 \mathrm{cts}$., oz. 75 cts.

## New Double Cosmos

Some years ago, when we first offered in our Novelties and Specialties this splendid new form of Cosmos of Australian origin, we considered it a notable addition to this beautiful family of easilygrown annuals for cutting. We are pleased to announce, however, that, due to painstaking effort on the part of an American grower, this strain has been further improved upon, in size of flower, greater degree of doubleness, and general vigor of the plant. Many of the flowers are entirely double, while others have an attractive collar which rather adds, we think, to its beauty.

We offer three distinct colors, as well as a mixture of all three.
Double Pink. Beautiful rose-pink.
Double White. Pure glistening white.
Double Crimson. Rich rose-crimson.
Double Mixed. Mixture of all three.
Each, pkt. 20 cts., 6 pkts. $\$ 1$

## Delphinium

## S. and W. Co.'s Gold Medal Hybrids

Specialists in America and Europe vie with one another in the improvement of this wonderful and, without a doubt, "the most popular hardy perennial." The varieties of yesterday are mere caricatures compared to the strain we are offering. The plants are of strong and vigorous habit and the spikes frequently attain the height of 6 feet, with flowers of very large size and colors of the finest range-Iilac, pale blue, light blue, dark blue, and petunia violet. The individual florets are quite distinct, and diversified in form.

The gardener who is striving for the production of the finest in hardy perennials finds added zest in cultivating this-the finest perennial-from seed. The enjoyment derived from selecting the seedlings after they have bloomed is far greater than that realized from growing named varieties from plants. Few of the best named varieties of this Hybrid come true from seed, therefore we suggest growing this strain and enjoying the pleasure of selecting your own favorites, which can be increased the next year from root divisions.

Pkt. (50 seeds) 25 cts., 5 pkts. $\$ 1$

For a complete list of the finest varieties of Spencer Sweet Peas arranged according to color classification see page 116.

## Diascia Barberæ

An old and not so frequently grown annual which we have inserted here in the Specialties in an endeavor to give it a wider acquaintance with flower-lovers. The plants average 9 to 12 inches in height and the dainty spurred flowers are freely produced in sprays on wiry stems. The flowers are 7/8inch in diameter and of a soft salmon-rose. Pkt. 25 cts., 5 pkts. $\$ 1$.

## Dianthus, Snowball

This splendid variety of the Dianthus or Pink family is one of the finest of all this genus for cutting. It is classed as a biennial but may be treated as an annual and sown outdoors when all danger of frost is past. It requires a rich soil and an abundance of sunshine. The plants grow about a foot high and are excellent for beds or border. Large, double, white flowers. Pkt. 15 cts., $1 / 4 \mathrm{Oz} .50 \mathrm{cts}$.

S. \& W. Co.'s Gold Medal Hybrids


New Double Clarkia


New Double Cosmos


Double Mrs. Bradshaw. The very large, full flowers are an attractive shade of orange-scarlet. They come quite true from seed and bloom the first year, if sown early. Height, $1 / 2 / 2$ feet. Pkt. 15 cts., 5 pkts. 50 ets.
Double Lady Stratheden. Fine rich golden yellow flowers. A splendid companion to Orange Queen and Mrs. Bradshaw. Height, I $1 / 2$ feet. Pkt. 25 cts., 5 pkts. $\$ 1$.

A very graceful annual, growing about 2 feet high, with fine feathery foliage, and bearing freely, over a long season, globular heads of bloom about I inch across. We offer a lavender-blue and white form. A splendid annual, lasting well when cut.
Capitata. Lavender-blue. Capitata Alba. White.

## Giant Shirley Foxglove

## (Digitalis)

A new and magnificent strain of Foxgloves raised by the late Rev. W. Wilks, who originated the Shirley Poppy. It is considered by plantsmen as being the greatest improvement ever made in Foxgloves. The very vigorous plants attain the height of 5 to 7 feet, with spikes of bloom ranging in color from the purest white to dark rose, handsomely spotted and blotched with crimson, maroon, and chocolate. This is certain to supersede all other strains of Foxgloves. Seed sown this spring should produce plants which, if properly grown on outdoors this summer and placed in their permanent positions before autumn will make a glorious show next season. Pkt. 25 ets., 5 pists. $\$ 1$.

## GEUMS

## Three Fine New and Rare Double Varieties

The following three new large-flowering Geums are among the best hardy perennials of recent introduction.
Double Orange Queen. We are pleased to offer what has hitherto baffled the hybridists and selecters to produce, namely, a Geum of a shade, intermediate, so to speak, between that of Mrs. Bradshaw and Lady Stratheden. The plants are similar in habit to both of these highly popular sorts, and as they are quite as large and freeblooming, we have no doubt that Orange Queen, in coming to complete a splendid trio, will soon acquire an equal share of public favor. Height, $11 / 2$ feet. Pkt. 25 cts., 5 pkts. $\$ 1$. servatories, frames, etc. Not the least beaulul is the effect of its yellow. The seedlings produce about 75 per cent of double flowers. Pkt. 25 ets., 5 pkts. \$1.

## Didiscus cærulea

## Queen Anne's Lace Flower

This pretty annual, which was cultivated extensively in the gardens of our grandparents, has been brought to prominence again. Florist shops throughout the country now display it, and its lovely, refined appearance and color makes an instant appeal. Few flowers are as lovely for decorating the dinner table. Queen Anne's Lace Flower grows into an upright, very much-branched plant about 2 feet high. Each branch ends in an umbel of sky-blue flowers, which spread out in an umbrella-like fashion, crowning each shoot with a beautiful and delicate head of flowers. Each individual bloom in the umbel is carried on a thin and long tube, giving the flower-heads a distinct and refined appearance. The name Queen Anne's Lace Flower is most appropriately applied to the flowers since the graceful form of the umbels of bloom resemble in their quaint and artistic arrangement, the most delicate and dainty lace. It is easily grown and a splendid cut-flower, lasting unusually long in water. Seed may be sown outdoors in a well-prepared seed-bed when trees are out in leaf; water copiously during hot weather. Pkt. 25 ets., 5 pkts. $\$ 1$.

## Gilia capitata



## New Godetia

We are pleased to offer five new varieties of this charming annual of easy culture. The plants are of
Nicotiana Sanderæ, Crimson King istinct and graceful habit and are excellent for cutting. The sprays should be cut as the flowers are just coming to perfection, as they will fully develop after being placed in water. Excellent border plant, frequently attaining the height of 2 to 3 feet.

## Tall Double Pink <br> Tall Double Crimson <br> Tall Double Mauve

Tall Double Carmine
Any of the above varieties, pkt. 25 cts., 5 pkts. $\$ 1$

## Hunnemannia fumariæfolia

## Santa Barbara Poppy, or Bush Eschscholtzia

This is by far the best of the Poppy family for cutting, remaining in good condition for several days. Seed sown early in May will, by the middle of July, produce plants covered with their large, butter-cup-yellow, Poppy-like blossoms, and never be out of flower until hard frost. The plants grow about 2 feet high, are quite bushy, with beautiful, feathery, glaucous foliage. Pkt. 10 cts., $1 / 402.50$ ets., oz. $\$ 1.50$.

## Lobelia tenuior compacta, Improved

This handsome annual has hitherto hardly received the attention it deserves. The improved strain, which we now offer, grows 8 to 9 inches high, is of erect, elegant habit, and thickly covered with large, dark blue flowers having a distinct white eye. As it remains a long time in bloom, it is a very effective plant for summer bedding. Pkt. 25 ets., 5 plsts. \$1.

## Nicotiana Sanderæ

## Crimson King

Several handsome hybrids of the original annual Nicotiana affinis have ornamented many gardens for a number of years, but this new variety excels them all in color, presenting, as it does, the richest and deepest tint, a dark velvety crimson-red which has thus far been produced in the Nicotiana family. Pkt. 25 cts., 5 pkts. $\$ 1$.

## Nasturtium, New Giant-Flowering

The plants are strong and vigorous, with very large, bright green leaves, measuring from 5 to 8 inches across. The flowers, which are very numerous, measure 3 inches in diameter, and are borne on long stems well above the foliage. They are exquisitely formed, with overlapping, crinkled petals. They are produced in great numbers and have a most striking effect. Their fine color, long stems, great s:ze and esthetic form make them valuable for cutting.
Giant-flowered, Dwarf, Mixed. Pkt. I5 cts., oz. $25 \mathrm{cts} ., 1 / 4 \mathrm{lb}$. 75 cts., lb. \$2.
Giant-flowered, Tall, Mixed. Pkt. I5 cts., oz. 25 cts., $1 / 4 \mathrm{lb} .75 \mathrm{cts} .$, 1b. $\$ 2$.

## Phacelia campanularia

This is sometimes called the Californian Bluebell. The flowers are much like the Canterbury bells, of beautiful cup-shaped formation and a lovely gentian blue. The neat little bushes, about I foot high, are literally covered with these lovely flowers throughout the summer. It can be grown as easily as a cornflower. Pkt. 25 cts., $1 / 40 z$. $\$ 1$.

## Balcony Petunias

We offer below this splendid type of Petunias in both the plain edged varieties as well as those of recent introduction, the Balcony fringed. The plants of these two types are symmetrically formed, grow about I foot high, and the flowers are rich and pure, measuring 3 inches across.

## Balcony Fringed

White Beauty. White.
Pride of Portland. Deep rose.
Pink King. Light rose.
Scarlet Beauty. Bright scarlet.

## Balcony Plain

Blue. Rich indigo-blue.
Rose. Rose-pink.
White. Pure white. Elks Pride. Blackish purple. Any of the above, pkt. 25 cts., 5 pkts. $\$ 1$

## Bedding Petunia, Pink Beauty

This is a grand acquisition to the single bedding Petunias. The flowers are very 'arge, of handsome form, brilliant rose-pink, with throat lightly suffused yellow. Of very rapid growth and continuously in bloom. Many who have grown this Petunia in beds, borders, or rockery procla $m$ it the best they have ever seen. Pkt. 15 ets., $\frac{1}{16}$ Oz. $\$ 1$.


Bedding Petunia, Pink Beauty


Physalis Franchetii. See page 64


Balcony Petunia



Double Hybrid Pyrethrum


Ostrich-Plume Salvia

## Physalis Franchetii

## Chinese Lantern Plant

This beautiful little plant, which is grown chiefly for the orange-scarlet lantern-like fruits that are gathered in the fall and serve as splendid decoration in the home at Thanksgiving and Christmas time, is of comparatively easy culture. While a perennial, it can be had in flower the first year if seed is sown early. Pkt. 25 cts., 5 plets. $\$ 1$.

## Poppy, Double Queen

This beautiful new strain of Poppies is of the Shirley type, but the flowers are double and semi-double, of the most delicate and brilliant colors, including salmon, pink, crimson, orangesalmon shaded white, brilliant scarlet with white center. For graceful beauty these Poppies are unexcelled and will be highly prized for the flower-garden and cutting. Like all of the annual Poppies this variety should be sown early in the spring, barely covering the seed, in a sunny situation, and for best results thin out to 4 inches between the plants. It is well to make several sowings where a succession of bloom is desired. Plst. 15 ets., $1 / 40 z . \$ 2.50$.

## Poppy, Double CarnationFlowered

Resembles the annual Poppy, but larger and more double in form. The colors are similar to those described above but the flowers are more double. They are very showy during their flowering period. Excellent for borders or beds. Pkt. 10 cts., $1 / 4$ oz. $\$ 1$.

## Poppy, Shirley, Wild Rose

Few, if any, of the Poppies are as delicate in their splendor as the Shirley Poppy. Our grower, by painstaking selection, has procured a strain that is perhaps best described as a pure wildrose pink. Sow the seed very early and again later for succession. Picking the flowers just as they expand and removing old blooms from the plants will lengthen the season considerably. Pkt. 10 cts., $1 / 40 z .50$ ets., oz. $\$ 1.50$.

## Primula malacoides fimbriata

The flowers of this charming new greenhouse Primula are of a lovely pink hue and beautifully and delicately fringed, a phenomenon which has not as yet appeared in the Malacoides section and which enhances the attraction of the plant to a remarkable degree. Both for culture in pots and for cutting we can strongly recommend this very attractive novelty. Pkt. 25 cts., 5 pkts. $\$ 1$.

## Giant Polyanthus

The visitor to any of the famous gardens of England in Maytime is greatly impressed with the manner in which this beautiful Primrose is used and the gorgeous display the better varieties present. Many of the larger gardens use them to intersperse between May-flowering Tulips in their bulb-gardens, but they are best seen to advantage in borders or in beds. The strain we are offering is of strong sturdy habit, and bears immense trusses of large flowers on strong stems io inches in length. The colors vary from pure white to rich wallfower-red. Seed is usually sown in early summer, in a frame, and the plants transplanted to the garden in the autumn. They require slight protection over winter. Pkt. 25 ets., 5 pkts. $\$ 1$.

## Pyrethrum, S. \& W. Co.'s New

## Double Hybrids

This beautiful perennial, when grown from a selected strain, is one of the finest for cutting. The seed we are offering is grown by a specialist who, after painstaking effort, has produced a wonderful strain. The flowers are large, very double, and the colors are distinct shades of pink, salmon, scarlet and pure white. Pkt. 25 cts., 5 pkts. \$1.

## NEW SALVIAS

We offer three New and Rare Salvias, and would ask our patrons to give them a trial.
HARBINGER. This new English introduction, which was first featured at the British Empire Exhibition, at Wembley, in 1924, is a notable advance in this favorite border and everblooming bedding plant. It is a true, dwarf, large-flowering Salvia which commences blooming in July from early-sown seed and continues until hard frost. It makes beautiful symmetrical plants about is inches high, and is densely clothed with long sprays of large, brilliant scarlet flowers. A decided acquisition to the Salvia family. Pkt. 25 ets., 5 plts. $\$ 1$. AMERICA, OR GLOBE OF FIRE. A new variety of this popular flower. The bushy plants do not grow over 15 inches high, with the large spikes of brilliant scarlet flowers thrown well above the plant, making a total height of about 2 feet. If desired for borders or beds, this is indeed an acquisition on account of its uniformity of height. A continuous bloomer. Pkt. 25 ets., $1 / 80 \mathrm{Oz}$. $\$ 1$, $1 / 40 \mathrm{oz}$. $\$ 1.75$.
OSTRICH-PLUME. The Ostrich-Plume Salvia is the most beautiful of all Salvias of recent introduction. The habit of the bush resembles the Splendens type but, unlike Splendens, produces a plume. The bush is well covered with these plumes of the most intense, dazzling scarlet. As a cut-flower for vases one plume alone makes a delightful decoration. Comes 75 per cent true from seed, and is as hardy as the other Salvias. Pkt. 25 cts., 5 pltts. $\$ 1$.


## ANTIRRHINUM (Snapdragon) Giavt flowering <br> half high varieties

This is considered one of the finest half-hardy perennials which may be flowered from seed the first year. Plant-breeders both in Europe and America vie with one another each year in introducing new strains. They are very valuable, both as a cut-flower for home decoration or for bedding. The following 6 varieties attain the height of $11 / 2$ feet and are splendid varieties in every way.

1. CARMINE QUEEN
2. THE FAWN
3. APRICOT QUEEN
4. MONT BLANC
5. GOLDEN QUEEN
6. FIREBRAND

Any of the above named varieties, each, pkt. 15 cents, $1 / 4$ ounce 75 cents


## 12 Distinct Giant Summer-flowering Sweet Peas

1 SCARLET
2 WHITE
3 BRIGHT BLUE 4 CARMINE

5 CREAM
6 LAVENDER
7 NAVY BLUE
8 LIGHT PINK

9 CREAM PINK 10 MAROON
11 PURPLE 12 SALMON-PINK

## SPECIAL OFFERING

COLLECTION. One pkt. each above 12 distinct colors, $\$ 1$. One oz. each above 12 distinct coilors, $\$ 5$


Victory Quilled Zinnia

## Statice (Sea Lavender)

The Sea Lavender has become very popular, especially for cutting for house decoration. The cloud-like masses of flowers of the branching varieties make borders gay for a long time, while their delicate coloring and light, graceful habit are a great help to helichrysums and other everlasting flowers. Sow seed outdoors early in May or to get an early start sow in a hotbed in March and transplant in April.
Suworowi. Cloud-like masses of bright rose.
Sinuata, Mauve. Clear mauve.
Sinuata, Rose Superba. New. Beautiful rose. Sinuata, Blue. Rich deep blue.
Sinuata, Yellow (Bonduelli). Bright yellow.
Any of the above, pkt. 25 cts., 5 pkts. $\$ 1$

## Two Sweet Williams

We are offering in the specialties section of our catalogue two really worth-while Sweet Williams. They have been grown in many American gardens for years, but we feel that their value should be brought more prominently to the attention of garden-lovers. Seed of this pretty hardy perennial should be sown in a frame during late spring and transplanted to the garden in early autumn, so that they become well established before winter.
Scarlet Beauty. An intensely rich, deep scarlet, very vivid, and quite an improvement over other listed varieties of its color.
Newport Pink. A beautiful even shade of water-melon-pink or salmon-rose. The flowers are borne in massive heads, on stems $15 / 2$ feet high. For midseason bedding it is very effective.

Each, pkt. 15 cts., 2 pkts. 25 cts.

## Thalictrum Dipterocarpum

Among the genus of hardy plants this is a real gem, not only for garden, but its dainty, graceful spraves of flowers, elegantly arranged on stems 4 feet high, are invaluable for cutting The flowers are a charming shade of violet-mauve, which is brightened by a cluster of lemon-yellow stamens and anthers. Pkt. 25 cts., 5 pkts. $\$ 1$.

## New Verbenas, Hybrida Grandiflora

A magnificent new strain of Verbenas, of robust, compact habit and free blooming. The trusses are immense, the individual florets measuring an inch and over in diameter. The Verbenas are fixed and come true from seed.
Blue. White eye.
Coccinea. Scarlet, small eye.
Lucifer. Vivid scarlet self.
White King. Pure white.
Rose King. Rose-pink, large white eye.
Any of the above, pkt. $25 \mathrm{cts} ., 1 / 4 \mathrm{oz} . \$ 2$

Picotee Zinnia

## Viscaria, Tom Thumb

This beautiful new race of Viscarias is quite unlike others, in that the plants are compact and bushy in form and bloom so freely as to be entirely covered. The plants grow evenly in height and require about same time from sowing to blooming as sweet alyssum. Indiv dual flowers resemble single wild roses in miniature form. We offer three distinct colors.
White Queen. Pure white. Rose Queen. Rose. Blue Queen. Bright blue.

Any of the above, pkt. 25 cts., 5 pkts. $\$ 1$

## NEW ZINNIAS

We offer on pages 117 and 120 all the types of Zinnias listed by us, but have ilustrated in our Novr-lty Section several new types which our California growers have developed in recent years.
New Double Dahlia-flowered. We are pleased to say that we have been able to secure this Zinnia in separate colors this year. The plants are of the same vigorous habit as our Giant Doubleflowering varieties listed in the color illustration on page II7. They attain the height of 3 feet, producing mammoth flowers averaging 6 inches across by 3 to 4 inches in depth, similar in shape to the decorative dahlia. A fitting companion to our strain of Giant Double-flowering Zinnias.
Canary Bird. Primrose.
Crimson Monarch. Largest of the red shades.
Exquisite. Light rose, center deep rose.
Golden State. Rich orange-yellow.
Meteor. Deep glowing red.
Polar Bear. Large, pure white.
OId Rose. Beautiful shade of old rose.
Mixed. A mixture of all shades.
Each, pkt. 25 cts., 5 pkts. $\$ 1$
COLLECTION: One pkt. each of above

## 7 varieties for $\$ 1.25$

Picotee. The flowers of this new type of Zinnias are not as large as those of the Giant Double varieties but are very effective. The petals are all well marked with a color distinct from that of the body of the flower. Plants attain a height of $I \pm / 2$ feet. We offer them in a splendid mixture of colors. Pkt. 25 cts., 5 pkts. $\$ 1$.
Victory Quilled. This new type of Zinnias form to the cactus dahlia. The petals have a rather refined looking appearance and are very graceful. Plants attain a height of $11 / 2$ feet. We offer them in a good mixture of colors. Pkt. 25 ets., 5 pkts. $\$ 1$.
Dwarf Double Salmon-Rose. While the Giant Double and Dahlia-flowered Zinnias are in great demand for cutting purposes, we wish to recommend this very beautiful variety for bedding or as a dwarf border variety or for table decoration. The color is a brilliant salmonrose. Pkt. 15 cts., oz. $\$ 1.50$.

Dahlia-flowered Zinnia


Verbena hybrida grandiflora


Tom Thumb Viscaria


Newport Pınk Sweet William

## Fifteen Fine Exhibition Sweet Peas

Each year the Sweet Pea enthusiasts of Europe and America offer a list of Novelty Sweet Peas. There are now several hundred good varieties in commerce, many of them of splendid merit, but in many cases the varieties are much alike. We have listed on pages II4 and $\underline{1} 15$ of our catalogue 44 of the most distinct varieties which we respectfully recommend. Many of our customers, however, are desirous of growing a limited number of varieties but want these to be the very best. It is with this in mind that we offer the following:

Brocade. Considered the finest variety in the art Pkt. O lavender, and rose-pink, with a satiny finish. The flowers are large and exquisitely shaped, carried on strong stems \$0 15 \$0 75
Charity. This is, without a doubt, the finest rich the brilliant crimson which does not burn in the sun. A vigorous grower, the exquisitely waved flowers are usually produced in fours on long, graceful stems. Defiance. The most brilliant Sweet Pea yet intro$15 \quad 75$ Defiance. duced. It is a fine, large, orange-scarlet,



## GENERAL LIST OF FLOWER SEEDS

In presenting this list of Flower Seeds for your attention, every care has been taken to secure seeds from sources of supply known to us, and from our experiences and from our tests at our trial grounds, to be of the highest possible merit. Our Flower Seeds are selected with an idea of superiority of strain and we handle only the highest possible types in each respective class.

We mail all Flower Seeds FREE OF COST to any Post Office in the United States.

## ABUTILON

## (Chinese Bellflower, Flowering Maple)

 Finest Mixed. Attractive coolhouse shrub and window-plant. Per-petual-blooming, bearing lovely bell-shaped flowers; valuable for winter decoration and summer bedding. Height 4 feet. Pkt. 25 cts., $\frac{1}{32} \mathrm{Oz}$. \$1.
## ABRONIA

Verbena-like plants, very fragrant, especially toward evening. Charming trailers for vases, rockwork, etc. Half-hardy annuals. Pkt. Umbellatum. Rosy pink. Height $3 / 4 \mathrm{ft}$.......................... . ${ }^{\circ} \mathrm{o}$ 10

## ACHILLEA

Ptarmica, The Pearl (Sneezewort). Hardy perennial. One of the best, bears a profusion of small, double, white flowers during the entire season. Fine for cutting. Height $21 / 2$ feet. Pkt. $25 \mathrm{cts} ., 1 / 802 . \$ 2$.

## ACONITUM (Monkshood, or Wolfsbane)

Napellus. A hardy perennial, growing in any good garden soil, producing long spikes of curiously shaped blue flowers. Well adapted for planting among shrubbery. Height 3 to 5 feet. Pkt. Io cts., $1 / 4 \mathrm{Oz} .35 \mathrm{cts}$.
Finest Mixed. All colors. Pkt. Io cts., $1 / 4 \mathrm{oz} .25$ cts.
ACROCLINIUM. See page 12 I .

## ADLUMIA (Mountain Fringe)

Cirrhosa. A very graceful, hardy, biennial climber. The foliage is somewhat similar to that of maidenhair fern. The flowers are tube-shaped, white or purplish, resembling in form the bleedingheart and entirely cover the plant. Excellent for trellises or old stumps of trees. Flowers first season from seed, if sown early. Pkt. 15 cts., 2 pkts. 25 cts.

## ADONIS

Estivalis (Pheasant's Eye). Hardy annual. Dark green foliage; scarlet flowers. Height I foot. June Pkt. to August.

Po I
Autumnalis (Flos Adonis). Smail, crimson fowers. with dark center; globose. Height I foot. May to July. Vernalis (Spring Adonis). Hardy perennial, with large yellow flowers in the early spring. Height I foot. May.

## AGATHAEA (Blue Daisy)

Cœlestis. A tender perennial, with beautiful blue flowers. Fine pot plant for winter blooming in conservatories. Height i foot. Pkt. I5 cts., 2 pkts. 25 cts.

## AGERATUM (Floss Flower)

One of the very best bedding plants, being literally a sheet of bloom from early summer till frost. Unlike many bedding plants, their flowers are not liable to be spoiled by rain, nor do the colors fade out. Easily raised from seed, which is usually started in a hotbed or window and transferred to the open ground in May. Can also be sown outdoors in May.
Blue Perfection. Large heads of deep blue flowers produced in abundance. Fine for cutting. Pkt. Io cts., $1 / 4 \mathrm{Oz} .50 \mathrm{cts}$.
Little Blue Star. A very dwarf variety used largely for edging, growing about 4 to 5 inches high; bright blue flowers. Pkt. 25 cts., 5 pkts. \$I.
Little Dorrit, Blue. This variety grows about 6 inches high; flowers bright blue. Pkt. Io cts., $1 / 402.50 \mathrm{cts}$.
Little Dorrit, White. Same in habit as preceding, only white. Pkt. Io cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts}$.
Mexicanum Capella. Distinct variety growing about 9 inches high; flowers rosy chamois. Pkt. I5 cts.. 2 pkts. 25 cts.


## AGROSTEMMA

Coronaria (Rose Campion; Mullein Pink). Hardy perennial
Flowers dark blood-red and very large; foliage silvery. Height 2 feet. June to September. Pkt. Io cts., $1 / 402.50$ cts.
Coronaria alba. White. Pkt. Io cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts}$.
Coronaria, Mixed. Pkt. Io cts., $1 / 4 \mathrm{oz}$. 50 cts.

## ALYSSUM

This most popular hardy annual needs little introduction. Used extensively as a border for the flower-garden, but equally valuable as a cut-flower, owing to its delightful fragrance.
Little Gem (A.maritimum). Plants grow only 3 to 4 inches high, and each plant completely covers a circular space of 12 to 20 inches. Pkt. Io cts., oz. 75 cts .
Sweet Alyssum (A. Benthami). The well-known fragrant white variety. Pkt. Io cts., oz. 50 cts .
White Carpet ( $A$. compactum procumbens). Pure white; grows oniy 2 to 3 inches high and flowers profusely. Pkt. yo cts., oz. \$1.
Saxatile compactum. Hardy perennial. Excellent rock or border plant, bearing bright yellow flowers from April to June. Height 9 inches. Pkt. 15 cts., oz. $\$ 1.50$.

## AMARANTUS

Brilliant-foliaged annuals, growing from 3 to 5 feet high, some of the varieties bearing curious racemes of flowers. All are useful in borders of tall plants, or for the centers of large beds. They thrive best in a hot, sunny location and not too rich soil; must be given sufficient room to develop their full beauty.
Caudatus (Love-Lies-Bleeding). Blood-red; drooping. Pkt. xo cts. Cruentus (Prince's Feather). Dark red, feathery flowers. Pkt. Io cts. Sunrise. Considered the most brilliant of this family. The foliage is a bronzy crimson, each branch terminating with a tuft of bright scarlet-carmtue leaves. Pkt. 15 cts., 2 pkts 25 cts.
Tricolor (Joseph's Coat). The leaves are red, yellow, and green.

Pkt. Io cts.


Long-spurred Aquilegıas


Border of Alyssum, Little Gem

## ANCHUSA

Capensis. Biennial. Flowers azure-blue. I $1 / 2$ feet. July and August. Pkt. Ioc., $1 / 402.50 \mathrm{c}$. Italica, Dropmore Variety. A hardy perennial whose bright blue, forget-me-not-like flowers are borne on graceful stems during the entire season and late into the fall. It is a great improvement over the existing varieties. 4 to 5 feet. Pkt. I5 cts., $1 / 4 \mathrm{Oz}$. $\$ \mathrm{I}$.

## ANEMONE

Single Giant de Caen (Windflower). Half-hardy perennial. The giant French Anemone. Excellent for cutting. 9 inches. Pkt. Io cts., $1 / 4 \mathrm{Oz}$. 50 cts .
St. Brigid (Irish Anemone). A great variety of colors. Pkt. $25 \mathrm{cts} ., 1 / 4 \mathrm{oz} . \$ 5$.

## ANTHEMIS

Kelwayi (Marguerite). Hardy perennial. Large, daisy-like yellow flowers; good for cutting. Height 2 feet. July to September. Pkt. Io cts., $1 / 4 \mathrm{Oz} .60 \mathrm{cts}$.
Nobilis. White. 2 feet. Pkt. Io cts., 1/402. 75 cts.

## AQUILEGIA (Columbine)

The Aquilegias are fine, free-flowering, hardy border plants. Seed may be planted in the open ground early in the spring, and will, in the case of single varieties, bloom the same season. Best results are obtained by planting in August, when they will come up early in the spring, making vigorous plants, blooming during late spring and early summer.

## Giant Long-spurred, Mixed.

 A very excellent mixture of Columbines, combinations, effective blue, mauve, white, yellow, orange, scarlet, and bright rose-pink. Pkt. 25c., 5 pkts. \$1. Californica hybrida. Beautiful flowers, principally yellow and orange shades. Pkt. I5 cts., $1 / 4 \mathrm{oz}$. $\$ \mathrm{I} .25$.Chrysantha. Canary-yellow. About 3 feet. Pkt. 10 cts., $1 / 4$ oz. $\$ 1.25$.
Cærulea. Violet-blue and white. About 2 feet. Pkt. I 5 cts., $1 / 4 \mathrm{oz}$. $\$ 2$.
Skinneri. True scarlet tipped with green. 3 feet. Pkt. I5 cts., $1 / 4 \mathrm{oz}$. $\$ 2$.

## SWEET SULTANS <br> imperialis)

WHEN we contemplated issuing the 25 th Anniversary Edition of our catalogue, it was our thought to change our policy of illustrating, from time to time, some easily-grown annual flower on the first cover, and to incorporate, in the body of our catalogue, some of the color illustrations we had previously used on our covers. Sweet Sultans (Centaurea imperialis) were first illustrated by us on our 1916 cover. We are submitting it again to the consideration of our worthy patrons as a pleasing and splendid cutflower for the home. We feel that the colors represented are as near to the actual color of the flowers as it is possible to reproduce them. The flowers are deliciously sweet-scented, are borne on long, strong stems, and are particularly striking, lasting several days


## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## The Six Kings of the Aster Family

THIS magnificent class of Asters is distinct from all others in the character of the flowers. The long, narrow petals are folded lengthwise, appearing almost as though quilled. The flowers are of great size and substance and last longer when cut than any other class. Their season for blooming is just after the earliest varieties and before the late branching types. To insure earliest blooming, the seed should be started in the house, hotbed, or coldframe, in April, transferring the plants to their flowering quarters as soon as danger of frost is past. For August and later blooming, sow seed outdoors in May, preferably in a well-prepared seedbed, transplanting the plants when 2 to 3 inches high to where they are to bloom. Seed may, however, be



Queen of the Market Aster


Early Royal Aster


Improved Crego Aster

## S. \& W. CO.'S SUPERB ASTERS

S. \& W, care taken in the preparation of the soil is repaid by finer plants, larger blooms, with longer stems and more profuse flowering. They should have an open, sunny position, and prefer a good, heavy, loamy soil enriched with a liberal quantity of Bone Dust No. 2, and an addition of airslaked lime, and we do not advise growing them on the same ground two years in succession; it is better to change each season. For early flowering, seeds should be started in a sunny window, hotbed or coldframe in April and transferred to their place in the garden as soon as danger of frost has gone by. For August (midseason) and September (late) sow seeds outside in finely prepared ground in May, thinning out to I foot in the rows and 2 feet between. With the above prescribed treatment and frequent cultivation of plants to insure a steady growth until flowering, excellent large blooms with long stems can be obtained.

For the purpose of aiding our patrons in making easy selections of the kind of Asters they desire to grow, we are listing the varieties under the headings Early, Midseason, and Late. The early sorts, such as Early Wonder, Queen of the Market, Lavender Gem, and Early Royal, begin blooming in July, followed by the midseason varieties, such as the Kings, Improved Cregos, California Giants, White Perfection and the Astermums. Then come the late-flowering varieties, such as S. \& W. Co.'s Late Branching, The Beauty Type, Autumn Glory, Heart of France, and Pink Enchantress which come into bloom from the end of August on through September into October. It is quite easy, therefore, with a little care in the selection of the varieties, to have Asters in bloom from early July to hard frost.

## EARLY-BLOOMING ASTERS

Early Wonder. We consider this the earliest Aster in our list, Early Wonder. flowering in early July from seeds sown in the open ground at the end of April, or, if sown indoors in March, can be had in bloom before the close of June. The flowers are of good size, quite double, and are borne on good, long, stiff stems, which, added to their extremely early flowering, makes them of great value for cutting.

## Carmine-Rose

White
Purple
Light Rose
Light Blue
Mixed
Any of the above colors, or mixed, pkt. 15 cts., $1 / 40 z .75$ ets. COLLECTION: One pkt. each of above 5 colors, 50 cts.

Queen of the Market. This well-known, early-flowering Aster is of a branching habit, growing about $\mathrm{I} 1 / 2$ feet high, and comes into bloom directly after Early Wonder.

| White | Crimson | Flesh-Pink |
| :--- | :--- | :--- |
| Rose | Dark Blue | Light Blue |
|  | Mixed |  |

Any of the above colors, or mixed, pkt. 10 cts., $1 / 40 z .50$ ets. COLLECTION: One pkt. each of above 6 colors, 50 ets.
Early Royal. (Branching Type.) This type of Aster is of reEarly Ront development and is best described as an early-flowering form of our Superb Late Branching Aster, having all the good qualities of the latter, but coming into bloom in early August. It is a splendid type of Aster for beds or borders, and its long-stemmed flowers are ideal for cutting.

| White | Rose-Pink | Shell-Pink |
| :--- | :--- | :--- |
| Lavender | Purple | Mixed |

Any of the above colors, or mixed, pkt. 15 cts., $1 / 40 z .75 \mathrm{cts}$. COLLECTION: One pkt. each of above 5 colors, 50 cts .

Semesan is a seed disinfectant. Dusting the seed with it protects against fungus and disease. 2 ozs. 60 cts. 4 ozs. $\$ \mathrm{I}, \mathrm{I} / 2 \mathrm{lb}$. $\$ \mathrm{I} .6 \mathrm{o}, \mathrm{lb} . \$ 2.75,5 \mathrm{lbs} . \$ \mathrm{I} 3$.

## MIDSEASON-BLOOMING ASTERS

## Improved Crego, or Ostrich-feathered. Improved

Type.) This is considered to be the finest and largest of all the Comet Asters. The flowers are borne on long, stiff stems and are of a fluffy character, frequently measuring 5 inches and over in diameter. They are splendid for cutting purposes on account of their good keeping qualities.

| White | Purple | Lavender | Crimson |
| :--- | :--- | :--- | :--- |
| Azure-Blue | Pink | Deep Rose | Mixed |

Any of the above colors, or mixed, pkt. 15 cts., $1 / 40 z .75$ cts. COLLECTION: One plst. each of above 7 distinct colors, 75 cts.
California Giants. Since offering the Beauty type of Asters, . we have frequently received inquiries for a Crego with the robust habit of growth and length of stems that characterize that class. Our grower, after several seasons of hybridizing and selecting, is now able to offer a type characterized by the Beauty's vigorous growth and the Crego or Cstrich-feather type of flowers-a true non-lateral Aster. The flowers are much larger and more substantial than the Improved Crego, neasuring 5 to 6 inches in diameter and standing up well when shipped as cut-flowers. Their immense size and beauty, as well as their long, sturdy stems, make them very attractive when arranged in the home as a cut-flower.
Peach Blossom Deep Rose Light Blue Light Purple White Any of the above colors, pkt. 25 ets., 5 pkts. $\$ 1$
COLLECTION: One pkt. each of above 5 colors, $\$ 1$
Astermums. A splendid new race of American-raised Asters, upright selected from the Comet Type. The plants are of upright growth, frequently having twelve to fifteen strong, sturdy stems $I \frac{1}{2}$ to 2 feet long, each carrying enormous flowers of splendid form, the petals completely covering the center so as to give the impression of one of the large Japanese chrysanthemums. This Aster has been grown with excellent success this past season.
Snow-White Rose-Pink Lavender
Any of the above colors, pkt. 15 cts., $1 / 40 z . \$ 1$
COLLECTION: One pkt. each of above 3 colors, 35 cts .


## S. \& W. CO.'S SUPERB ASTERS

## LATE-BLOOMING ASTERS

## S. \& W. Co.'s Late Branching

This exceptionally fine Aster is without a rival. It is as well known in Europe as in America, and although we placed it on the market only a few years ago, today every florist has a fine stock of the flowers in his window just before the chrysanthemum comes in; and it is often mistaken for the chrysanthemum, which it so much resembles. The flowers are of extraordinary size-much larger than other varieties-and stand erect on long, graceful stems, well above the foliage; flower-stems 15 to 20 inches long. Grand for cutting. Plants extra large and of strong growth; one plant will cover a space $21 / 2$ feet square. By far the most satisfactory Aster grown.

## Pure White <br> Shell-Pink <br> $\underset{\substack{\text { Rose-Pink } \\ \text { Lavender }}}{\text { Ren }}$ <br> Purple <br> Crimson <br> Mixed

Any of the above colors, or mixed, pkt. 10 cts., $1 / 40 z .50$ cts. COLLECTION: One pkt. each of above 6 colors, 50 cts.

## Beauty

This is a recently developed late-flowering strain, coming into bloom late in September and being at their best through October. The plants grow nearly 3 feet high and bear their very large, densely covered flowers on long, strong stems. A very desirable addition to the Aster family on account of their late-blooming character and excellence for cutting. We offer five distinct colors.

## Light Blue Carmine-Rose Purple <br> Light Pink <br> White

Any of the above colors, pkt. 15 cts., $1 / 40 \mathrm{oz}$. $\$ 1$
COLLECTION: One pkt. each of above 5 colors, 60 cts.

## Single Comet Asters

This type of Asters has met with considerable demand recently. From a decorative point of view the possibilities are immense. Their large blooms, often measuring 5 to 6 inches across, make them truly conspicuous.
White
Light Rose
Scarlet
Light Blue
Dark Blue
Mixed

Any of the above colors, or mixed, pkt. 15 cts., $1 / 40 z . \$ 1$
COLLECTION: One pkt. each of above 5 colors, 60 cts.

## Semesan: Seed Disinfectant

Mix a small quantity of Semesan powder with your Aster seeds before sowing-a teaspoonful to one ounce of seed, a "pinch" of the powder to a packet-shake together for a minute and sow. Protects against fungus and disease. 2 ozs. 60 cts ., 4 ozs. $\$ \mathrm{r}, 1 / 2 \mathrm{lb}$. $\$ \mathrm{I} .6 \mathrm{o}, 1 \mathrm{lb} . \$ 2.75,5 \mathrm{lbs} . \$ 13$.

## MISCELLANEOUS ASTERS

Heart of France. This recent introduction is the largest plants grow about 2 feet high, are nicely branched, and bear their long, rich, deep ruby-red flowers on long, strong stems. A very beautiful dark variety and blooms with the late-blooming sorts. Pkt. 25 cts., $1 / 4$ oz. $\$ 2$.
Lavender Gem. Truly a gem and easily the finest early lavender. In the full, double flower, the feathery effect of the ostrich-feathered type is enhanced by the fact that it bears long, partly tubular florets that are irregularly cut and slashed, resembling ragged chrysanthemums. Pkt. 15 cts., $1 / 4 \mathbf{o z}$. $\$ 1.25$.
Autumn Glory. A beautiful seashell-pink Aster, and one of late Asters are past their prime, thus prolonging the Aster season two weeks and coming into bloom when good flowers are scarce. The flowers are splendid in size and form, very double, and are borne on stems of unusual length. Pkt. 15 cts., $1 / 4 \mathrm{oz} . \$ 1.25$.
Pink Enchantress. This beautiful Aster is a pleasing shade tress carnation. It blooms of salmon-pink, similar to the EnchanThe farnation. It blooms about a week earlier than Autumn Glory. The flowers are full, double, of medium length and very broad. A splendid variety or cutting. Pkt. 15 cts., 1/40z. \$1.25.
White Perfection. Finest midseason white Aster in cultidin vation. The flowers are 4 inches in diameter and exquisite in form, and the plants are taller than those of the late upright Asters. When first open the entire flower is whorled, producing a charming effect; the broad petals are slightly folded lengthwise, making them appear rather narrow. The plants are extremely vigorous, and they carry about twelve large flowers on strong stems free from side branches. Pkt. 15 cts., $1 / 402 . \$ 1.25$.

## Hardy Perennial Asters

## Michaelmas Daisies

Single, fall-flowering, hardy herbaceous plants which thrive in any good garden soil. We offer them in four distinct colors, as well as in a mixture.
Alpinus. Large bluish purple flowers in May and June. Good rockgarden plant. Height 9 inches. Pkt. 15 cts.
Alpinus albus. White form of above. Pkt. I5 cts.
Amellus bessarabicus. Large, rich violet flowers in profusion in August and September. Height 2 feet. Pkt. Io cts.
Novz-angliæ, Mixed. Good-sized flowers in September and October. Height 4 feet. Colors, Violet-purple, Reddish Crimson, and Pink. Pkt. Io cts.
Subcæruleus. Compact, tufted plants with solitary, glowing purple flowers 2 to 3 inches across, on 18 -inch stems, in June and July. Pkt. 25 cts.

## ANTIRRHINUM (Snapdragon)

This is considered one of the finest perennials which may be flowered from seed the first year. Plant-breeders in Europe and America vie with each other in introducing new strains each year. They are very valuable both as a cut-flower for home decoration or for bedding. We offer below ten choice varieties of the Half-High type and six varieties of the Tall type. The Tall varieties are best seen to advantage in long borders in flower-gardens, making splendid subjects for backgrounds, while the Half-High type have now superseded the others in popularity on account of their suitability for bedding. Seed may be sown in the open ground early in May and be had in bloom in July, but it is best to start the plants indoors in pots or flats or in a frame in March and transplant the seedlings out-of-doors as soon as weather will permit.

## Giant-flowered Half-High Varieties Height about

Apricot Queen. Apricot-pink, white tube.
Carmine Queen. Rose-carmine.
Empress. Rich velvety crimson.
Fascination. Pearly pink self.
Fawn. Rose and gold-one of the best colors used alone for bedding.
Named varieties, each, pkt. 15c., COLLECTION: One pkt. each of above 10 fine varieties, $\$ 1$

\section*{Giant-flowered Tall Varieties | Height about |
| :---: |
| $\substack{\text { f feet }}$ |}

We offer a selection of the best six colors:

## Garnet. Garnet.

Delicata. Rose-pink.
Queen Victoria. White.

Rose. Beautiful rose-pink
Scarlet. Bright scarlet.
Yellow. Rich golden yellow. Named varieties, each, pkt. 15c., $1 / 402$. 75c.; mixed, pkt. $10 \mathrm{c} ., 1 / 4 \mathrm{oz}$. 60c. COLLECTION: One pkt. each of above 6 distinct colors, 50 ets.

## ARCTOTIS GRANDIS (African Daisy)

A remarkably handsome annual from southwestern Africa. It forms much branched bushes 2 to 3 feet high, its flowers are large and showy, being pure white on the upper surface. There are few annual flowers grown in the garden more valuable for cut-flower work than the Arctotis. It is easily grown from seed, and may be started in hotbed, in the house or in the open ground, the seed germinating in about five days. The plants may be expected to come into bloom early in July and continue until quite hard frost. It delights in a sunny situation. As a cut-flower it is especially valuable, the blooms lasting a week or ten daysin water, and if undeveloped buds are cut and placed in a sunny window, every one will open and produce as fine flowers as though left on the plant. Pkt. 15 cts., $1 / 402.75$ ets.


Arctotis Grandis

## ARGEMONE (Mexican, or Prickly Poppy)

Mexicana. A very interesting and highly ornamental plant, both in and out of bloom. The plants are of sturdy character, attaining a height of 3 feet. The ornamental spiny foliage has a clear silvery mid-rib, a splendid color contrast. The flowers are poppy-like, of satiny texture, over 3 inches across, in various shades of rich yellow to creamy white. It blooms early in July and continues without interruption until November. Sow seed where intended to bloom in May, thinning out later; does well in a sunny location and light soil. Pkt. Io cts., $1 / 40 \mathrm{Oz} .50 \mathrm{cts}$.
Platyceras rosea. A recent introduction similar in habit of growth and foliage to the above with rich ruby-rose flowers. Pkt. $15 \mathrm{cts} ., 2$ pkts. 25 cts .

## ARISTOLOCHIA (Dutchman's Pipe)

Sipho. A very attractive and highly ornamental climber, with flowers resembling the pitcher plant. Pkt. Io cts.

## ASPARAGUS

Plumosus nanus. A graceful pot-plant for either house or conservatory. Finely cut foliage. Pkt. 25 cts., 100 seeds $\$ 1$. Sprengeri. Drooping foliage, adapted for hanging-baskets or cutting. Pkt. 25 cts., oz. \$I.

## ASPERULA (Sweet Woodruff)

Odorata. Hardy perennial. Handsome creeping plant, with deep green, whorled foliage and pretty white flowers. Especially useful for carpeting in shady situations. Height, 6 inches. June and July. Pkt. Io cts., $1 / 40 z .50$ cts.

## AUBRIETIA (False Wall Cress)

Pretty, dwarf-growing rock plants, forming broad masses of silvery green foliage and sheets of flowers in spring and early summer.
Bougainvillei. Showy purple flowers. Pkt. I5 cts.
Leichtlinii. Bright reddish crimson. Pkt. I 5 cts.


## DOUBLE CAMELLIA-FLOWERED BALSAM (Lady's Slipper)

An old and favorite garden flower, producing its gorgeous masses of beautiful, brilliant-colored, double fowers in the greatest profusion; of easiest culture; succeeds in a good, rich soil. Tender annuals. 2 feet. Start the seed indoors in April, or sow out-of-doors in May. When specimens are wanted, plant at least 18 inches apart; splendid when grown in pots.

Pkt. Oz.
White Perfection. Large; double; white............. \$0 io \$1 00 Scarlet King. Glowing, fiery scarlet; large, double flowers
Salmon Queen. Deep rose-pink; large, double flowers Lilac Gem. Beautiful pale lilac.

Io 100
Rur Gem. Beautiful pale lilac ........................ Purple King. Double; rich purple.

Io I 00

Primrose Gem. Double; beautiful primrose; the best
yellow variety to date.
Io I 00
 COLLECTION: 1 pkt. each, 6 named varieties, 6 pkts., 50 ets. S. \& W. Co.’s Double, Mixed. A mixture of selected beautiful, spotted, blotched and striped self-colors as well as oz. \$1.

## BEGONIAS

## Everblooming Bedding Varieties

The following varieties of Begonia semperforens and B. gracilis take rank as bedding plants with geraniums and coleus, doing equally well in full sunlight, and surpassing both in positions partially or wholly in shade. They are of sturdy growth, growing about i foot high, and forming dense bushes which, from May until frost, are completely hidden with flowers. As pot-plants for winter flowering they are superb, being a mass of bloom throughout the entire year. Easily raised from seed, which should be started either indoors or in a hotbed.
Gracilis, Primadonna. Carmine-rose; brown-tinted foliage. . \$o 25
Gracilis, Bonfire. Scarlet; metallic brown foliage.
Gracilis luminosa. Brilliant dark scarlet; very effective.... 25
Semperfiorens Erfordii. Rosy carmine; green foliage....... . I5
Semperforens, Triumph. Pure, glistening white.............. 15
Semperfiorens, Vernon. Bright orange-carmine; red foliage..
Tuberous-rooted Single, Mixed. Excellent for indoor cul-
ture only.
Tuberous-rooted Double, Mixed. The double form.

## BALLOON VINE (Love-in-a-Puff)

This rapid-growing annual climber succeeds best in a light soil and sunny situation. The flowers are white and the seed-vessels which resemble miniature balloons, are very interesting to children. Seed should be sown as soon as ground becomes warm, in an open situation. 8 feet. Pkt. Io cts., $1 / 40 z$. 25 cts.

## BAPTISIA (False Indigo)

Australis. Hardy perennial. Free-growing plant, with deep green cut foliage and lupine-like dark blue flowers in long racemes. 3 feet. June and July. Pkt. Io cts., $1 / 40 z .75$ cts.

## BARTONIA

Aurea. Hardy annual. Very bright golden flowers from July to September. Fine for cutting. I foot. Pkt. Io cts., $1 / 40$. 50 cts .

## BOCCONIA (Plume Poppy; Tree Celandine)

Cordata. Effective, hardy perennial for single specimens or groups on lawns. Foliage glaucous green; bears freely spikes 2 to 3 feet long of cream-colored flowers; easily raised from seed. 5 feet. Pkt. Io cts., $1 / 402.50 \mathrm{cts}$.

## BOLTONIA (False Chamomile)

One of the showiest of our native hardy perennials, growing 4 to 6 feet high, with daisy-like flowers, borne in great numbers from July to September.
Asteroides. White. Pkt. Io cts.
Latisquama. Lilac-pink. Pkt. Io cts.



Fpopularity as has the Calendula in recent years. Florists throughout the United States now grow it in large quantities in the greenhouse benches in the autumn, and it may be seen in the florists' shops throughout the year. Its depth of color meets with instant favor from the discriminating flower-lover, and its great adaptability as a cut-flower for home and table decoration has helped to increase its popularity. Our growers have, through painstaking efforts, worked up a strain, the plants of which are more robust in character, bloom more freely, with flowers larger, more double, and very intense in color. Seed should be sown in the open ground where intended to tloom in the early spring; thin out to leave 1 foot of space between the plants.

Orange King. Deepest orange. Golden King. Rich golden yellow. Lemon King. Rich lemon-yellow.
Each, pkt. 25 cts., $1 / 4$ oz. 50 cts., oz. $\$ 1.50$
COLLECTION. Pkt. each of above 3 varieties, 50 cts.; $1 / 4 \mathrm{oz}$. each of above

3 varieties, $\$ 1$



Bellis perennis

## BELLIS (English Daisy)

A favorite perennial, which will stand the winter if given the protection of a little litter. In bloom from early spring until well on in the summer. Easily raised from seed, which may be sown any time from spring until August. For best results, new plants should be raised from seed each year. The following are the finest doubleflowering kinds, selected after careful test.

Pkt.
Giant-flowering White. . \$o 25
Snowball. White.
Pkt.
Longfellow
. 8015
Mixed..
Dongre Red Quilled.
15
25

## BEAN

Scarlet Runner. The well-known rapid-growing annual climber, with bright red flowers from July to September. Fruit is a most delicious vegetable. 8 feet. Pkt. Io cts.

## CALENDULA (Pot Marigold)

This is one of the best and showiest, free-flowering, hardy annuals, growing in any good garden soil, and producing a fine effect in beds or mixed borders.
Golden King. Rich golden yellow
Lemon King. Rich lemon-yellow
Meteor. Large; double; yellow, each petal striped with orange.
Orange King. Deepest orange.
Prince of Orange. Similar to Meteor, but darker
Ranunculoides fl.-pl. Striped and margined.
The Ball. Splendid orange variety for forcing.
Mixed. All colors mixed. outside bedding.

## BROWALLIA (Amethyst)

One of our favorite profuse-blooming bedding plants, covered with rich, beautiful, winged flowers during the summer and autumn months, supplying a very uncommon shade of intense blue; grows freely in any rich soil; blooms finely in the winter if the plants are lifted in autumn and cut back.
Speciosa major. A beautiful-flowering variety of the most brilliant ultramarine-blue-a rare color. Does finely outsidc in the border, or in hanging-baskets or vases, but is especially valuable as a pot-plant for winter and early spring flowering. Pkt. 25 cts.

## BRACHYCOME (Swan River Daisy)

Free-flowering, dwarf-growing annuals, covered during the greater part of the summer with a profusion of pretty blue or white flowers, suitable for edgings, small beds or pot culture. Height, 9 inches.
Iberidifolia, Blue. Pkt. Io cts.
Iberidifolia, White. Pkt. Io cts.

## CACALIA

Coccinea. (Tassel Flower; Flora's Paint-Brush.) A neat annual, of easy culture, with bright red, tassel-shaped flowers; blooms from June to September; fine for borders. Pkt. Io cts., 1/4 oz. 60 cts.

## CALCEOLARIA

The strains offered herewith are grown by a famous English seedgrowing specialist and are the finest in existence. The S. \& W. Co.'s Giant Strain is intended for conservatory growing; the Rugosa for
S. \& W. Co.'s Giant Strain. Pkt. 50 cts.

Rugosa. Shrubby; for bedding. Pkt. 50 cts.

## CHELONE (Turtlehead)

Beautiful hardy perennial; very
should be grown in every garden. Barbata coccinea. Red. Summer. 3 feet. . . . . . . . . . So Io \$kt. 50
Barbata Torreyi. Coral-red. Summer. 3 feet....... 10 . 50
$\begin{array}{cc}\text { Pkt. } & 1 / \mathrm{oz} . \\ \text { So } 25 & \text { \$0 } 50\end{array}$

CALLIOPSIS
Showy and beautiful, free-flowering annuals and perennials, of the easiest culture, doing well in any sunny position, blooming all summer, and excellent for cutting and massing. Sow where they are to bloom, thinning out to stand 6 inches to 12 inches apart. By keeping the old flowers cut off the flowering season can be lengthened until late autumn.

## ANNUAL VARIETIES

Bicolor nana. Dwarf, compact, clear yellow, small garnet eye. Height, io inches. Crimson King. Splendid; dwarf; rich velvety crimson-garnet. Height, to inches. Golden Ray. Dwarf, compact plants not over 9 inches high, densely covered rich maroon flowers edged golden yellow, the petals twisted like the cactus dahlia.
Golden Wave. Rich golden yellow, chestnut-brown center. Height, i foot.
Marmorata. Tall grower; rich golden yellow and wallfower-red flowers. 2 feet.
Nigra speciosa. Strong grower; large flowers of rich reddish maroon. Height, 2 feet.
Tiger Star. Rich reddish brown, tigered with golden yellow.
Tinctoria. A very striking tall-growing variety. The flowers are a bright yellow and maroon, evenly divided in color combination. Height, 2 feet.
S. \& W. Co.'s Mixture. A select mixture of tall varieties.

Each, plet. 10 cts., $1 / 402.50$ cts., oz. $\$ 1.50$

## COREOPSIS. PERENNIAL VARIETIES

The following two varieties of Perennial Calliopsis are usually sown in June and transplanted $I 1 / 2$ to 2 feet apart. Give slight winter covering. May be had in flower the first year if sown under glass in January.
Grandifiora. Deep golden yellow, cup-shaped flowers, on fine stems for cutting.
Height 2 feet. All summer. Pkt. 10 cts., $1 / 40 \mathrm{Oz} .40$ cts.
Lanceolata grandifiora. Same as above except flower is lanced. Pkt. 1oc., 1/40z. 75c.


Brachycome

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## CAMPANULA, or BLUEBELLS

## PERENNIAL VARIETIES

These are among our best-known hardy perennials. The tall varieties are fine for cutting, while the dwarf sorts make excellent border plants. All have dainty bellshaped flowers. Some of the varieties offered will flower the first season from seed if sown early.
Carpatica. This variety is largely used for edging. Flowers of deep blue Pkt. all summer. Height, about 6 inches.
Carpatica alba. The white-flowered form of the above.

## Macrantha. Blue

Persicifolia grandifora, Blue (Peach Bells). One of the finest of the hardy Bellflowers; grows 2 to 3 feet high, with large, blue flowers. Persicifolia grandifiora alba. The white-flowered form of the above.
Pyramidalis (Chimney Bellflower). Spikes 3 to 4 feet tall; erect, pyramidal flowers, large and of beautiful blue. Splendid for both garden and pot culture
Pyramidalis, White

## CAMPANULA MEDIUM (Canterbury Bells)

These are strictly biennials, and require to be sown from June i to September i; when strong enough, transplant to a distance of 6 inches apart; after frost has set in, protect with leaves and straw. They flower the following June, after which they die. Their colors are so pure that gorgeous effects can be achieved with them.

|  | Pkt. | 1/40z. |  | Pkt. | 1/4oz. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Single White | O 10 | \$0 50 | Single Striped. | O 10 | \$0 50 |
| Single Rose. | 10 | 50 | Single Mixed | 15 | 50 |
| Single Blue. | 10 | 50 | Double Mixed | 15 | 75 |

## CAMPANULA CALYCANTHEMA (Cup-and-Saucer)

These produce beautiful, large, single flowers resembling a cup and saucer; they require the same treatment as Campanula Medium.


## CANDYTUFT (Iberis)

The Candytuft is almost as fragrant as the sweet alyssum and very popular. Very useful as a bedding plant or for border work. Sow outdoors in April, where it is to bloom, and thin well when the plants grow about 1 inch. Sow also in July for fall blooming. Where grown in rows, best results for cutflowers can be obtained only by giving the plants at least a foot apart in the rows and $I x / 2$ feet between the rows.

## S. \& W. Co.'s Giant Hyacinth-flowered. We con- Pkt. Oz.

 sider this the finest white variety, which, through selection, has been greatly improved. The flowers are of large size, borne in large trusses well above the foliage. Finest for cutting or for the border........ . $\$ 0$Empress. Excellent; white.
IO
Dunnett's Crimson. Deep crimson
I 00
Pink Beauty. New. Fine pink. Height, i foot.
Lilacina. Lilac. Height, I foot.
Mixed. All

S. \& W. Co.'s Giant Hyacinth-flowered Candytuft


Campanula Medium

## PERENNIAL CANDYTUFT

A very early-flowering variety, largely used in the hardy border. Foliage exceedingly pleasing in color and very decorative.
Gibraltarica. White, shaded pink. Pkt. I5 cts., oz. $\$ 3$.
Sempervirens. Pure white fowers; evergreen foliage. Pkt. I5 cts oz. $\$ 5$.

## CANARY-BIRD FLOWER $\begin{gathered}\text { (Tropaoolum } \\ \text { canariense) }\end{gathered}$

A rapid-growing, tall climbing annual, producing hundreds of its pretty, fringed, bright yellow flowers, which resemble a canary-bird with expanded wings. Pkt. Io cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts}$.

## CARNATIONS

Carnations are general favorites for their delicious fragrance and richness of colors. They are indispensable, both for greenhouse culture in winter and for the garden in summer. The Marguerite and Chabaud's types are the best for summer-flowering.
Chabaud's Everblooming. Raised by a famous French specialist. Blooms in five months after being sown, and continues to flower in the greatest profusion indefinitely. Mixed colors. Pkt. 25 cts., 5 pkts. \$I.

## GIANT MARGUERITE CARNATIONS

These are deservedly the most popular Carnations with the anıateur, as they begin flowering in July or August if sown early in the spring. The strain offered is of extra-fine quality, producing on long, strong stems an abundance of large, double, beautifully fringed, highly scented flowers; with slight protection they will survive an ordinary winter and bloom freely the following spring.
$\begin{array}{lll}\text { Giant Pink } & \text { Giant Crimson } & \text { Giant Yellow } \\ \text { Giant White } & \text { Giant Scarlet } & \text { Giant Mixed }\end{array}$
Each, pkt. 15 cts., $1 / 4$ oz. $\$ 1$, oz. $\$ 3$
COLLECTION: One pkt. each of above 5 colors, 50 cts.

## CERASTIUM

Tomentosum. Hardy perennial. A very pretty dwarf, white-leaved edging plant, bearing small white flowers. Pkt. I5 cts.

## CASTOR-OIL PLANT (Ricinus)

The Ricinus are tall, stately growing plants of tropical appearance; their luxuriant foliage renders them exceedingly ornamental. They are freegrowing, tender annuals of easy cultivation. Half-hardy annuals. Africanus. Very large green foliage. . . . . . . . . . . . . . . . . . . . . . . . . . . . So io
Zanzibarensis. New Giant Castor-Oil Plant from Africa. .
Borboniensis arboreus. Large and handsome green foliage. is feet Communis (Castor-Oil Plant). Green foliage. 6 feet.
Gibsonii. Dark, purplish-red foliage. 6 feet. .
Cambodgensis. Leaves bronzy maroon, with red veins; stems black
Duchess of Edinburgh. Dark red foliage. 6 feet.
Gibsoni mirabilis. Dwarf, compact; very fine.
Sanguineus. Tricolor, red spotted; fruit in clusters; red foliage. Io ft . Mixed.... .............................................. 1 b . oz. 25 cts.

## CELOSIA

## Celosia cristata (Cockscomb)

Free-blooming annuals, growing best in rather light soil, not too rich; make grand border plants and are attractive for pots. Seed can be sown under cover in early spring and planted out in May, or may be sown outdoors in May. If dwarf growth is desired, do not crowd.
Empress. Rich crimson. I foot. Pkt. $25 \mathrm{cts} ., 1 / 4 \mathrm{oz} . \$ 2$.
Glasgow Prize. Dark crimson. I foot. Pkt. 15 cts., $1 / 4 \mathrm{Oz}$. $\$ \mathrm{I}$.
Dwarf Mixed. I foot. Pkt. Io cts., $1 / 40 z$. 75 cts .

## Celosia plumosa (Feathered Cockscomb)

Make fine plants for large beds or groups, and the plumes or flowers can be cut and dried for winter bouquets. Should be treated same as Cockscomb described above.
Ostrich-plumed, Crimson. Pkt. Io cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts}$. Ostrich-plumed, Yellow. Pkt. $10 \mathrm{cts} ., 1 / 40 z .50 \mathrm{cts}$.
Ostrich-plumed, Mixed. Pkt. Io cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts}$


CELOSIA, PRIDE OF CASTLE GOULD


CASTOR-OIL PLANT

## Celosia Thompsonii magnifica

## Improved Strain of Feathered Cockscomb

Thompsonii magnifica is of pyramidal growth, often attaining the height of 3 feet, and producing graceful, feathery plumes of the most magnificent shades, ranging from the clearest yellow to the darkest blood-red.
Thompsonii magnifica, Crimson. Bright crimson. Pkt. I5 cts., $1 / 4 \mathrm{Oz}$. \$1.
Thompsonii magnifica, Yellow. Beautiful yellow. Pkt. I5 cts., $1 / 4 \mathrm{oz}$. $\$ \mathrm{I}$.
Thompsonii magnifica, Mixed. Pkt. Io cts., 1/40z. 75 cts.

## Celosia, Pride of Castle Gould

An entirely distinct type of the Celosia pyramidalis plumosa, and surpasses by far anything thus far placed on the market. This strain has through constant culture and careful selection and hybridization proved its superiority to anything similar ever offered.

Habit of Plants.- Pyramidal, compact growth of from 2 to 3 feet, with immense, extra-fine feathered heads, gives the plant a most striking appearance.

COLOR.-The following distinct colors are among these hybrids: Blood-red, real carmine, golden yellow, salmon, deep scarlet, dark orange and wine-red; however, by variation there will be found many more shades; the self-coloring will be surprising.

This illustration is from a photograph taken on the estate of M. C. D. Borden, Oceanic, N. J. (William Turner, Supt.). The following is a description by William Turner: "Celosia Castle Gould is admirably adapted for growing along in pots for decorative purposes or for planting out in beds, provided the beds are situated to receive full benefit from the sun's rays. Castle Gould is a decided improvement over all other Celosias, both for richness of colors and the massive plumes this variety produces. Being a free, vigorous grower, it is not necessary to sow the seed for outdoor planting until say the middle of March. They would then be nice, vigorous plants in 3 - or $31 / 2$-inch pots, ready for placing in the beds about the end of May. With a little care, they would be a mass of gorgeous plumes until killed down by frost." Per pkt., mixed shades, 25 cts., 5 pkts. \$1.

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## CENTAUREAS

There is, perhaps, no more popular annual than the Centaurea. Will grow well anywhere and as a cut-flower is much in demand.

## Double Cornflowers (Centaurea Cyanus)

These are also known as Blue Bottle, Bachelor's Buttons, Ragged Sailor, Bluet, and sometimes referred to as Ragged Robin. As Ragged Robin is also a name given to Lynchnis, we suggest patrons ordering by botanical name to avoid confusion. Our growers are now able to offer a much improved strain of this beautiful flower in a better range of colors, with larger flowers. The seed may be sown outdoors in April, and several sowings will give a succession of bloom. For best results, thin out plants to stand 8 inches apart.

| Blue | Rose-Pink | White |
| :--- | :--- | :--- |
| Maroon | Mauve | Rosy Red |

Any of the above colors, pkt. $10 \mathrm{ets} ., 1 / 4 \mathrm{oz} .30 \mathrm{cts} .$, oz. 75 ets . COLLECTION: One pkt. each of above 6 colors, 50 cts .
Double Mixed. A mixture of all the above colors. . . \$o Io $\$ 025$ Single Mixed. A mixture of single-flowering Cornflowers, all colors.

IO

## Giant Sweet Sultans (Centaurea imperialis)

This beautiful class is undoubtedly the finest of all the Sweet Sultans for cutting purposes. Beautiful, deliciously sweetscented flowers are borne on long, strong stems and are particularly striking, lasting several days after cutting. We recommend sowing in succession every two weeks from May until July, thereby giving a continuous bloom from summer to fall.
Imperialis, White. Large and exquisitely sweet-scented.
Imperialis, Pink. Pink, with tinge in center.
Imperialis, Purple. Brilliant rosy purple.
Imperialis, Lilac. Beautiful lilac.
Imperialis, Red. New. Deep amaranth-red.
Imperialis, Rose. Brilliant rose.
Imperialis, Mixed. A select mixture of above colors.
Any of the above colors, or mixed, pkt. 15 ets., $1 / 40 z .50 \mathrm{cts}$.


Giant Sweet Sultans (Centaurea imperialis)


Double Cornfiowers (Centaurea Cyanus)

## White-leaved Centaureas (Dusty Millers)

Extensively used for edging of beds or borders of the flower-garden. The glistening white, contrasted with the bright color of the coleus, salvia or red canna, is very striking.
Candidissima. This hardy, rapid-growing annual is only Pkt . $1 / 4 \mathrm{oz}$.
grown for its foliage which is very lanced and silver coated.
An excellent edging plant. . $\qquad$
Gymnocarpa (Dusty Miller). Leaves fern-like; a triffe taller
than Candidissima
IO

## Various Centaureas

Americana. The stems, foliage, and flowers of this Cornflower are Pkt. gigantic in size compared with the regular sorts. The flowers, which appear thistle-like, attain the size of 4 inches when fully expanded and are of a splendid, deep lavender-color, making an excellent subject for garden decoration or cuttings. Like the Cyanus, it is easily flowered from seed sown outdoors; plants should be placed at least I foot apart. Height 3 feet............... 5 pkts. 50 cts... Macrocephala. This is a hardy perennial variety with large, thistlelike, golden yellow flowers, useful for cutting and fine for the hardy border. Blooms during July and August. $3^{1 / 2}$ feet.
Montana (Perennial Cornflower). Grows 2 feet high, bearing large, violet-blue flowers from July to September.
Montana alba. Large, white form of the above. . 2 pkts. 25 cts.
Suaveolens (Yellow Sweet Sultan). Very showy, large, bright yellow flowers, sweet scented. A very popular sort used extensively by the florist as a cut-flower


## CHRYSANTHEMUMS

## ANNUAL VARIETIES

We offer a choice selection of the best varieties of this showy hardy annual. They are splendid subjects for the border or for cutting. The plants average 2 feet in height. and bear their daisy-like flowers in great profusion on strong stems. Beaconsfield. White, with a pink center.
Burridgeanum. White petals, zone of rich brownish red, inner zone yellow. Eastern Star. Clear yellow petals with dark disc.
Evening Star. Yellow petals, dark disc.
Morning Star. Petals canary-yellow, with a halo of deeper yellow, disc darker. Northern Star. Large, daisy-like flowers, 3 inches in diameter; pure white,
fringed petals with canary-yellow zone around a dark brown eye.
The Sultan. Rich wallflower-red with a narrow yellow zone around the brown disc. Each, pkt. 15 cts., 2 pkts. 25 cts.
COLLECTION: One pkt. each of above 7 varieties, 75 cts.
Pkt. 2 Pkts.

White Queen. Double; pure white.................................... 15 . 25
Single Annual Varieties Mixed. A choice mixture of Single-flow-
ering varieties.
$8^{1 / 4}{ }^{\text {oz. }}$
Double Annual Varieties Mixed. Mixture of double varieties.... Io so 50

## PERENNIAL VARIETY (Shasta Daisy)

Chrysanthemum Leucanthemum, Alaska. A splendid hardy perennial variety, with flowers frequently 5 inches across, of the purest glistening white, with broad, overlapping petals, and borne on long, strong stems. This is a beautiful cut-flower frequently lasting in good condition a week or more.
$25 \begin{gathered}\text { 5 Pkts. } \\ \text { \$I } 00\end{gathered}$

## CONVOLVULUS (Morning-Glory)

Dwarf Bedding Varieties. Mixed. Pkt. Io cts., oz. 30 cts. Tall or Climbing Varieties. Mixed. Pkt. Io cts., oz. 30 cts. See Ipomœa for other varieties of Morning-Glories.

## CINERARIA

Seed should be sown from May to September where a succession is desired. When sown at this time, fine plants may be secured. The main point in the culture of Cinerarias is to secure as hardy a growth as possible with leaves of medium size. Seed may be transferred direct from seed-pans to thumb-pots. After planting, place in coldframe facing north, if possible. As pots become full of roots, shift to larger ones until flowering size is reached.
S. \& W. Co.'s Giant-flowering Mixed. This strain of Prize Cineraria is grown for us by a famous English seed specialist. The flowers seldom measure less than 3 inches in diameter, comprising the following colors: White, rose, flesh, crimson, blue, violet, etc. The plants are of a very robust dwarf habit, which, combined with the mass of giant blooms, makes this strain exceedingly valuable. Pkt. 50 ets. S. \& W. Co.'s Giant Sky-Blue, Dark Blue, Flesh-Color, and White. Each, pkt. 50 cts.
Matador. A new large-flowering, deep scarlet; adds brilliance to a collection. Pkt. 50 ets.
S. $\mathcal{E}$ W. Co.'s Stellata. Delicate star-like blooms are borne in great profusion on long stems, giving this variety a double use, as it is excellent for cutting as well as decorative purposes; all shades. Tall Mixed. Pkt. 50 cts . Dwarf Mixed. Pkt. 50 cts.

## CLARKIA ELEGANS

A mighty handsome annual, which should be far more widely known. It is of easy cultivation, graceful in habit of growth, and lends itself as well to bedding as for cutting. Flowers.in long racemes which all open in water when cut.

|  | Pkt. | , | Pkt. 1/4oz. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Single R | Rose....... . . . . \$o 10 | \$0 30 | Salmon Queen. Salmon. So | 10 | \$0 50 |
| Single W | White.......... 10 | 30 | Brilliant King. Crimson. | 5 | 50 |
| Single | Mixed.......... 10 | 25 | Purple King. Purple... | 15 | 50 |
| DOUBLE VARIETIES |  |  | Scarlet King. Scarlet. | 5 | 50 |
| We consider these varieties of double |  |  | White King. Whit | 15 | 50 |
| Clarkias a dccided acquisition. |  |  | Double Mixed | 15 | 40 |

## COB ÆA (Cup-and-Saucer Vine)

A climber of rapid growth, attaining a height of 30 to 50 feet during the season, valuable for covering trellises, arbors, trunks of trees, etc.; will cling to any rough surface. In sowing, place seeds edgewise and merely cover lightly with soil; to get early results, start the seed indoors in March or April; can also be sown out-of-doors in May.
Scandens. Large bell-shaped purple flowers. Pkt. 10 cts., 1/4 Oz, 25 cts.
Scandens alba. Pure white. Pkt. I 5 cts., $1 / 402.50 \mathrm{cts}$.

## CLEOME (Spider Flower)

Gigantea. Annual. Singular-looking, rose-colored flowers; the stamens look like spiders' legs, and present a very attractive appearance. This plant is now used extensively in many of the public parks, planted among shrubbery, and is very effective. Sow seed outdoors in May and thin out to stand 2 feet apart. Height 3 feet. Pkt. Io cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts}$.


Cleome gigantea

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York



## COSMOS

This is one of the most notable summer and fall flowers, the specialists' skill having added much to its beauty. Many professional gardeners sow their Cosmos late in the spring, as it has been demonstrated, particularly with the Late Mammothflowering Tall Cosmos, that early sowing frequently makes enormous, heavy-wooded plants which do not Hower any earlier than if sown later.
We recommend the sowing of Cosmos about the first of May, outdoors in rows, covering the seed about $1 / 4$ inch, and when the plants are about 3 inches high, thin out or transplant to not less than 2 feet apart. Any garden soil will grow Cosmos to perfection; frequent cultivation around the base of the plants will greatly benefit them.

## Extra-Early Flowering <br> Dwarf Cosmos

Frequently the amateur finds that the Cosmos of the Late-flowering Tall type, selected by him for growing in borders or beds with other annual flowers, is unsuitable because of it flowering late in the summer, and also growing to the height of 6 to 8 feet. We, therefore, take pleasure in offering this new Early-flowering Dwarf Cosmos, which, if sown outdoors about the first of May, will give an abundance of cutflowers for the table or home decoration from July until cut down by frost.

This type of Cosmos grows about 4 feet high, and while the flowers are not quite so large as the Late Mammoth-flowering type offered on this page, they are admirably adapted to the use of the suburbanite whose garden-space is small. To those who desire the larger-flowering type, which flowers late, after most other flowers are past, we recommend our Late Mammoth-flowering Tall Cosmos.


## Late Mammoth-Flowering Tall Cosmos

This type of Cosmos, which has been greatly improved over the old tall small-flowering varieties, flowers late in the summer-usually September in this latitude-and coming at this season of the year, when nearly everything in the garden has finished blooming. it is a very desirable addition.

These tall, graceful plants are most effective when planted in broad masses along background borders against evergreens or shrubs. The gigantic flowers, borne on long stems, and the feathery foliage lend themselves to graceful arrangements for bouquets.


Lady Lenox. This is the very latest development of this popular autumn flower, bearing gigantic flowers, the petals having a wide overlapping character and of splendid substance; its beautiful, deep rosy pink color and splendid form make this Cosmos one of the most widely grown. Pkt. 10 cts., $\mathbf{1} / 4 \mathbf{o z} .50 \mathrm{cts} ., \mathbf{o z} . \$ 1.50$.
Lady Lenox, White. Similar to above, but white. Pkt. I5 cts., I/4oz. $\$ \mathrm{I}$, oz. $\$ 3$.

## New Double-Flowering Cosmos

Some years ago, when we first offered in our Novelties and Specialties this splendid new form of Cosmos, which was of Australian origin, we considered it a notable addition to this beautiful family of easily grown annuals for cutting. We are pleased to announce, however, that due to the painstaking effort on the part of an American grower, this strain has been further improved upon, in size of flower, greater degree of doubleness, and general vigor of the plant. We offer three distinct colors as well as a mixture of the three.
Double Pink. Beautiful rose-pink.
Double White. Pure glistening white.
Double Crimson. Rich rose-crimson.
Double Mixed. Mixture of the three.
Each, pkt. 20 ets., 6 pkts. $\$ 1$

## STUMPP \& WALTER CO.'S SELECTED SEEDS

## CUPHEA (Cigar Plant)

Pretty, half-hardy perennials; fine for the border or as a pot-plant. Platycentra. This variety of the Cupheas bears long tube-shaped scarlet flowers all summer. Pkt. I 5 cts., 2 pkts. 25 cts.

## CYCLAMEN (Giant-flowering)

The following varieties of Cyclamen seed are American-grown. They have been developed from the best of Continental and European strains. They make very beautiful house-plants. Seed is usually sown in the autumn.
Fairy Queen. A very large, magnificent, frilled white, with a crimson eye. Pkt. \$r, ioo seeds $\$ 5$.
Pride of Cincinnati. A semi-double salmon; very large and free-flowering; one of the finest of its color. Pkt. $\$ \mathrm{I}$, roo seeds $\$ 5$. Pkt. 100 seeds Glory of Wandsbek. Light and dark shades of salmon. \$0 50 \$3 50 Brilliant Red. Very large and fine. $50 \quad 350$
Christmas Cheer. Blood-red.
Rosea superba. A very pretty shade of shell-pink.
Large fiower and excellent grower.
50350
agnifica.

| 50 | 3 | 50 |
| :--- | :--- | :--- |
| 50 | 3 | 50 |
| 50 | 3 | 50 |
| 50 | 3 | 50 |
| 50 | 3 | 50 |
| 50 | 3 | 50 |
| 50 | 3 | 5 |

## CYPRESS VINE (Ipomcea Quamoclit)

One of the most popular of annual climbing plants with very delicate fernlike foliage, and masses of beautiful, small, star-shaped flowers. It is advisable to soak seed in water for a few hours before planting out in order to hasten the germination. Frequently attains a height of I5 feet; sow outdoors in May. We offer it in three colors, also a mixture.

Crimson White Rose Mixed
Each, plt. $10 \mathrm{cts} ., 1 / 4 \mathrm{oz} .25 \mathrm{cts}$.

## DAHLIA

Half-hardy perennial. The seed we offer has been saved from a superb collection of the finest-named varieties. Pkt. Giant Peony-flowered, Mixed. Saved from finest blooms.. . \$I 00 Cactus, Mixed. Saved from a choice collection............... I 00 Double-flowering Exhibition Strain, Mixed. Saved from
fine Show sorts.
I 00

## DATURA

Cornucopia (Trumpet Flower). A grand annual plant. The flowers average 8 inches long by 5 inches across; French white inside, purple outside; delightfully fragrant. Started early, will flower from early summer until fall. Pkt. 10 cts.

## DELPHINIUM (Perennial Larkspur)

There is, perhaps, no better known hardy plant than the Delphinium. The beautiful fowers, borne on tall, stately spikes, are a gorgeous sight and a charm to the garden. Sow seeds in early spring in shallow boxes indoors or in a hotbed. When seedlings are about i inch high, transplant to flats 3 to 4 inches apart each way. About a week before planting out, remove to the open, taking care to protect them on cold days and nights; set out 6 inches apart in the garden. Plants treated thus usually flower the first season, during August. In the fall they may be lifted and set out in groups of colors, three or four plants at a distance of 3 feet apart, in the rear of hardy perennials, where they make a fitting background.
Chinense (Blue Butterfly). A distinct and neat vari- Pkt. 5/40z. ety, growing about I $1 / 2$ feet high, with fine, feathery
foliage, and producing freely spikes of large
blossoms of intense gentian-blue.
\$1 00
Album. The white-flowered form of the preceding..... .
Barlowii. Very large, dark blue flowers; extra-fine. ... 25200 Belladonna (Everblooming Hardy Larkspur). One and most continuous blooming hardy Larkspurs. Clear turquoise-blue flowers, unequaled for delicacy and beauty. 5 pkts. $\$ \mathrm{r} . .$.
Gold Medal Hybrids. We especially invite the interest of our patrons in this wonderful improved type of Delphinium, as our - grower, a noted specialist, has produced what we consider the finest strain of this-the peer of all the hardy perennials. The spikes frequently attain a height of 6 feet, and are symmetrical in form. The individual florets are large, of diverse formation, and the color ranges from pale lilac through all the beautiful shades of blue to pansy-violet. Pkt. ( 50 seeds) 25 cts., 5 pkts. $\$ 1$.



Double Annual Pinks

## DIANTHUS (Pinks)

In this large and greatly varied genus are some of our most beautiful and best-loved flowers, unsurpassed for color and fragrance. They are hardy biennials that bloom finely the first season, remaining green all winter and blooming the next year also, if lightly protected. Old plants flower the earliest, but as young ones give the largest, finest flowers, sowings are made every year. Seed may be sown in the open in early spring when the danger of frost is past and if the situation is open and the ground is well prepared, they will flower luxuriantly in a few weeks' time and continue until hard frost. For best results seedlings should be thinned out to have plants stand 6 inches apart. They average 1 foot in height and are splendid for borders and for cutting. The double-flowering varieties are quite as fine as carnations for cutting.

## DOUBLE ANNUAL VARIETIES

Chinensis fl.-pl. (China, or Indian Pink). Flowers Pkt.
5/40z.
are borne in clusters, very double and in a large range of bright colors
$\$ 0$ Io
$\$ 025$
Diadematus fl.-pl. (Double Diadem Pink). Beautiful double flowers in various tints of lilac, crimson, purple; outer edges fringed
Fireball. New. Extra double brilliant dark scarlet; very beautiful
Heddewigii fl.-pl. (Double Japan Pink). Double mixed, color varying from richest crimson to most delicate rose

I5 I 00

Laciniatus fl.-pl. (Double Fringed Pink). Large double flowers in a great variety of colors; edges fringed

IO

10
Lucifer. Brilliant orange-scarlet, flowers measuring about 2 inches across; very dazzling and popular variety; nicely fringed.
Salmon King. Brilliant salmon-rose.................... Io
Snowball. Large; double; white; excellent for border or cutting.

I5
Violet Queen. A rich violet-rather unusual shade... Io

## SINGLE ANNUAL VARIETIES

Among these sing'e sorts are many beautiful varieties, and the flowers often measure 2 to 3 inches in diameter. They are very effective for borders or beds.

Pkt. $1 / 40 z$. Crimson Belle. Rich crimson. Height, i foot. \$O IO \$0 50 Eastern Queen. Delicately marbled rose and mauve fowers. Io 50
50
5
Queen of Holland. Beautiful white
Laciniatus (Single Fringed Pink). Flowers fringed, in a great variety of colors.
Salmon Queen. Beautiful fringed fowers of brilliant salmon color changing to old rose when fading.
Vesuvius. Beautiful orange-scarlet flowers; striking in beds or borders.


These form low, bushy, tufted plants, above which are produced, on long stems the beautiful fringed and fragrant flowers so valued in "old-fashioned" gardens. For permanent beds and borders these Pinks are unrivaled.
Barbatus (Sweet William). See page 119.
Latifolius atrococcineus f.-pl. Hardy perennial. A hybrid between the China Pink and Sweet William. The heads of brilliant red flowers are quite double. Will flower first season from seed.
Plumarius, Double Mixed. Fringed, fragrant flowers of white, crimson, or purple shades, spotted and variegated. Height, i foot
Plumarius, Single Mixed. Large, fragrant flowers of beautiful colors and finely fringed.
Scoteh, or Florists' Pinks. Excellent perennial garden plants, about I foot high when in bloom. They are vigorous, very hardy, and flower profusely during spring and early summer. The flowers are very large, very double, beautifully fringed, and emit a grateful clover-like perfume. Mixed colors. brilliancy and rich variety of color, and bloom in perfect succession during the whole summer and autumn in such numbers as fairly to crowd each other for room. Mixed colors. Pkt. 10 ets., $1 / 40 \mathrm{oz} .50$ ets.
COLLECTION OF ANNUAL SORTS: One pkt. each of 10 choice Dianthus, 5 named Double and 5 named Single sorts for 75 ets.

## HARDY GARDEN PINKS



## California Poppies

(Eschscholtzia)

## New and Rare Varieties

THE visitor to California during Poppy season is greatly impressed with the beauty and richness of coloring created by these, perhaps the easiest grown, most striking and free-flowering of annuals. They bloom early, and, where the weather remains cool, continue until frost. The plants are particularly adapted for beds or borders. They are dwarf in habit, spreading, and the lovely flowers are carried well above the finely divided green foliage. The Santa Barbara Poppy (Hunnemannia fumarixfolia), considered by many as one of our prettiest annuals, is sometimes called Bush Eschscholtzia or Giant Yellow Tulip Poppy. The plant is upright and the flowers are of a rich golden yellow, frequently measuring 3 to 4 inches across, and borne erect on stiff stems. They keep quite some time in water after cutting. Their blooming season lasts from July until cut down by frost. Sow seed early in April, and in order to avoid having the plants too dense, mix the seed before sowing with ten times its bulk of sharp builders' sand; cover seed just slightly, and thin plants out to stand 3 to 4 inches apart.

1 Carmine King. Beautiful shade of carminerose.
2 Golden West. Bright yellow, dark orange at base of petals.
3 Scarlet Beauty. Deep scarlet inside, lighter on outside of petals.
4 Geisha. Rich golden orange inside, orangescarlet outside-very striking contrast.
5 Vesuvius. Rich coppery red which glistens in the sunlight.
6 Santa Barbara Poppy (Hunnemannia fumarixfolia). Rich golden yellow. Each, pkt. 10 cts., $1 / 4$ oz. 50 cts ., oz. $\$ 1.50$


## DIASCIA

Barberx. An old and not so frequently grown annual which we have inserted here in the Specialties in an endeavor to give it a wider acquaintance with flower-lovers. The plants average 9 to 12 inches in height and the dainty spurred flowers are freely produced in sprays on wiry stems. The flowers are $7 / 8$ inch in diameter and of a soft salmon-rose. Pkt. 25 cts., 5 pkts. $\$ 1$.

## DIDISCUS

## (Queen Anne's Lace Flower)

Cærulea. This pretty annual, which was cultivated extensively in the gardens of our grandparents, has been brought to prominence again. Florist shops throughout the country now display it, and its lovely, refined appearance and color make an instant appeal. Few flowers are as lovely for decorating the dinner table. Queen Anne's Lace Flower grows into an upright, very much-branched plant about 2 feet high. Each branch ends in an umbel of sky-blue flowers, which spread out in an umbrella-like fashion, crowning each shoot with a beautiful and delicate head of flowers. Each individual bloom in the umbel is carried on a thin and long tube, giving the flowerheads a distinct and refined appearance. The name Queen Anne's Lace Flower is most appropriately applied to the flowers since the graceful form of the umbels of bloom resemble in their quaint and artistic arrangement, the most delicate and dainty lace. It is easily grown and a splendid cut-flower, lasting unusually long in water. Seed may be sown outdoors in a well-prepared seed-bed when trees are out in leaf; water copiously during hot weather. Pkt. 25 cts., 5 pkts. $\$ 1$.


Dolichos (Hyacinth Bean)


Dimorphotheca (African Golden Daisy)

## DIGITALIS (Foxglove)

This ornamental hardy plant is used extensively for naturalizing in shrubbery borders and along the edges of woods. It grows well under almost all conditions, giving a wealth of blons during June and July.
Gloxiniæflora. This is an improved strain of the ordinary Foxglove, D. purpurea. with handsome spotted Gloxinia-like flowers on long spikes.
Alba. White ground. Rosea. Rose ground.
Mixed.
Purpurea. Purple ground. Lutea. Yellow ground.
Each, pkt. 10 cts., $1 / 40$ oz. 50 ets.
Monstrosa (Mammoth Foxglove). Long spikes surmounted by one enormous flower; all colors mixed. Pkt. 15 cts., $1 / 40 \mathrm{Oz}$. \$I.

## DIMORPHOTHECA (African Golden Daisy)

This is by far one of the best introductions in recent years. The plants are of branching habit, growing about 15 inches high and the flowers are a rich golden orange with a dark center. Being an annual, it is easily cultivated and will give a magnificent display all summer. Very highly recommended.
Aurantiaca. Golden orange..
Aurantiaca hybrida. Beautiful new hybrids of the African Golden
Daisy and similar in habit to the parent. The flowers are equally as large, but vary in color from the purest white through the various shades of yellow and orange to rich salmon shades, many being zoned with several of these colors around the black disc

10
50

## DOLICHOS (Hyacinth Bean)

A rapid-growing annual climber, flowering freely in erect racemes, followed by ornamental seed-pods. Fine for covering arbors, trellises, etc. Sow the seed in the garden in beds where it is to remain. Height io feet.
Daylight. This grand Hyacinth Bean comes from Japan. In our Pkt. On trial-grounds, plants from seed sown late in May had, by the middle of July, attained a height of over xo feet. and were covered with spikes of snow-white, pea-shaped blossoms from then until late fall. The heart-shaped foliage is bright green and not affected by insect pests.
\$o 10
Darkness. Identical in every way with the above, except in color,
which is a rich purple-violet. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10
Lablab, Mixed

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## ESCHSCHOLTZIA

## (California Poppy)

Profuse-blooming annuais, for beds, edging or masses. Bioom from eariy summer to frost. We offer below a choice list of what we consider the finest varieties in commerce.
Ballet Girl. Outside of petals intense Pkt. K/oz. cochineal-carmine, inside of petals creamy white; beautifully frilled and fluted..
\$0 20 \$I 50
Carmine King. Beautiful shade of car-mine-rose. . . . . . . . . . . . . . . . . . . . . . . .
Chrome Queen. An entirely new and distinct tone of rich chrome-yellow....
Fringed Yellow. A deep pure yellow, the petals deeply cut and fringed......
Geisha. Rich golden orange inside, orange-scarlet outside-very striking contrast.
Io 50

Golden West. Bright yellow, dark orange at the base of the petals.
Lovely. A lovely tone of bright rose-pink suffused with salmon. The blcoms have a satiny appearance which adds very much to the effect.
Purple Glow. Undoubtedly the greatest advance that has been made in Eschscholtzias. It is a bright reddish puiple, the darkest shade that has been


Euphorbia variegata
obtained so far.
Scarlet B 20 I 50 outside.
lighter on $P$
outsid.................. $\$ 0$ io io $^{2 / 40 z}$.
Tango. Bronzy red overiaid with terra cotta........ Io 50
Vesuvius. Rich coppery red which glistens in the sunlight. .
S. \& W. Co.'s Choice Mixture. We have prepared a mixture of named sorts covering all the beautiful colors in this pretty annual. $10 \quad 50$ 10

50

## EUPATORIUM (Thoroughwort)

Strong-growing, hardy perennials, well suited for naturalizing and deserving of a place in every hardy border. They will grow and thrive in any location.
Ageratoides. A very useful variety, growing 3 to 4 feet high, with dense heads of minute white flowers from August to October. Pkt. Io cts.
Frasexi. A very pretty dwarf variety, producing clusters of snowwhite flowers, fine for cutting and bouquets. iI/2 feet. Pkt. Io cts.


Four o'Clocks

## ECHINOPS (Globe Thistle)

Ritro. Striking hardy perennial plants, with handsome, silvery, thistle-like foliage and fine steel-blue flowers in round heads, which can be used for cutting. Excellent for the back of the hardy border among other tall plants. Height, 3 to 5 feet. Pkt. Io cts.

## ECHINOCYSTIS

(Wild Cucumber Vine)
Lobata. One of the quickest-growing annual vines we know of; splendid for covering trellises, old trees, fences, etc. Clean, bright green foliage and sprays of white flowers during July and August. Pkt. Io cts., oz. 40 cts.

## ERYNGIUM (Sea Holly)

Amethystinum. Handsome, ornamental hardy plants, growing 2 to 3 feet high, with finely cut, spiny foliage and beautiful, thistlelike heads of amethystine blue; fine for winter bouquets. Plst. I5 cts.

## EUPHORBIA

Strong-growing annuals, suitable for beds of tall-growing plants or mixed borders. The flowers are inconspicuous; the foliage, however, is exceedingly ornamental.
Variegata (Snow-on-the-Mountain). Attractive foliage, veined and margined with white. 2 feet. Pkt. Io cts., 1/4oz. 25 cts.
Heterophylla (Annual Poinsettia). An annual which resembles in color the beautiful hothouse poinsettia. The plants grow 2 to 3 feet high, of branching, busla-like form, with smooth, glossy green leaves which about the middle of the summer, turn to a beautiful orange-scarlet, presenting a striking and brilliant appearance. Pkt. I5 cts., 2 pkts. 25 cts.
FEVERFEW. See Matricaria.
FORGET-ME-NOT. See Myosotis.

## FOUR O'CLOCK

## (Mirabilis)

Well-known, free-fiowering plants. Called Four o'Clock because they open their blossoms at that hour in the afternoon; also called Marvel of Peru. Hardy annuals. 2 feet.
Fine Mixed. All colors. Pkt. Io cts., oz. 30 cts.

## STUMPP (MEANTER CO.'S SELECTED SEEDS



Types of Gaillardia

## GAILLARDIA (Blanket Flower)

## ANNUAL VARIETIES

Very showy annuals of easy culture. The flowers are borne freely and are brilliant in tone. Excellent for borders and do best if sown in May. Flower in great profusion from July to November.

Pkt. 1/4oz.
Ambyodon. Rich blood-red. 2 feet................... \$0 10 \$0 50
Aurea. Rich yellow. 2 feet
Picta Lorenziana. A mixture of various colors. The flowers are double and excellent in form. Pkt. Io cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts}$.
The Bride. This is a pure white selection from the Lorenziana type; very double and, like the variety mentioned above, is excellent for cutting. Pkt. 15 cts., 2 pkts. 25 cts.

## PERENNIAL VARIETIES

The perennial varieties of this family are grown in most hardy borders. They thrive in any position or soil, require little or no protection, and take care of themselves. If sown early, they begin flowering in July, and continue to be a mass of bloom until cut down by frost; fine for cutting. Height 2 feet.
Kermesina splendens. Center rich crimson, narrow canary-yellow border. Pkt. 15 cts.
Grandiffora compacta. A compact variety forming bushy plants 12 to 15 inches high, and bearing its longstemmed flowers well above the foliage. In coloring the flowers are as brilliant and varied as the tallgrowing sorts. Pkt. 15 cts., 2 pkts. 25 cts.
Grandiflora, Copper-Red. A striking new color in this popular perennial. Pkt. 15 cts., 2 pkts. 25 c .
S. E W. Co.'s Hybrids

This strain of Hybrid Gaillardia has been obtained from a specialist who has developed a splendid type, covering only the best varieties. The flowers are as large as sunflowers. Pkt. 25 ets., 5 pkts. $\$ 1$.

## GEUM (Avens)

Atrosanguineum fl.-pl. Beautiful hardy perennial, bearing Pkt. profusely large, showy, double, dark-crimson flowers all through the summer; an elegant flower for bouquets..

1/4oz. 50 cts . So 10
Mrs. Bradshaw. Large double brilliant orange scarlet; in flower throughout the entire summer.

## GLOXINIA

These very remarkable Gloxinias have, by careful selection, now been so far fixed that 40 per cent of the seedlings come true. The groundcolor of the large, erect, and widely opened flowers is a velvety purplecrimson, with a rosy white throat. On the often seven-lobed corolla appear more or less sharply defined bands, spots and stripes, characteristic of this new class, the latter mostly of a violet hue. Pkt. 50 cts .

## GLOBE AMARANTH

## (Gomphrena)

Popularly known as "Bachelor's Button." A first-rate bedding plant. The flowers resemble clover heads and can be dried and used in winter bouquets. Cornflowers and a number of other flowers are also known as Bachelor's Buttons, and in ordering it is well to order by name to prevent errors. We offer them in separate colors and in a mixture as well.

| Rose | Purple |
| :--- | :--- |
| White | Mixed |

Each, pkt. 10 ets., oz. 75 ets.

## GNAPHALIUM

## (Edelweiss)

Leontopodium. Seed should be sown early and kept cool and moist. Pkt. 25 cts.

## EVERLASTING FLOWERS

We give a complete list of the best varieties of this splendid class of flowers on page 12 I .


Godetia

## GODETIA

This beautiful hardy annual deserves more extensive cultivation. The plants bloom profusely and are splendid for bedding. We also recommend that those with greenhouse facilities try growing these as a pot-plant for winter decoration. We offer the single-flowering sorts, which grow about I foot high, and the double varieties, which attain the height of 2 feet.

Pkt. 1/40z.
Duchess of Albany. Satiny white..................... \$o io \$0 50
Lady Satin Rose. Brilliant carmine
IO
Princess of Wales. Beautiful pink.
10
IO
IO
Sunset. Dwarf; compact; rosy carmine 10
25
Tall Double Pink. Beautiful salmon-pink. 5 pkts. \$I . . 25
Tall Double Rose. Deep rose. ......... 5 pkts. \$I.. 25
Tall Double Carmine. Carmine ........ 5 pkts. \$I. .
Tall Double Crimson. Crimson ........ 5 pkts. \$I..
Tall Double Mauve. Mauve......... . 5 pkts. \$I..
Tall Double Mixed.
5 pkts. $\$ \mathrm{I}$.

## GOURDS

A vigorous class of plants, with curiously formed and often strangely colored fruits. The foliage is abundant and often curious. Pkt.
Mock Orange
\$0 10
Apple-shaped
IO
Dish-Cloth, or Chinese Luffa
10
Dipper.
IO
Hercules' ${ }^{\text {Cliub. }}$
IO
Mixed. All sorts.

## GREVILLEA (Silk Oak)

Robusta. Very graceful foliage; highly valued as a decorative plant for the table, and, when large, for tropical effects. 3 to 5 feet. Pkt. I5 cts.

## HELENIUM (Sneezewort)

Hardy perennial; blooms in late summer; useful in the hardy border; very free-blooming. Height, 5 feet.
Riverton Beauty. Lemon-yellow.
Pkt.
Riverton Gem. Wallflower-red.

## GYPSOPHILA (Baby's Breath)

Pretty, free-flowering, elegant plants, succeeding in any garden soil. Their misty white panicles of bloom are largely used for mixing with other cut-flowers.
Elegans grandifiora alba. This is an improved, large- Pkt. Oz.
flowering, pure white form of the annual Baby's
Breath; of free, easy growth, and grown by the acre
in the suburbs of Paris and London for use with other
cut-flowers. Several sowings should be made during
the season to keep up a supply.
\$0 $10 \$ 0 \quad 50$
Elegans grandiflora rosea. Delicate rose. . . . . . . . . no 50
Muralis. An annual sort which forms mounds of green
8 to 10 inches high, thickly studded with little pink
flowers from early in the season till frost; fine for edging. .

Io I 00
Paniculata. White flowers; fine for bouquets; one of the favorite hardy perennials; blooms first. year if sown early. 2 feet.
Paniculata fl.-pl. The new double-flowering Baby's Breath, and one of the finest hardy plants for cutting. 5 pkts. \$1.
Acutifolia. A strong-growing hardy perennial sort, 3 to 4 feet high, with large panicles of small white flowers in July
Repens. Dwarf; white. A hardy perennial sort for rockwork

10
I 50

## HELIOPSIS

Pitcheriana (Orange Sunflower). Hardy perennial. A valuable plant for the border, thriving in any good soil. Flowers cupshaped, deep yellow, on long, stiff stems for cutting. 3 to 4 feet. June to October. Pkt. $10 \mathrm{cts} ., 1 / 4 \mathrm{Oz} .50 \mathrm{cts}$.

## HEUCHERA (Alum Root or Coral Bells)

Most desirable, dwarf, compact, bushy plants of easy culture, growing $I \mathrm{I} / 2$ to 2 feet high, and bearing graceful spikes of flowers. Excellent hardy plant for the border or rock-garden. Splendid for cutting. Blooms during July and August.
Sanguinea. Coral-red. Sanguinea alba. White.
Sanguinea gracillima rosea. Carmine-rose.
Any of the above, pkt. 15 cts., 2 pkts. 25 cts.


Gypsophila elegans grandiflora, White

## HELIANTHUS (Sunflower)

Much-prized annuals and perennials for cutting; the tall sorts are largely used in the perennial border; the dwarf sorts make good edgings to the tall.

## ANNUAL SUNFLOWERS

The annual sorts of Sunflowers are indispensable for cutting. Sown in a sunny location in April or early May, they come to bloom early in the summer and flower continuously until cut down by frost.
Cut-and-Come-Again, Mixed. A mixture of the tall-growing, Pkt. 1/4oz. large-flowering types for cutting. ................................ . \$0 io \$0 50
Cucumerifolius (Miniature Sunflower). Small, single, rich yellow flowers; an abundant bloomer. 4 feet....
Cucumerifolius, Stella. Different from the above by its larger and better-formed flowers of purest golden yellow with black center.
Cucumerifolius, Orion. A new variety of the Stella. The petals are twisted like a cactus dahlia. .
Cucumerifolius, Perkeo. A charming dwarf variety of the Miniature Sunflower. The plants form compact bushes about 12 inches high by 14 inches through. There are many positions. such as the front of borders or beds of plants of medium height, where this can be used to good advantage flowering as it does from the end of June until cut down Pkt. by hard frost........................................... . So io \$o 35
Cucumerifolius fl.-pl. The double-flowering form of the popular Miniature Sunflower. The flowers, while double, are quite free and graceful; of a bright golden yellow
Dwarf Double (Globe of Gold). Dwarf; double; yellow. 4 feet....................................................... . .
Globosus fistulosus (Globe or Dahlia Sunflower). Flowers large, double and of a rich saffron. 6 feet..........
Gigantic Russian. The large-flowering Russian variety. Oz. 10 cts., $1 / 4 \mathrm{lb} .25 \mathrm{cts} ., 1 / 2 \mathrm{lb} .40 \mathrm{cts} ., 1 \mathrm{lb} .75 \mathrm{cts}$.

## HARDY SUNFLOWERS

Missouricus. Fine; double; yellow................................... . $\$ 0$. 25
Rigidus. Heavy, stiff stems; clear yellow flowers............... . 25
Perennial Sorts, Mixed. A mixture of the best perennial varieties carefully selected..

25
HELICHR YSUM (Straw Flower). See Everlastings, page 121.


Heliotrope, Lemoine's Giant

## HIBISCUS (Marshmallow)

Showy, ornamental plants, for mixed beds or shrubbery borders. Hardy perennial, but will bloom first year from seed if sown early.

Pkt.
Moscheutos (Swamp Rose Mallow). Flowers 6 inches in diameter; of light rosy red, with dark center.
Golden Bowl. Giant yellow, cup-shaped fowers, from 6 to 9 inches in diameter; of rich cream, with velvety maroon center. The plants commence to bloom early and continue until cut down by frost.
Crimson Eye. Fine for borders and groups; color white, with crimson center; flowers very large.
Mallow Marvels, Mixed. Flowers of enormous size in splendid shades of Crimson, Pink, and White, mixed.


Chater's Superb Double Hollyhocks

## HOLLYHOCKS

One of the most popular of hardy garden plants. The beautiful color effects produced by the planting of these flowers, combined with their dignified and stately appearance, render them indispensable for either the old-fashioned garden or the well-planned herbaceous border. As a background for other flowers or planting among shrubbery, they are without an equal. As the plants are affected with rust occasionally, we recommend frequent spraying in springtime with bordeaux mixture.

## CHATER'S SUPERB DOUBLE

By special arrangement, we have secured seed from a grower in England who has, at great expense and effort, grown seed of the famous Chater's Hollyhock on the ground where the original strain was first grown, and we can offer the true strain in the following colors:

| Cerise | Crimson | Flesh-color |
| :--- | :---: | :---: |
| Lilac | Pink | Primrose |
| Scarlet | White | Yellow |
|  | Mixed |  |
|  | Each, | pkt. 25 cts., 5 pkts. $\$ 1$ |

## CHATER'S SUPERB SINGLE

Many prefer the single-flowering Hollyhocks, and we have arranged to procure the same well-known strain in the following single varieties:

| Pink Scarlet | Purple | Primrose |
| :---: | :---: | :---: |
|  | White | Yellow |
|  | Mixed |  |
|  | Each, pkt. 25 cts., 5 pkts. \$1 |  |

## S. \& W. Co.'s Superb Double. <br> This is a selected strain from offer in mixture only The selection has another grower, which we can

 care. Mixed, pkt. 10 ets., $1 / 80 \mathrm{oz}$. 50 cts.
## HUMULUS

## Japan Hop

A rapid summer climber which in three to four weeks' time attains a height of 20 to 30 feet, resembling the common Hop, but, being an annual, attains full perfection the first season. The foliage is luxuriant, making a dense covering. It is one of the best plants for covering verandas, trellises, etc., producing grateful shade and being very ornamental. Heat, drought and insects do not trouble it.


## HONESTY (Moonwort)

Hardy biennial, admired for its silvery seed-pouches, which are used for house ornaments; beautiful and curious purple flowers. Sow seed in open in May and protect over winter. 2 feet. Pkt. 10 ets., $1 / 40 z .50$ ets.

## HUNNEMANNIA

## (Giant Yellow Tulip Poppy; Bush Eschscholtzia)

Fumariæfolia. This is by far the best of the Poppy family for cutting, remaining in good condition for several days. Seed sown early in May will, by the middle of July, produce plants covered with their large, buttercup-yellow, Poppy-like blossoms, and never out of flower until hard frost. The plants grow about 2 feet high, are quite bushy, with beautiful, feathery. glaucous foliage. Pkt. Io cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts} .$, oz. $\$ \mathrm{r} .50$.
LBERIS. See Candytuft.

## IMPATIENS

Sultani. One of the most beautiful of decorative plants. It thrives in stove heat, greenhouse and in open border during the summer. The flowers are of a brilliant rosy scarlet, $1 / 2$ inches in diameter. Mixed. Pkt. Io cts.
Impatiens Holstii. A very handsome plant from East Africa, forming bushes $1 \mathbb{1} / 2$ to mpatiens Holstii. 2 feet in height, with brilliant scarlet flowe.s, which measure from $I x / 4$ to $I / 2$ inches across. It is an elegant pot-plant, also valuable for bedding out in partial shade. Pkt. 25 cts.

## INCARVILLEA

Delavayi. Hardy perennial. Rather new; originated in northern China, and is one of the prettiest perennials known. It produces divided pale green leaves about 2 feet in length, much like acanthus. The flowers are borne on long, stout stems, tube-shaped, and appear almost like gloxinias. Color bright rose. $21 / 2$ feet. June to August. Pkt. 50 cts.


Kochia trichophylla (see page 95)

## IPOMOEA

Climbers of rapid growth, with beautiful and varied flowers. For covering walls, trellises, arbors, or stumps of trees they are invaluable. It is well to soak the seed in warm water over night to assist in germination.
Bona-nox (Evening-Glory). Rosy lilac flowers, expanding in the evening; of very rapid growth. Pkt. Io cts., oz. 75 cts .
Grandiflora mexicana alba (Moonflower). At night and during dull days the plants are covered with an abundance of large, pure white, fragrant flowers, 5 to 6 inches in diameter. It grows rapidly and will cover a large surface. Pkt. Ioc., oz. 75 c . Hederacea grandifiora superba. blue, margined white. Pkt. Ioc., oz. 75c.
Hederacea grandifiora superba alba. White. Pkt. Io cts., oz. 75 cts.
Leari. Dark blue. Pkt. Io cts., oz. \$I.50.
Rubra carulea (Heavenly Blue). Immense flowers of bright sky blue, very beautiful. Pkt. I 5 cts., 2 pkts. 25 cts.
Setosa (Brazilian Morning-Glory). Flowers of p.easing rose-color, borne very freely, in large clusters, from August to frost. As a quick-growing vine it has no equal, covering an enormous space in a short time. Pkt. Io cts., oz. \$I.
Mixed Imperial Japanese (Emperor Morning-Glory). These are beyond question the handsomest of all MorningGlories. Of the easiest culture; can be sown in the open ground in a sunny situation when the weather has become warm and settled. They soon cover a large area, and even before flowering are decidedly interesting on account of the varied forms of the foliage and their markings. The flowers are of gigantic size and their colorings beyond description. The self or solid colors range from snow-white to black-purple, with all the possible intermediate shades; there is also an endless number having flowers spotted, marbled etc. Pkt. Io cts., oz. 50 cts .
For other varieties of Ipomœas, see Cypress Vine and Convolvulus

## Kochia (Summer Cypress; Mexican Firebush)

TRICHOPH YLLA. A pretty half-hardy annual, 2 to 3 feet in height, which grows into a perfect pyramidal-shaped cypress bush, with small, feathery, light green foliage, deepening as the season advances until it becomes a lovely crimson hue about September. Excellent for edging or hedging. Pkt. Io cts., $1 / 4 \mathrm{oz} .25 \mathrm{cts}$.
KUDZU VINE. See Pueraria.

## LANTANA

One of the most desirable half-hardy greenhouse or bedding plants, which bloom constantly. The flowers are borne in Verbena-like heads of orange, white, rose, etc. Mixed colors, pkt. IOc., $1 / 4 \mathrm{Oz} .50 \mathrm{C}$.

## LATHYR US (Everlasting or Hardy Sweet Pea)

Hardy cl mbers, growing 6 to 8 feet high when trained on a trellis. The flowers are borne in large clusters. They are peculiarly adapted to rough places, to scramble over rocks and bushes; splendid cut-flower. White. Pkt. Io cts.
Delicata. Rosy flesh-color. Pkt. 10 cts .

## LAVATERA (Annual Mallow)

Trimestris grandiflora rosea. A very beautiful and showy annual, growing about 2 feet high and covered during the entire summer with large, cup-shaped salmon-pink flowers; for beds or borders they are very effective. Sow seed in May where they are to bloom and later thin the plants out to I foot apart. Pkt. Ioc., $1 / 4 \mathrm{oz} .50 \mathrm{c}$.

## LAVENDER

Lavandula vera. Well-known, hardy perennials; sweet-scented; should be grown extensively in mixed borders. Height 3 feet. Pkt. Io cts., $1 / 40$. 50 cts.


Imperial Japanese Morning-Glory (Ipomœa)

## ANNUAL LARKSPURS

These are among the best-known garden flowers, and in recent years a vast Improvement has been effected by careful selection in size and color of the blossoms and the general habit of the plant. Seeds sown in the open ground before the close of April will produce flowering plants by the beginning of July, and give a continuous succession of flowers from then until frost, a record that is not surpassed by any other annual. They make handsome beds or lines, and their free, graceful habit and bright colors are very effective when interspersed in the old-fashioned flower or shrubbery border. They stand
well when cut, and a vase of one or mixed colors is indeed charming.

## DOUBLE <br> STOCK-FLOWERED

This is the finest variety of this very popular annual, with beautiful double flowers. Height $21 / 2$ to 3 feet.
Snowstorm. Pure white.
Stella. Sky-blue.
Loveliness. Shell-pink.
Attraction. Bright rose.
King of the Blues. Dark blue.
Violet Queen. Violet.
Lilac Perfection. Lilac.
Tricolor. Variegated.
Exquisite. Soft pink; very beautiful.
Defiance. A decided improvement This Larkspur over the Newport Scarlet. ur is of the same habit as our Double Stock-flowered; the plants, however, are a trifle taller in growth.
Each, pkt. 15 cts., $1 / 40 z .50$ cts., oz. $\$ 1.50$
Tall Stock-flowered, Mixed. A select mixture of our famous Stock-flowered strain. Pkt. Io cts., oz. 75 cts.
Dwarf Stock-flowered, Mixed. Finest double flowers. Mixed. I $1 / 2$ to 2 feet. Pkt. Io cts., oz. 75 cts.

## S. \& W. Co.'s Emperor

This grand type of Annual Larkspurs grows about 2 feet $\because$ igh and is of candelabra habit. When planted in borders of the flower-garden the plants will prove most effective.
Apple-Blossom
Violet
Black-Blue
White, Striped
Dark Red
Rose
Briniant R
Tricolor
Light Blue

Azure-Blue Pkt. 10 cts., $1 / 4 \mathrm{oz} .30 \mathrm{cts} .$, oz. $\$ 1$
COLLECTION: One pkt. each of the above 10 varieties, 75 cts.

## LEPTOSYNE

Stillmani. Rich golden yellow flowers on lo stems; wili bloom in six weeks. Pkt. I 5 cts.

## LIATRIS (Blazing Eiar; Gay Feather)

A very attractive, native, hardy perennial. The purple and rosy purple flowers are borne on long spikes. Excellent for cutting. 3 to 4 feet. July to September. Mixed varieties, pkt. Io cts.

## LINARIA

Cymbalaria (Kenilworth Ivy). Lavender and purple. A charming, neat, hardy perennial trailing plant, suitable for baskets, vases. pots, or rockeries. Pkt. I5 cts., 2 pkts. 25 cts.

## LINUM (Flax)

Grandiflorum rubrum (Scarlet Flax). One of the most effective and showy hardy annuals; bedding plants, of long duration, having fine foliage and delicate stems, with brilliant scarlet-crimson flowers. Height I foot. Pkt. Io cts., $1 / 4 \mathrm{Oz} .25 \mathrm{cts}$.
Perenne. Bright blue. Height $\mathrm{I} 5 / 2$ feet. Pkt. Io cts., $1 / 4 \mathrm{oz} .35$ cts.


Lupinus polyphyllus roseus

## LOBELIA

These bloom very quickly from seed and flower all through the season. For beds, edgings, baskets, and pots there is nothing prettier. Sow outdoors in early spring, where the plants are to grow, and thin moderately; or transplant several inches apart in rich, open soil. Some stimulant given when they are in bloom greatly improves the flowers. Almost all are also good winter conservatory plants of trailing habit. The perennial or tall varieties are handsome, showy plants and will be found quite effective for backgrounds and grouping.
Barnard's Perpetual. Deep blue with Pkt. 5/40z. white eye; trailing..................... . \$o Io \$1 oo Crystal Palace Compacta. Rich deep blue; dark foliage. The finest variety for bedding.
Emperor William. A very compact variety with sky-blue flowers.

IO 200

Lindleyana. Rose, with white eye; trailing.
Pumila splendens. Dark blue, with clear white eye; compact
Pumila alba. Pure white.
Speciosa. Dark blue; dark foliage; extra
fine; trailing.

## HARDY VARIETIES

Tall-growing, hardy perennials with long spikes of brilliant flowers, unrivaled for permanent beds and borders. 2 to 4 feet. Pkt. Cardinalis (Cardinal Flower). Scarlet. 1/4oz. \$3. . \$0 25 Cardinalis lugdunensis. Rose.
Queen Victoria. Brilliant scarlet.

## LUPINUS (Lupine)

This very interesting class of plants is of easy culture and produces beautiful leaves and pea-shaped flowers. It should be more generally cultivated. The following annual varieties may be sown out in the open in May and as plants grow, thin out, leaving about I foot between the plants.

ANNUAL VARIETIES
Rich Blue
White $\quad$ Rose
Each, pht. 10 cts., oz. 50 cts.
PERENNIAL VARIETIES

rpinus
Lupinus polyphyllus roseus. hardy perennial are of robust, branching habit. An excellent subject for the herbaceous border, flowers being produced in long spikes of soft rose-pink. Pkt. 15 cts., $1 / 4 \mathrm{oz} .35$ cts., oz. $\$ 1$.
Lupinus polyphyllus, Excelsior. This fine strain of perennial Lupines the hardy perennial section, embracing as it will be found a grand addition to解 ranging from very pale to deep rose, and various shades of lavender, mauve and blues. A really fine mixture. Pkt. 15 ets., 2 pkts. 25 cts.

## LYCHNIS

Handsome hardy perennial plants of easy culture, for massing in beds or borders, blooming first year from seed if sown early.
Alpina. Splendid dwarf variety for rock-gardens, growing but 6 inches high.
Rose-colored blooms in June.
Arkwrighti Hybrids. New improved strain, growing $21 / 2$ feet high. Mixed
colors.
25

Chalcedonica, Salmon Queen. Salmon. 2 feet
Haageana. Orange-scarlet. 2 feet..
25
Viscaria. Rose. I $1 / 2$ feet
10
Viscaria splendens. Scarlet. I $1 / 2$ feet.
10

## MARIGOLD

The African and French Marigolds are old favorite free-flowering annuals of easy culture; both are extremely effective. The former have uniformly large, yellow or orange-colored flowers, and are well adapted for large beds or mixed borders; the latter are dwarfer in growth, with beautifully striped flowers, and are better suited for bedding purposes and for pot culture. They succeed best in a light soil, with full exposure to the sun. A vase or bowl of any of the rich yellow sorts in combination with a few blue larkspurs or cornfowers is very striking.

## DOUBLE AFRICAN

## Giant Show Lemon.

This highly meritorious strain of the African Marigold is grown specially for us by a specialist in Europe who selects only the finest blooms and plants of unusually good constitution for seeding purposes. Height $21 / 2$ feet. Pkt. 25 ets., $1 / 40$ z. $\$ 1$.

## Giant Show Orange. The darker form of the preceding variety. Height

Eldorado. Flowers very large, imbricated, and extremely double, in all shades of yeliow. Pkt. Io cts., $1 / 4 \mathrm{Oz} .40 \mathrm{cts}$.
Lemon Quilled. Deep, double, lemon-yellow flowers, daintily quilled. Pkt. 10 cts., $1 / 4 \mathrm{Oz} .50 \mathrm{cts}$.
Orange Quilled. Similar to the above but orange-yellow. Pkt. Io cts., 1/40z. 50 c .
Giant Show Mixture. Yellow and orange shades. Pkt. 25 cts ., $1 / 4 \mathrm{oz}$. \$I.,

## DWARF FRENCH MARIGOLDS

Few annuals are as effective as the French Marigold, or bloom for as long a period. They form compact bushes I foot high, excellent for borders or beds.
Brunea. Double, quilled flowers of rich brown with a narrow thread-like edge of yellow.
Gold-striped. Double; golden yellow flowers, each petal striped brownish red.
Gold-edged Brown. Double golden yellow flowers, narrow margin of velvety brown.
Golden Ball. Double, pure golden yellow.
Legion of Honor (Little Brownie). A charming single-flowering Marigold forming dense, compact bushes about 9 inches high. They begin to bloom in June and continue until frost. The flowers are golden yellow marked with a large blotch of velvety crimson at the base of each petal.
Lemon Ball. Double lemon-yellow flowers.
Mahogany. Double, rich velvety mahogany-brown blooms.
Each, pkt. 25 cts., $1 / 40 \mathrm{oz} . \$ 1$
 plants of which attain the height of 3 feet, and four varieties of the Dwarf French Marigolds, which are very effective when used for beds or borders, forming dense bushes about 1 foot high. Seed of all these varieties may be sown, when danger of frost is past, where they are to bloom; thin out African varieties to stand $11 / 2$ feet apart, the French sorts 6 inches apart.

## SIX FINE VARIETIES

Dwarf French, Little Brownie. Single. Golden yellow. large spot of velvety crimson.
Dwarf French, Golden Ball. Double. Pure golden yellow.
Dwarf French, Lemon Ba I. Double. Pure lemon-yellow.
Dwarf French Mahogany. Double. Rich velvety mahoganybrown.
Giant Show Lemon. Large: double: lemon-yellow.
Giant Show Orange. Large; double; orange-yellow.
Each, pkt. 25 cts., $1 / 4 \mathrm{oz} . \$ 1.00$
COLLECTION: One pkt. each of above 6 varieties . $\$ 1.00$


## ANNUAL LARKSPURS

FEW annuals are more satisfactory for garden display or for cutting than the Larkspur. Plant-breeders have produced wonderful improvements in size and color and the varieties we are offering are a distinct advance in habit of growth, size of spikes and color to any strains we have tried in comparison. Seed sown in the open ground in April will produce plants which will bloom continuously from July to frost. They are splendid for beds or borders, their graceful habit and bright colors making them very effective.

TEN FINE VARIETIES

Attraction. Bright rose. Defiance. Scarlet. Exquisite. Soft pink.

Loveliness. Shell-pink. Snowstorm. Pure white.
King of the Blues. Dark blue. Lilac Perfection. Lilac.

Each, pkt. 15 cts., $1 / 4$ oz. 50 cts., oz. $\$ 1.50$

Stella. Sky-blue.
Tricolor. Variegated. Violet Queen. Violet.

## MATRICARIA (Feverfew)

Grandiflora fl.-pl. eximia. Half-hardy perennial, which should be treated as an annual. Double, pure white flowers are borne on slender stems 15 inches high, which are excellent for cutting. Pkt. Io cts., $1 / 4 \mathrm{Oz}$. 50 cts ., oz. $\$ \mathrm{I} .50$.
Golden Ball. Compact-growing variety with golden yellow flowers. Excellent for bedding. I foot. Pkt. 25 cts ., $1 / 4 \mathrm{oz}$. \$1.

## MALVA



## MATTHIOLA

## Evening-scented Stock

Bicornis. This old-fashioned annual has no beauty to recommend it, the flowers being a dull purplish lilac, but it is well worth growing for the entrancing fragrance which it emits during the evening. I ft. Pkt. Io cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts}$.

## MAURANDIA

Rapid-growing, half-hardy perennial climbers that can be treated as annuals. Fine for garden or greenhouse; bloom all summer in hanging-baskets and vases or on trellises. Io feet.

Po IO \$I
Barclayana. Blue. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$o 10 \$ $\$$ Barclayana alba.

## MESEMBRYANTHEMUM

Crystallinum (Ice Plant). Dwarf, trailing annual plants; flowers white. Prized for its singular icy foliage. Pkt. Io cts.

## MIGNONETTE (Reseda)

Well-known little hardy annual plants, with sweet-scented flowers, at home everywhere, either in the greenhouse, garden or sitting-room.
S. 8 W. Co.'s Triumph. One of the choicest varieties for winter forcing. In type similar to Allen's Defiance, except that spikes are more compact and the individual florets are much larger in size. Seed of this grand variety is grown in our greenhouses, and is saved from the best spikes. Pkt. 50 cts.
Allen's Defiance. This gorgeous Mignonette has qualities heretofore unknown in largeflowering varieties, being deliciously fragrant. When grown under favorable conditions and with proper care, its spikes will be from 12 to 15 inches long. The individual florets are of remarkable size and stand out boldly, forming a graceful as well as compact spike. Its remarkable strength is accompanied by extraordinary keeping qualities; the spikes have been kept in a vase three weeks after cutting, retaining their grace and fragrance until every bud opened. Pkt. io cts., 1/40z. 50 cts .

Improved Large-flowering. Pkt. 1o cts., 1/4oz. 25 cts .


Matricaria (Feverfew)

Golden Queen. Yellow-tinted flowers. Pkt. Io cts 1/40z. 25 cts
Miles' Spiral. Very fine. Pkt. Io cts., 1/4oz. 25 cts.
Machet. A dwarf French variety, with broad spikes of very fragrant red flowers; one of the best varieties for either garden or pot culture. Pkt. do cts., $1 / 40 \mathrm{oz} .50 \mathrm{cts}$.
Machet, Ruby. A fine new Machet Mignonette, with coppery scarlet flowers. Pkt. io cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts}$. Odorata maxima, Goliath. Bears very large flowers, the center spikes being often 8 inches long. The plant grows in candelabra form and produces fiery red flowers on firm, upright stalks. Pkt. Io cts., $1 / 40250 \mathrm{cts}$..

## MIMOSA (Sensitive Plant)

Pudica. A very curious plant. The leaves in- Pkt. stantly close up when touched. Tender annual. \$o Io

## MIMULUS (Musk Plant)

Moschatus. The plants of Mimulus are beautiful and tender-looking, with almost transparent branches. They luxuriate in damp. shady situations; musk-scented. Tender annual. I foot. .
Splendid Mixed

## STUMPP \& WALTER CO., 30 AND 32 Barclay St., NEw York



Myosotis, Ruth Fischer (Forget-me-not)

## MYOSOTIS (Forget-me-not)

Few spring flowers are more admired than the lovely Forget-me-not, which is especially effective for mass planting. It is perennial and hardy if given slight protection through the winter. Seed may be sown any time from spring until mid-summer. The Alpestris varieties and Dissitiflora come into bloom in April, with the spring-flowering bulbs, etc. The Palustris sorts do not bloom till May, but continue till fall.
Alpestris, Royal Blue. Rich indigo-blue flowers. The finest and Pkt. $1 / 4 \mathrm{oz}$. most effective dark blue variety; grows about 9 inches high. ........ \$0 10 \$0 75 Alpestris robusta grandiflora. A strong, sturdy grower attaining a height of about 10 inches with good heads of clear Forget-me-notblue flowers.
Alpestris, Victoria. A favorite variety with fine heads of clear azureblue flowers; plants bushy and compact. Makes a fine edging for beds.
Alpestris, Mixed. A select mixture of the above.
Dissitiflora. Of dwarf, compact habit with sprays of large, exquisite blue flowers, especially adapted for beds of late-flowering tulips, etc.
Palustris semperfiorens. An ever-blooming variety beginning to flower in May and continuing until autumn. Large, clear blue flowers in pretty sprays.
Ruth Fischer. The latest and said to be the finest and largest-flowered Forget-me-not yet sent out, producing flowers up to $1 / 2$ inch in diameter, of true Forget-me-not-blue. Plants of strong, vigorous growth, of exceptional value for pot culture and spring bedding.

5 pkts. \$1..
25

## NEMOPHILA

Splendid trailing annuals for garden decoration; bright-colored flowers, in shades of blue, white, and violet. I foot.

Finest Mixed. Pkt. Io cts.

## NICOTIANA

Affinis. An annual with sweet-scented, pure white, star-shaped flowers, 3 inches across, blooming continually. 2 to 3 feet. Pkt. Io cts., 1/4oz. 25 cts.
Giant Red-flowered. Magnificent annual of tropical effect, large, luxuriant leaves and immense clusters of rich crimson flowers. 5 feet. Pkt. Io cts.
Sanderze Hybrids. A splendid new type in a great variety of colors. Pkt. Io cts., 1/40z. 50 cts .

## NIGELLA

Damascena, Double Mixed (Love-in-a-Mist). Pretty garden Pkt. $\quad$ K/ $/ \mathrm{oz}$. annuals with feathery green foliage, in which large, double, charming blue or white flowers are set. I to 2 feet $\ldots \ldots \ldots \ldots \ldots \ldots$.
Miss Jekyll. A lovely variety with cornflower-blue blossoms; splendid for cutting. Hardy annual. About 2 feet.

IO $\quad 75$

I5 I 50
Io 50
I5 200

I5 200
MOMORDTCA (Balsam Apple; Balsam Pear)
Luxuriant annual climbers, with large leaves, making dense shade. The flowers are followed by ornamental, large fruits of orange or copper color, which burst and expose an interior of red, which is highly effective. I 5 to 20 feet.
Balsamina (Balsam Apple). Orange fruits. Pkt. Io cts., oz. 75 cts.
Charantia (Balsam Pear). Coppery scarlet fruits. Pkt. Io cts., oz. 75 cts.

## MUSA (Abyssinian Banana Tree)

Ensete. A foliage plant of magnificent proportions; for subtropical massing, or as single specimens it is strikingly effective. Seeds sown early in the house will produce plants io to 15 feet high the first season. Pkt. 25 cts.

## NEMESIA

We are pleased to offer a splendid strain of this beautiful half-hardy annual, principally the large-flowered varieties and one of the dwarf, compact sorts.
S. \& W. Co.'s Orange. Rich orange.
S. \& W. Co.'s Rose. Rich rose.
S. \& W. Co.'s Scarlet. Scarlet.
S. \& W. Co.'s Mixed. Rich mixture of all the lovely colors that come in this class of plants.
S. \& W. Co.'s Hybrid Blue Gem. A dwarf variety, very suitable for borders.

Each, pkt. 25 cts., 5 pkts. $\$ 1$.

## OENOTHERA

Fraseri (Evening Primrose). Hardy Pkt. 1/4oz. perennial border plants of value. Beautiful yellow flowers. July to October. I $1 / 2$ feet ..
\$0 25 \$I 50
Lamarckiana. Hardy perennial. Enormous yellow flowers. July to Octo-
ber. 3 feet
IO
50


Nigella, Miss Jekyll

## STUMPP \& WALTER CO.'S SELECTED SEEDS

## Stumpp \& Walter Co.'s Superb Nasturtiums

Few garden annuals respond with as little care as the Nasturtium. For ease of culture, duration of bloom, brilliancy of coloring and general excellence, they are unexcelled. All they need is a moderately good soil, in a well-drained, sunny position, and from within a few weeks trom the time they are sown until hard frost comes there is an endless profusion of their gorgeous blossoms. The varieties offered below were selected, after exhaustive trials, from a very large number of sorts as being the best and most distinct.

NEW GIANT-FLOWERING
We have arranged with a grower, who has made growing Nasturtiums a specialty, to grow this Giant-flowering strain for us. The plants are strong and vigorous, with very large, bright green leaves, measuring from 5 to 8 inches across. The flowers, which are very numerous, measure 3 inches in diameter, and are borne on long stems well above the foliage. They are exquisitely formed, with overlapping, crinkled petals. They are produced in great numbers and have a most striking effect.
 Their fine color, long stems, great size and esthetic form make them valuable for cutting. We can offer it only in selected mixtures of both the Dwarf Bedding and the Tall Climbing kinds.
Giant Tall, Mixed. Pkt. 15 cts., oz. 25 cts., 1/4lb. 75 cts., lb. $\$ 2$.
Giant Dwarf, Mixed. Pkt. 15 cts., oz. 25 cts., $1 / 4 \mathrm{lb}$. 75 cts., lb. $\$ 2$.

## TOM THUMB DWARF OR BEDDING

Aurora. Salmon-rose.
Beauty. Light scarlet, mottled yellow.
Brilliant. Rich scarlet.
Chameleon. Various colors on one plant.
Crystal Palace Gem. Sulphur, maroon-blotches.
Empress of India. Brilliant crimson; dark foliage.

King Theodore. Deep crimsonmaroon; dark foliage.
King of Tom Thumbs. Dark scarlet; dark foliage.
Lady Bird. Orange-yellow, spotted red.
Luteum. Pure, light yellow.
Pearl. Pure white.
Ruby King. Light ruby-red.
Price of any of the above named Dwarf sorts, pkt. 10 ets., oz. 20 ets., $1 / 41 \mathrm{lb}$. 60 ets.
Special Collections: 1 pkt. each of 6 of these varieties, 50 ets. 1 pkt. each of 12 of these varieties, $\$ 1$.
Dwarf, Mixed. A mixture of above-named sorts. Pkt. io cts., oz. I5 cts., 1/41b. 50 cts.
Dwarf, Ivy-leaved. Beautiful, dark green, ivy-like foliage, composing into an effective setting for the lovely flowers of various colors. Mixed Colors. Pkt. 15 ets., oz. 25 ets., $1 / 4 \mathrm{lb} .75$ ets.
Dwarf, Variegated-leaved. These comparatively new and robust in growth and produce freely as beautiful flowers in various colors as the plain green-leaved Nasturtiums, with the added merit of ornamental foliage, which renders them beautiful objects even out of flower. We offer in a mixture of best colors. Pkt. 15 cts., oz. 25 cts., $1 / 41 \mathrm{lb} .75$ cts.

## TALL OR CLIMBING VARIETIES

Elegant and luxuriant climbers for verandas, trellises, etc. May be used to cover unsightly railings and to trail over rough ground with fine effect. The seed-pods can be gathered while green and tender for pickling; 6 to io feet.
Chameleon. Differently rich-colored flowers on the same plant. Crimson. Rich and velvety.
Dunnett's Orange. Rich golden orange, garnet blotches.
King Theodore. Deep crimson-maroon, dark foliage.
Pearl. Creamy white.
Prince Henry. Cream, spotted and tipped scarlet.
Rose. A lovely shade of ruby-rose.
Scarlet. Glowing vermilion.
Yellow. Pure yellow. Pkt. io cts., oz. 20 cts., 1/41 1 . 60 cts.
Tall Mixed. A mixture of the above-named sorts. Pkt. Io cts., oz. $15 \mathrm{cts} ., \mathrm{I} / 4 \mathrm{lb}$. 50 cts .
Jupiter. Magnificent flowers of a brilliant golden yellow. Pkt. 10 cts., oz. $20 \mathrm{cts} ., 1 / 1 \mathrm{lb} .75 \mathrm{cts}$.
Moonlight. Immense, creamy white flowers. Pkt. Io cts., oz. 20 cts., $1 / 4 \mathrm{lb} .75 \mathrm{cts}$.
Sunlight. Pure, rich butter-yellow; frequently measuring 3 inches across. Pkt. 10 cts., oz. $20 \mathrm{cts} ., 1 / 4 \mathrm{lb} .75 \mathrm{cts}$.
Special Collections: 1 pkt. each of 6 named varieties, 50 ets.解 1 pkt. each of 12 named varieties, $\$ 1$.
Tall, Ivy-leaved. Similar in type to the Dwarf Ivy-leaved 15 cts., oz. 25 cts., $1 / 41 \mathrm{~b} .75 \mathrm{cts}$.
Tall, Variegated-1eaved. Similar in type to the in Tall-growing sorts. Mixed Colors. Pkt. 15 cts., oz. 25 cts., $1 / 41 \mathrm{~b} .75$ cts.

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## STUMPP \& WALTER CO.'S GIANT PANSIES

This very popular annual needs little description. Good results may be obtained from sowing seed in April in a light, cool, but well-moistened soil, enriched with a slight amount of barnyard manure or fine ground bone. Sow seed in drills, covering them
 about two weeks and should not be allowed to dry out. A small covering of newspapers will prevent drying out. When plants are large enough to handle, transplant to a distance of I foot apart. Where greenhouse and coldframe facilities are at hand, sow in July or August and protect plants during winter.

## Pansies in Mixture

Our Pansy Mixtures are prepared in our Flower Seed Department by an expert who has a thorough knowledge of the finest sorts extant, and is done in a very careful manner. Our Pansies have been grown throughout the United States, by leading florists, many of whom have repeated their order every year, thereby giving their unqualified indorsement to our famous strain.

## S. \& W. Co.'s Exhibition Strain.

This mixture of Giant Pansies has been prepared of the finest varieties grown; blooms of gigantic size, splendid texture; the plants of robust constitution hold their majestic blooms well above the foliage. Every conceivable color and combination of colors has been included. Pkt. 25 cts., $1 / 4 \mathrm{oz}$. $\$ 3$, oz. $\$$ io.
Non Plus Ultra. A mixture of Pansies designed for the critical buyer who desires his beds to look of uniform quality, giving every conceivable color and combination of colors that exists in this highly meritorious flower. Pkt. 20 cts ., 3/4oz. \$2, oz. \$7.50.
Masterpiece
(Frilled Pansy). A remarkable type, each petal being conspicuously curled or waved. The color range is quite extensive, the rich, dark, velvety shades predominating. Pkt. 25 cts., $1 / 4$ oz. $\$ 2$, oz. $\$ 7.50$.
Cassier's Giant. A grand mixture of the very large in size and rich in coloring. Pkt. 20 cts., I/4oz. \$2, oz. \$7.50.
Mnie. Perret. A new and beautiful strain, French specialist; flowers of large size, borne very freely in a great diversity of colors, especially rich in red and wine shades. Pkt. 20 cts., $1 / 4 \mathrm{oz}$. $\$ 2$, oz. $\$ 7.50$.
S. \& W. Co.'s Special Mixed. Pkt. io cts., $1 / 40 z$. $\$ \mathrm{I}$, oz. \$3.50.
Finest English Mixed. Pkt. Io cts., 1/4oz. 75 cts., oz. \$2.50.

## Giant Pansies in Separate Colors



## STUMPP \& WALTER CO,'S SELECTED SEEDS

## PETUNIA

The Petunia cannot be equaled by any plant for outdoor decoration. They will flower the first season, even if sown in the open ground but usually not before June. These sown in the house or hotbed in April will bloom in June and be larger and finer plants. Half-hardy annual.
S. $\mathcal{E}$ W. Co.'s Giant-flowering Petunias. The demand for a mixture comprising the best representative types of singleflowering Petunias has been so significant that we have by careful selection and elimination prepared a special mixture. Where a mixture of the giant single fringed and plain-edged varieties are desired, as well as an assortment of the various colors and shades, our customers will find them for bedding purposes the finest procurable. Pkt. 25 cts., 5 pkts. $\$ 1$.

## GIANT-FLOWERING FRINGED PETUNIAS

## SINGLE VARIETIES

Under this heading we have listed the finest possible varieties of the now popular large-flowering Fringed Petunias. Whether desired for bedding, cutting or general display, the varieties listed are the best by test of the Fimbriata, or fringed large-flowering class.
Single Fringed White. Pure glistening white. Sk
". ". $\begin{aligned} & \text { Yellow. Canary-yellow. . } \\ & \text { Rose. Brilliant rose }\end{aligned}$
". ${ }^{\text {. }}$ Crimson. Dazzling crimson.
Single Fringed Mixed. A mixture of best fringed varieties including with the above many new colors and shades. Should be grown by everyone desiring the best. Pkt. 25 cts.

## DOUBLE VARIETIES

It has been a well-established fact that seed saved from the most carefully hybridized flowers produces a small percentage of double-flowering plants. It is important to save the weaker seedlings, as these invariably produce the finest double flowers. Double Fringed White.

$$
\begin{aligned}
& \text { Rose..... } \\
& \text { Crimson. }
\end{aligned}
$$

Double Fringed Mixed. A superb mixture of the finest double-fringed varieties. Pkt. 50 cts.

## SINGLE BEDDING VARIETIES

Balcony Blue. A splendid free- Pkt. flowering type, either for bedding or window-boxes, vases, hangingbaskets, etc. Flowers average 3 inches across and are of a rich indigo-blue.
\$0 25
Balcony Rose. Brilliant rose-pink. . 25
Balcony Red. Bright red..........
Balcony White. Pure white; very graceful habit. ......................
Julius Wolff. Similar to Snow Queen, except in color which is light blue.
Rosy Morn. Soft carmine-pink, white center.........................
Rose of Heaven. Similar to Rosy Morn but more brilliant.
Snowball. An excellent, compact variety, producing pure satiny white flowers throughout the entire season; very dwarf.
Snow Queen. Pure white sort, not quite as compact as Snowball.
Howard's Star. Rich crimson with distinct white star in the center. .
Countess of Ellesmere. Dark rose with fine white throat..............
Inimitable compacta. Bushy little plants covered with pretty striped and star-shaped flowers..
Special Bedding, Mixed. Select, bright colors.......... 1/40z. 4oc..

S. \& W. Co.'s Giant-flowering Petunias

# STUMPP \& WALTER CO., 30 AND 32 BARCLAY ST., NEW YORK 

## PHLOX DRUMMONDII (Hardy

One of our best annuals, flowering freely all the summer. For richness of color they cannot be surpassed. They are invaluable for beds and ribbon-gardening, therefore no garden should be without them. They should be sown outdoors in May, in a situation well open to the sun, and they will flower and be a mass of color in July and continue until late autumn. Seeds may be sown in a hotbed in March and flowers be had in June.

## Large-flowering Tall Varieties

This is the finest type, having the largest heads of bloom as well as the largest individual flowers; of strong, sturdy growth, attaining a height of about 15 inches.
Brilliant. Finest crimson
Pkt. $1 / 402$.
Carmine. Carmine with white eye
10 \$0 75
Chamine. Carmine with wh
75 Isabelliana. Tea-rose-yeliow
$\begin{array}{lll}\text { I5 } & \text { I } 00 \\ \text { I5 } & \text { I } 00\end{array}$
Kermesina. Scarlet-striped.
Leopoldii. Rose with white eye Purple. Deep purple

## Finest Tall Mixed.

IO
Imported Collection. One pkt. each of $\mathbf{6}$ One pkt. each of above 12 varieties.

## Large-flowering Dwarf Varieties

This type resembles the tall sorts offered in size of blooms but the plants are dwarfer in habit. Pkt. $1 / 4 \mathrm{oz}$. Chamois-Rose. Shell-pink........... \$o 10 \$1 25 Defiance. Brilliant crimson................ Io I 25 Fireball. Scarlet.
Purple.
Snowbali. Pure white
Surprise. Vermilion, white center..... Io 125
Finest Dwarf Mixed ................. Io I 00
IMPORTED COLLECTION. One pkt. each of above 6 varieties, 50 cts.
Star of Quedlinburg. Dwarf; star-shaped flowers; a novel variety. Mixed colors, pkt. 10 ets., $1 / 40 z .75$ cts.

## HARDY PHLOX

Large-flowering Hybrids, Tall Mixed...... . \$o $\mathrm{I}_{5}$
Large-flowering Hybrids, Dwarf Mixed
Large-flowering Red Shades, Mixed.

## PASSION FLOWER

Handsome, rapid-growing perennial climber for greenhouse decoration or sunny positions in the open ground in summer

Pkt. Cærulea. Large flowers of violet and blue.... \$0 I5 Alba. Large, white flowers.

## PHYSALIS (Chinese Lantern Plant)

Franchetii. Hardy perennial forming dense bushes about 2 feet high, producing bright orangescarlet lantern-like fruits. May be had in flower first year from seed if sown early; the fruits are often displayed in florist shops and are very interesting, and of splendid decorative value. Pkt. 25 cts., 5 pkts. \$I.

## PENTSTEMON (Beard Tongue)

Highly useful and attractive hardy perennial, and much used in the hardy border.
S. $\mathcal{E}^{\circ}$ W. Co.'s Giant-flowered Hybrids. Mixed. This is a mixture of the finest giant-flowering varieties and a very excellent assort ment of colors. Pkt. 25 cts., 5 pkts. $\$ 1$.
S. \& W. Co.'s Pink Strain. A very pleasing strain of pink and pale rose shades. Pkt. 25 cts., 5 pkts. $\$ \mathrm{I}$. Sensation. As a bedding plant this takes rank with the petunia, phlox, etc. It grows about 2 feet high, every branch being a spike of large, gloxinia-like flowers in a very wide range of bright colors, including rose, red, carmine, cherry, pink, lilac, purple, etc. Not quite hardy, and best treated like petunias, verbenas, salvia, etc. Pkt. I 5 cts., 2 pkts. 25 cts.


Phlox Drummondii in foreground

## STUMPP \& WALTER CO.'S SELECTED SEEDS



## PHYSOSTEGIA (False Dragonhead)

Virginica. One of the prettiest hardy perennials, forming dense bushes, 3 to 4 feet high, and bearing freely during the summer months spikes of delicate lilac tubular flowers not unlike a gigantic heather. Pkt. Io cts.

## PLATYCODON

## Balloon Flower; Japanese Bellflower

One of the best hardy perennials, producing very showy flowers during the whole season. They form large clumps and are excellent for planting in permanent borders or among shrubbery. Easily raised from seed; begin blooming in August if sown outdoors in April.

Grandiflorum Mariesii. Large, open, bell-shaped flowers of a rich violet-blue; plant dwarf and compact.
Grandiflorum japonicum fl.-pl. (Double Japanese Bellflower). Large, glossy, deep blue flowers. The inner petals alternate with the outer ones, giving the flower the appearance of a ten-pointed blue star.. 2 pkts. 25 C .. 15


Portulaca

SINGLE GRANDIFLORA


## DOU BLE GRANDIFLORA

|  | Pkt. | 1/\%oz. |  |  | Pkt. | 1/0z. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alba. White. |  | \$1 50 | Splendens. | Crimson |  | \$1 50 |
| Rosea. Rose. | 10 | 150 | Sulphurea. | Yellow | 10 | 150 |
| Salmonea. Salmo | 10 | 150 | Finest Mixed |  | ı0 | 125 |

## PUERARIA THUNBERGIANA

## Japanese Kudzu Vine

To this must be awarded first place as the fastest-growing hardy climbing plant. It will grow 8 to io feet the first year from seed, and after it has become established there seems to be no limit to its growth, 50 feet in a single season being not unusual. Its foliage is large and covers well. It bears small racemes of rosy purple, pea-shaped blossoms toward the close of August. A splendid subject for permanently covering verandas, dead trees, etc. Pkt. $10 \mathrm{cts} ., 1 / 4 \mathrm{oz} .30 \mathrm{cts}$.

## POLEMONIUM

## Jacob's Ladder

Popular hardy perennial border plant, with bell-shaped flowers nearly i inch across. 2 feet. May to July. Pkt. Io cts. Cæruleum grandiflorum. Deep blue. Pkt. Io cts., $1 / 4 \mathrm{oz}$. 50 cts. Cæruleum album. Pure white. Pkt. Io cts., $1 / 402.50 \mathrm{cts}$.
Richardsonii. Sky-blue. Pkt. Io cts., $1 / 4 \mathrm{OZ} .50 \mathrm{cts}$.

## POLYANTHUS

## Primula elatior

Showy, free-flowering plants for either pot or outdoor culture.
Giant Polyanthus. We offer an improved strain of this beautiful plant. For complete description see page 64 . Pkt. 25 cts., 5 pkts. \$I.


Platycodon grandiforum japonicum fl.-pl.

## POPPIES

Annual Poppies should be sown as early as possible in the spring where they are to remain, as they do not transplant readily. It is advisable to mix the seed with builders' sand, using about twenty-five times as much sand as seed, and then carefully broadcast seed in on the surface of the ground and firm well. Plants should be thinned out to stand about 4 inches apart for best results. Seed may be sown in rows also and in succession up to the middle of May. It is advisable to pick flowers just as they are expanding as they last longer; removing the old blooms from plants will help lengthen the flowering season.

## Single Annual Varieties

Shirley, Carmine Shades. A selection of all the shades of carmine.
Shirley, Rose Shades. A selection of rose-color shades.
Shirley, Salmon Shades. A selection of salmon shades.
Shirley, White Shades. A selection of white shades.
Shirley, Wild Rose. One of the finest varieties of the Shirley, the flowers of which are best described as a pure wild-rose-pink.
Shirley, Mixed. We have prepared a mixture of these beautiful annual Poppies to cover all the shades mentioned above, as well as the deeper shades of scarlet to rich crimson.

$$
\text { Each, pkt. } 10 \text { cts., } 1 / 40 z .50 \text { cts., oz. } \$ 1.50
$$

Admiral. A single peony-flowered variety of surpass- Pkt. 8/4oz. ing beauty, having large, smooth-edged flowers of glistening white, with a broad band of brilliant scarlet around the top..
Charles Darwin. Remarkable for the unique color of its large, smooth-edged flowers, being a striking rich dark purple, with a velvety black spot at the base of each petal.
Dainty Lady. Immense flowers 4 to 5 inches across, of a charming shade of rosy mauve, with a large dark metallic blotch at the base of each petal..
Danebrog (Danish Cross). Very showy variety, producing large flowers of brilliant scarlet, with a silvery white spot on each petal, forming a white cross.

10
25
King Edward. A new variety of gorgeous coloring, being a deep scarlet, shaded crimson-red. each petal marked with a large black blotch for half its length from the base, against which the yellow anthers stand out in bold relief. The plant grows $21 / 2$ feet high, and produces its very large flowers with great freedom. . . .


Carnation-flowered Poppies

## SINGLE ANNUAL POPPIES, continued

English Scarlet (Flanders). The common scarlet Pkt. 1/4oz. Field Poppy of Europe. . . . . . . . . . . . . . . . . . . . . . . . . . \$o Io \$o 25
Tulip Poppy (Papaver glaucum). One of the most brilliant; the flowers are 3 inches across and closely resemble the brilliant scarlet Gesneriana tulip.......... Io

## Double Annual Varieties

The Double Annual Poppies require the same cultural treatment as the Shirley. They are excellent to grow for cutting. For best results plants should be thinned out to stand 8 inches apart.

Pkt. 1/4oz.
American Flag. Beautiful variety; flowers very large
and double, snow-white, bordered with scarlet. . . . ... \$o 10 \$0 25
Fairy Blush. Very double flowers of pure white, elegantly fringed and tipped with rose. . . .............. IO 25
Golden Gate. Comprising an infinite variety of semidouble and double flowers in the greatest variety of colors.
Mikado (Striped Japanese Poppy). This beautiful Poppy is very distinct in character and color. The flowers are brilliant scarlet and white, with elegantly curved petals, like a Japanese chrysanthemum.......
White Swan. Immense double flowers, beautifully fringed and of purest white, of the same dwarf habit as Cardinal and Shell-Pink.
Cardinal. A splendid dwarf variety of the carnationflowered type, growing about 2 feet high and bearing large, globular, fringed flowers of an intense cardinal-
red...................................................................
White Swan, except color, which is a soft seashell- or chamois-pink. Very dainty...........................
Carnation-flowered. Splendid double, fringed flowers. (See cut.)
Mixed colors. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Peony-flowered. Large, showy, double globular flowers, resembling a double Peony
Mixed Colors.
I 00

## Hardy Perennial Varieties

Too much cannot be said of this class of Poppies, as for general effectiveness and brilliancy of display they are unequaled.

## ICELAND POPPIES (Papaver nudicaule)

The Iceland Poppy, while considered a perennial, will flower the first year from seed. They are of graceful habit, with bright green, fern-like foliage, formed in tufts, from which issue slender stalks about I2 inches high, bearing their brilliant flowers in endless profusion. Most useful for cutting, for which purpose pick when in bud.

Pkt. 5/4oz.
Iceland (Nudicaule) Scarlet. . . . . . . . . . . . . . . . . . . . . . \$o I5 \$I oo
Iceland (Nudicaule) White............................ . . I 15 I 00
Iceland (Nudicaule) Yellow. . . . . . . . . . . . . . . . . . . . . . . IS IS I 00
Iceland (Nudicaule) Mixed. . . . . . . . . . . . . . . . . . . . . . . . 15 I5 75
Iceland (Nudicaule) Double Mixed................. . . I5 75

## ORIENTAL POPPIES

I ike the annual Poppies, these should be sown as early in the spring as the ground can be worked. The plants disappear during July and August, appearing again when the weather becomes cool. When this fall growth starts they should be transplanted to their permanent flowering quarters. It is well to mark the places they are planted, to insure the roots against disturbance during their annual resting period.

Pkt.
Orientale, Scarlet . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$o I5 $_{5}$
Orientale, Oriflamme. Gorgeous orange-scarlet. . . . . . . . . . . . . . 15
Orientale, Finest Mixed . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Io

## Improved Shirley Poppies

WE HAVE endeavored to give wider prominence to the California Poppy by presenting on a preceding page a color illustration of this lovely flower. We feel, however, that we would be remiss in our desire to serve you if we did not give equal prominence to that lovely and most easily raised of all the California annual flowers, the Shirley Poppy. Its refined and delicate texture, its glorious blaze of color, its adaptability to any location in the garden, however obscure, or, shall we say, neglected-all recommend it to the flower lover. One garden which the writer delights in visiting at various times of the year, used the Shirley Poppy with tell$i_{n g}$ effect last year. There are two flower borders, several hundred feet long and about 12 feet wide, in which are planted, in the autumn of the year, large blocks of Darwin, Breeder, and Cottage Tulips. These are in full bloom in mid-May. To take the place of the color furnished by the tulips when they were through blooming, it was decided to plant Shirley Poppies. The seed of these was mixed with approximately twenty-five times its bulk of sharp builders' sand. This was sown broadcast throughout the border and gently firmed on the surface of the ground, even before the Tulips had made their appearance in the spring. The Poppies bloomed wonderfully in mid-June, thereby providing a succession of color in this lovely border in this grand old garden.

We are now offering this annual in its improved forms for your early consideration. The variety Wild Rose, which comes almost entirely true from seed, is perhaps best described as a beautiful shade of wild-rose-pink. Where one color is desired for a bed or border this is splendid. We also offer shades of various colors, and, last and by no means least, a mixture of shades which has been carefully prepared so as to include all the colors from snowwhite through all the delicate tints of pink, rose, carmine, to the deepest crimson and blood-red.

We advise that the seed be sown as suggested above. One of the prettiest displays which it was the privilege of the writer to see was the result of seed sown in December, in the manner described, thereby allowing the winter snows to carry the seed just in the surface of the ground and permitting the plants to have the benefit of the earliest spring start. Where planted in beds or borders by themselves, for decoration or cutting, sow in drills cr broadcast where intended to bloom as they should not be transplanted, just covering the seed and firming. As soon as plants are well above the ground, thin out to 3 to 4 inches apart for best results. Successional sowings may be made at intervals of several weeks, up to mid-May. The flowers will last several days if picked just before expanding, and the plants will bloom for a longer period of time if the old flowers are removed.

## SPECIAL OFFER

## Improved Shirley Poppies

WILD ROSE. Wild-rose-pink.
CARMINE SHADES. Shades of carminerose.
ROSE SHADES. Shades of rose-pink.
SALMON SHADES. Lovely shades of sal-mon-pink.
WHITE SHADES. Shades of white and pale tints.
MIXTURE. Splendid mixture of all existing shades.
Each, pkt. 10 cts., $1 / 4 \mathrm{oz} .50 \mathrm{cts} .$, oz. $\$ 1.50$

## COLLECTION

Pkt. each of above 6 forms
. $\$ 0.50$
$1 / 40 \mathrm{oz}$. each of above 6 forms
2.50


## PRIMULA (Primrose)

The charming and beautiful Chinese Fringed Primroses and Obconica varieties are among the most important winter-blooming pot-plants. The seed we offer is of the highest merit, and has, as usual, been saved from the best strains of English and Continental growth. Florists and others report that they have never seen finer flowers than those produced from our seed. Seed sown in April will bloom during early winter; August for spring blooming. Sow in shallow pans, in soil consisting of part sand and leaf-mold worked through a fine sieve and allow for good drainage. Cover seeds lightly and water frequently; give a temperature of about 65 degrees.

## Primula sinensis (Chinese Primrose)

This beautiful Chinese Fringed Primrose is indispensable for spring decoration in the home or conservatory, and ranks as one of the finest of all winter-blooming pot-plants grown by the florist or the home gardener. Our Giant Fringed strain is of the highest merit and is carefully selected. Giant magnifica, Blue Giant Ruby Queen Giant White, FernGiant Crimson

Giant Salmon
Giant Rose Queen
Pkt. 75 cts.; collection of 6 pkts. for $\$ 4.25$

Giant Double, White
Giant Double, Scarlet
Giant Double, Blue

Giant Double, Rosy Pink
Giant Double, Salmon-Pink
Giant Double, Salmo
Giant Double, Mixed
n of 6 pkts. for $\$ 4.25$

A very pretty form, with large heads of star-shaped flowers of various colors; a splendid type for decorative purposes.

Giant White Star
Giant Salmon-Pink

Giant Crimson Star
Giant Blue Star

Giant Rosy Star Giant Mixed

Pkt. 75 cts.; collection of 6 plts. for $\$ 4.25$

## Primula obconica gigantea

This type of Primula outrivals the old Obconica type, the flowers being considerably larger, often measuring $\mathrm{I}^{\mathrm{I} / 2}$ inches in diameter. Pkt. Obconica gigantea Kermesina. Rich crimson. . . . . . . . . . . . \$0 25
rosea. Rose.
alba
lilacina. Beautiful ilac.
Mixed. A mixture containing pure white to crimson.

S. \& W. Co.'s Primula sinensis HARDY PRIMROSES
These are among the best of the early spring-blooming plants. With a slight protection they will stand the winter, but will do better if protected by a coldframe.
Auricula. A well-known favorite of great beauty; seed saved from splendid choice mixed varieties. 6 inches.

So 15
Japonica (Japanese Primrose). Bright and showy flowers, borne in whorls on stems 6 to 9 inches long. Mixed

I5

## FOUR FINE GREENHOUSE PRIMULAS

Malacoides (The Giant Baby Primrose). The flowers measure $1 / 2$ to $3 / 4$ inch across, and the plants branch very freely. The flowers, of a

S. \& W. Co.'s Single Pyrethrum pretty light lilac, are borne in whorls on stems which are graceful and strong. If grown in a greenhouse, can be had in bloom in four or five months after sowing. A most delightful plant for table decoration. Pkt. 25 cts., 5 pkts. \$r.
Malacoides alba. This beautiful new variety is a welcome addition to this type of Primula. All those who have grown Malacoides have been pleased, making the white variety a strong favorite. Makes a charming combination with the lilac form. Pkt. 25 cts., 5 pkts. \$I.
Forbesii (The Baby Primrose). Quite the freest-flowering Primula we know. of. The plants throw up tiny flower-stalks when only a few weeks old, but we advise pinching them off and the plants kept growing until October. They may then be allowed to flower, which continues until late in the spring in greatest profusion. Pkt. 25 cts ., 5 pkts. \$I.
Kewensis. This new variety is most attractive, with pleasing, bright yellow flowers borne on long stems. It is delightfully fragrant and stands well as a house plant. Pkt. 2.5 cts., 5 pkts. $\$$ I.

## PYRETHRUM

The first-named variety is the well-known Golden Feather so much used for edging, carpet-bedding, etc., while the others are most attractive hardy plants, with daisy-like flowers that are perfect gems for cutting. No hardy border should be without these charming plants, as their flowers make delightful subjects for home decoration. Aureum (Golden Feather). Half-hardy perennial, grown as an annual. Valuable for edging, as the foliage makes a fine contrast with other bedding plants. Pkt. Io cts., $1 / 4 \mathrm{Oz}$. 50 cts .
S. $\mathcal{E}$ W. Co.'s Single Hybrids. Our strain of this beautiful hardy perennial by a specialist of this flower. The cosmos-like flowers range in color from the palest pinks to deep red, the bright yellow centers forming a splendid contrast. Blooming as they do during May and June and again in the fall, and on account of their longlasting and utility as a cut-flower, we recommend them highly to our patrons. Pkt. 25 cts., 5 pkts. $\$ 1$.
S. E W. Co.'s Double Hybrids. Colors and character of plants similar tufted, somewhat rest that centers are

## STUMPP \& WALTER CO., 30 AND 32 BARCLAY ST., HEW YORK

## SALPIGL.OSSIS (Painted Tongue)

Few annual flowers contribute such a wealth of bloom from summer until cut down by frost. It is only of recent years that American gardeners have become better acquainted with this delightful annual. As a cut-flower it has become highly prized. The funnel-shaped flowers, facing upward, revealing their exquisite markings of either gold or silver veins running through the groundwork of the flowers, and their orchid-like appearance, make them instant favorites.
For best results sow seed in a hotbed or sunny window, and when all danger of frost is past, place in the garden, allowing 8 inches between the plants.

## Salpiglossis superbissima

## (Orchid-Flowering)

This orchid-flowering strain branches freely from the main stem, forming fine, spreading plants, flowering freely from all branches, making it invaluable for cutting.
Purplish Violet Po to \$i/oz.
Pink. Bright pink. $\begin{array}{rrr}10 & 100 \\ \text { Io } & 100\end{array}$
Light Blue. Veined gold.
Io I
Golden Yellow. Rich color
IO
Scarlet. Rich color
Io I oo
Brown with Gold.
IO I OO
Finest Mixed
IO
75
COLLECTION: One packet each of 6 separate varieties, 50 cts.
Emperor. This variety forms only one leading stem, and bears at its summit a veritable bouquet of flowers in a mixture of colors, covering shades of scarlet, pink, yellow and violet. Grows about 2 feet high, and is largely


Salvia splendens (Scarlet Sage)

## SALVIA

One of our most handsome summer and autumn-flowering plants, growing into compact bushes about 3 feet high and literally ablaze with brilliant flowers; very effective for massing on the lawn and for garden decorations. Half-hardy perennial.
Splendens (Scarlet Sage). Beautiful bright scarlet; 3 feet. Pkt. io cts., 1/40z. 60 cts.
Bonfire (Salvia splendens nana compacta erecta). This variety, without question, is the finest Salvia for bedding yet introduced. The plants grow into very compact oval bushes, about $21 / 2$ feet high and produce long spikes of brilliant scarlet flowers. They stand out stiff and erect; over 200 spikes to a plant is not unusual, and the spikes bear from twenty to thirty flowers each. Gorgeous effects can be produced with the Bonfire Salvia massed on the lawn or in the garden, or planted in rows along a sunny drive, where the brilliant scarlet is simply dazzling. Pkt. Io cts., $1 / 4 \mathrm{Oz} . \$ \mathrm{I} .5 \mathrm{O}, 5 / 2 \mathrm{Oz} . \$ 2.5 \mathrm{o}, \mathrm{oz} . \$ 5$.
Scarlet Dragon. This variety is an improvement on the old Splendens type, the flowers being nearly double the size, closely crowding the immense spikes that often measure 6 inches across. It forms compact bushes, 3 feet through by 3 feet high. Pkt. 10 cts., $1 / 40 z$. $\$ 1.25$.
Zurich. A splendid dwarf variety, growing about 2 feet high, and is especially valuable on account of being the earliest to bloom, flowering ten days in advance of any other sort. Pkt. 20 cts., 1/4oz. \$1.50.
Patens (Blue Sage). In color this is as blue as the "Scarlet Sage" is red; unlike the latter, however, it is not useful for bedding, but is a beautiful plant for the border or greenhouse; tender perennials. 2 feet. Pkt. 25 cts.
Farinacea. A perennial variety, but best grown as an annual. . Seeds sown in the open ground in May bloom from July to frost. The fine light blue flowers are borne on long spikes held above the foliage; makes a good blue line. 2 feet. Pkt. 15 cts.

## Rehmannia

Angulata. Greenhouse herbaceous perennial from central China, erect habit; 2 to 3 feet in height; flowers 3 inches in diameter, rosy purple with yellow throat, spotted with deep purple; of easy culture; blooms nine months from time of sowing seed. Pkt. 25 cts .

## SANVITALIA

Procumbens fl.-pl. An annual of dwarf, compact growth, Pkt. useful in masses in beds, or edges of borders, or in vases, baskets, etc. Showy bright yellow, double flowers; in bloom all summer. $\qquad$

## SAPONARIA (Bouncing Bet)

Caucasica fl.-pl. (Double-flowering Bouncing Bet). A hardy perennial sort with white tinted rose, double flowers, produced all summer and fall. 15 inches.
Ocymoides. Very showy hardy perennial rock-plant, producing during the summer months masses of small, bright rose flowers. 9 inches.
Vaccaria. A pretty and useful annual variety, growing about 2 feet high, and bearing masses of satiny pink flowers somewhat like an enlarged gypsophila. Charming for cutting, adding grace to any arrangement of flowers. Several sowings should be made to keep up a succession of bloom. $\qquad$

## SCABIOSA

Mourning Bride; Pin-Cushion Flower; Sweet Scabious
These beautiful hardy annuals are in great demand. They grow about $21 / 2$ feet high and bloom from early in July without interruption until cut down by the frost. As a flower for cutting they are very popular. The various shades are extremely charming, but are equally well adapted for borders or beds, where they display themselves very effectively. Seeds should be sown any time in the spring after danger of frost is past.

| IMPROVED DOUBLE | LARGE-FLOWE |  |
| :---: | :---: | :---: |
|  | Pkt. | \%/40z |
| Azure Fairy. Lavender-blue. | . 8010 | \$0 |
| Fiery Scarlet. Dazzling color | 10 | 50 |
| Flesh-color. Light pink | 10 | 5 |
| Cherry-Red. Rich red. | 10 | 5 |
| King of the Blacks. Purplish | k. . . . . . . . . . . . . 10 | 5 |
| White. Pure white.......... | 10 | 5 |
| Tall Double-flowering, Mixed. | 10 | 4 |
| Dwarf Double-flowering, Mixed | 10 | 4 |

## HARDY PERENNIAL, VARIETIES

Caucasica (Blue Bonnet). One of the handsomest of hardy Pkt. perennials. It is especially valuable for cutting, the lilac-blue blooms lasting a long time in water. 3 feet
.$\$ 0 \quad 15$
Caucasica alba. Pure white. 3 feet .......... . . .
Japonica. A hardy perennial variety from Japan, forming bushy plants $21 / 2$ feet in height by the same through, and bearing on long, wiry stems beautiful, artistic, lavender-blue flowers. It is extremely floriferous, producing a continuous crop all summer. A fine cut-flower.

## SCHTZANTHUS (Butterfly or Fringe Flower)

These dainty annual plants are of easy culture in any good garden soil. The dwarf sorts are frequently used for edging borders or beds. For outdoor blooming, sow seed in May where intended to bloom and thin out to 6 inches. Seeds germinate quickly and flower with ordinary care.
Garaway's Hybrids. A splendid strain having graceful Pkt. fusion of large fern-like foliage and bearing a profusion of large flowers, all with handsome markings on white, buff, brilliant rose, rich blue, brown, and black grounds. Seed sown in August and September will make fine plants for winter and spring flowering. Seed furnished direct from originator. \$i oo
Wisetonensis. A variety largely used as a pot-plant for the Wisetonensis. house or conservatory. It is remarkably freeflowering and presents a beautiful appearance, with its myriads of blooms, the ground-color of which is white, dotted with delicate rose. 5 pkts. \$I..

## Dwarf Hybridus grandiflorus. New. A popular strain of

 nual; plants grow 12 inches in height, of compact and pyramidal habit, with a great range of colors, bright and handsome. Splendid for border planting. $\qquad$
## SILENE (Catchfly)

The varieties offered below are very pretty hardy perennials, well adapted for the rockery or the front of the hardy border. Pkt. Alpestris. Glistening white flowers in July and August. 4 inches
.$\$ 015$
Schafta (Autumn Catchfy). A charming border- or rockplant, growing from 4 to 6 inches high, with masses of bright pink flowers from July to October.

15

## SMILAX (Myrsiphyllum asparagoides)

In many respects Smilax is the most useful, and it is certainly one of the most graceful climbers which adorns the greenhouse or conservatory. For bouquets and floral decorations it is indispensable. Pkt. Io cts., $1 / 40 \mathrm{oz}$. 30 cts .

## SOLANUM

Capsicastrum (Jerusalem Cherry). This is a very useful pot Pkt. plant for winter decoration. It is of dwarf, branching habit; bearing in the greatest profusion bright scarlet globular berries. Leaves oval, small. Very ornamental. Height 1 foot.
Capsicastrum, Fra Diavolo. A new variety of the above, of close, compact growth, with foliage somewhat smaller and lighter green. The small, bright scarlet fruits remain on the plant a long time and make it a beautiful decorative pot plant through the winter months.

15

## STATICE (Sea Lavender)

Splendid hardy perennials, either for the border or rockery, producing all summer panicles of minute flowers, which can be dried and used for winter bouquets.
Latifolia. Purplish blue flowers.
. $\$ 0$ IO
Mixed. Containing many sorts. 10

## STEVIA

Serrata. Free-blooming plants, bearing a multitude of fragrant, pure white flowers; suitable for summer or winter blooming; largely used for cutting.


Schizanthus wisetonensis

S. \& W. Co.'s Giant Perfection Stocks

## STOCKS

These popular flowers are easily grown, and are so highly fragrant and of such great beauty, and have so many good qualities, that they deserve a place in every garden. They should be given good rich soil to grow in, and will amply reward good treatment with remarkably large pyramids of bloom. The flowers represent a great diversity of color. The Tall Perfection and Dwarf Bouquet Stocks are great improvements over the Gilliflowers of the olden times, the flowers being much larger and more densely double, and there is also a much larger variety of colors and shades than there used to be.

As they are half-hardy annuals, seed should be started in the house or hotbed during March or April, planted into small pots, and then set out in the garden during May, allowing I foot of space between the plants, in order that they may attain full and perfect development.

Our Stock seed is high-bred, being produced from plants grown in pots by a specialist, and will afford a very large percentage of double-flowering plants.

## S. \& W. Co.'s Improved Giant Perfection

These are an improvement on the variety offered as Ten-Weeks' Stock. Of splendid, pyramidal growth, freely branching from the main stem, giving an abundance of large spikes of double fiowers from early summer until fall, and are used largely for cutting. 2 feet. Pkt. $1 / 8 \mathrm{oz}$. Pkt. $1 / 8 \mathrm{oz}$.


## S. \& W. Co.'s Dwarf Bouquet

This is a leading class for bedding out for summer blooming. They come into bloom earlier than the preceding varieties, but are dwarfer in habit and do not make so fine flowers for cutting. Pkt. $1 / 8 \mathrm{oz}$. $1 / 8 \mathrm{oz}$.


Fiery Crimson.

## Giant-Flowering Beauty Stocks

A magnificent, recentiy developed strain of early-flowering winter or Brompton Stocks, forming much-branched plants about 2 feet high, and having numerous spikes of very large, double, delightfully fragrant flowers; they are of special value as potplants for greenhouse decoration and for cutting during the dull winter months; for this purpose seed should be sown from July to September; if sown in February or March, will produce plants that will bloom-from midsummer to frost. $\quad$ Pkt. $1 / 8 \mathrm{oz}$. Almond Blossom. White, shaded car- Monte Carlo. Canary-yellow. mine.
Beauty of Nice. Delicate pink.
Crimson King. Rich blood-crimson. Mont Blanc. Purest white.

Old Rose. Beautiful shade of old rose.
Queen Alexandra. Beautiful lilac.
Summer Night. Rich deep blue.

Packet, any of the above varieties, 25 cts . each, $1 / 80 \mathrm{z} . \$ 1$

Cyanea alba. A pure white-flowering form, identical to the popular blue variety in every way except color. Pkt. I5 cts., I/4oz. \$I.

## STREPTOCARPUS HYBRIDUS

A new hybrid race of the Cape Primrose, the flowers somewhat resembling those of the gloxinia, but smaller. The plants are compact in habit, the flowers about 2 inches in diameter, with long, tube-like corollas, and are borne in clusters of six to eight on a stem, with several stems to the plants. The colors are varied from white through shades of pink, rose, wine-red, light blue, mauve, etc., many having white throats or marked in various ways. Used for greenhouse decoration. Pkt. 50 cts.


Stokesia cyanea

# S. \& W. CO.'S SWEET PEAS EARLY-Flowering 

We have great pleasure in offering to our patrons a very complete list of Early or Winter-flowering Spencer Sweet Peas. Many of our patrons grew them under glass last fall and produced wonderful results. This, however, is not the only reason Sweet Pea growers have worked to produce the large-flowering strain of Sweet Peas to flower early. This new race of Early-flowering Spencer Sweet Peas is particularly adapted to sections where the Summer-flowering Spencer varieties have not proved satisfactory. In our southern states, Japan, Australia, as well as all tropical or subtropical countries, this strain of Early-flowering Spencers, if sown during the early fall months, will produce flowers during the winter and continue until killed by the extreme heat. This is a distinct advantage over the regular Spencer Sweet Peas which, if sown at the same time, will not begin flowering until April.
The number of varieties of Early-flowering Sweet Peas that are now being offered has become so numerous that we have been obliged to make a careful survey of the kinds that are distinct in their color and also those that do best in the various parts of this country. The following list, we feel, covers this need quite well.
The expression Early before each variety is used so as to avoid these new varieties being confused with the late-flowering varieties.

$$
\text { All packets contain } 50 \text { seeds each }
$$

Early Amethyst. Royal purple; medium Pkt.
grower...................................... ${ }^{\text {So }} 25$

Early Aviator. Best Christmas red........... 25
Early Blanche Ferry. Identical in color to the popular late-blooming pink-and-white variety.
Early Blue Bird. The finest Wedgwood blue; throws a small percentage of dark blue rogues, but grows more vigorous than any other blue, fully a foot higher. .
Early Blue Jacket. Rich deep navy blue.....
Early Cream. Best pale yellow.
Early Columbia. One of the finest of recent introductions. An improved Blanche Ferry, with a deeper rose standard and whiter wings............................................. . .
Early Eldorado. Beautiful new orange.......
Early Flambeau. The finest cerise to date...
Early Glitters. One of the finest of its colorbright cerise......
Early Grenadier. Best dazzling scarlet......
Early Hercules. Beautiful large rosy pink flowers; vigorous grower; will continue to produce flowers when all others are out of season.
Early Jeanne Mamitsch. Improvement on Zvolanek's Rose.............................. . .
Early Lavender King. Rich lavender.......
Early Madonna. The best black-seeded white variety; easy to germinate, and better than Mrs. Spanolin.
Morse's Superior Pink. The color is a beautiful rose-pink, slightly shaded with salmon. This was awarded the silver medal at the last New York Spring Show, likewise the very highest award of the Chicago Florist Club, which is a Certificate of Merit..
Early Mrs. Kerr. Best salmon-pink.
Early New Blue. Fine deep even tone blue.
Early Orange King. The finest orange. . . . . . .
Early Rose Queen. A popular rose-pink....
Early Snowstorm. Good white; vigorous...
Early Sweet Lavender. The finest lavender .
Early True Blue. Light violet-blue..........
Early Wedgwood. This is a fine light blue, but not as early as Blue Bird.

1/2oz. Oz.
\$0 60 \$I oo
85 I 50

60

Early Yarrawa. Vigorous grower. This is still considered among the good pink varieties...
Zvolanek's Rose. The finest novelty of recent introduction; by all odds the finest rose-pink.
Early-flowering Mixed. We offer a mixture of Early-flowering Sweet Peas covering all the colors

|  | 85 | 150 |
| :---: | :---: | :---: |
| 1 | 75 |  |
| 1 | 75 |  |
|  | 85 |  |
|  | 85 |  |
|  | 60 | 100 |
|  | 60 | I 00 |


| 50 |  | 250 | 500 |
| :---: | :---: | :---: | :---: |
| 25 |  | 85 | I 50 |
| 50 | 1 | 1 75 | 3 оo |
| 50 | I | 75 | 300 |
| 25 |  | 60 | I 00 |
| 25 |  | 60 | 100 |
| 50 | I | 75 | 3 оo |
| 25 |  | 60 | $1{ }^{0}$ |
| 25 |  | 60 | 100 |
| 20 |  | 60 | 100 |
| 25 |  | 85 | I 50 |



## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York



Summer-flowering Sweet Peas when grown for exhibition purposes are best grown in the manner illustrated above. The vines are trained to bamboo stakes. This insures unusually long, strong stems, frequently bearing 4 flowers of the very largest size. The illustration was taken from a photograph in a famous New England garden.

## Stumpp \& Walter Co.'s Sweet Peas

## SUMMER-FLOWERING SPENCER VARIETIES

Culture of Sweet Peas. It is a well-known fact that, in order to have largest blooms of Sweet Peas, seed must be planted early pots and transplant in April, or sow the previous fall. greatest root-development during early spring; many professional gardeners sow in pots and transplant in April, or sow the previous fall.

Sow seed as soon as the ground can be worked in the spring. Dig a trench about a foot wide and deep, and fill in with 6 inches of well-rotted stable manure; tread down firmly and replace the good garden soil. Draw a single straight line in the middle of the prepared surface, about $3 / 4$ inch deep; sow seed at even distances of about 3 inches and cover. When the plants grow about 3 or 4 inches high, thin out, leaving the plants 6 inches from each other. (Experts who raise for exhibition thin out to one foot.)

The cutworm is one of the greatest enemies of Sweet Peas, attacking the young shoots just as they come up. At the first appearance of this pest, a good sprinkling of lime over the row sometimes helps to exterminate it. As soon as the vines reach a height of about 8 inches, proper trellis or other supports should be provided.

The Sweet Pea is a moisture-loving plant, and by the month of May the plants will require water. In order that the water may be retained by the soil and get to the roots, as well as to keep them cool, it is advisable to use a mulch of old stable manure and soak well with hose each or every other day, as needed.

We believe, in submitting the following list of 44 varieties of Summer-flowering Spencer Sweet Peas, we have covered the best distinct varieties in commerce. On page 116 we have listed these in a color classification for ready reference, and suggest our patrons referring to this chart for the best variety in their particular color class.

Agricola. The Sweet Pea lover who delights in raising Pkt flowers of unusual color will find the blush-lilac variety Agricola very interesting.
$\$ 010$
Oz.

Aurora. Another odd-colored variety, classified under the marbled, flaked, and striped varieties. The ground-color is white, which is striped and flaked orange-pink.
Barbara. Sweet Pea experts consider this favorite the finest salmon-colored variety. A conspicuous sort at all Sweet Pea exhibitions.
Blanche Ferry. Still a great bicolor variety and considered among the best. The standards are bright pink and the wings pure white-a lovely contrast....
Blue Monarch. Where a dark blue sort is desired we suggest this variety
Blue Picotee. Another variety liked on account of its oddity. The flower is white, with a narrow picotee edge of dark blue.
Brocade. Considered the finest variety in the art shades. A combination of salmon, rosy lavender, and rose-pink, with a satiny finish. The flowers are large and exquisitely shaped, carried on strong stems.
\$o 50

Charity. This is without a doubt the finest rich bril- Pkt. liant crimson which does not burn in the sun. A vigorous grower, the exquisitely waved flowers are usually produced in fours on long graceful stems...... \$o is
Constance Hinton. Still considered the finest blackseeded white. ....... . . . . . . . . . . . . . . . . . . . . . . . . . . superseded for exhibition, still a good bright pink.....
Defiance. The most brilliant Sweet Pea yet intro-
Defiance. The most brilliant Sweet Pea yet introduced. It is a fine, large, orange-scarlet, burnless, and of vigorous habit. Considered to have superseded all other orange-scarlets.
Dobbie's Cream. Deep cream; still a winner at all Sweet Pea exhibitions on account of its splendid size and long stem.

10
Elegance. This variety has indeed been appropriately named. The color is a bluish lilac or white, faintly suffused with a pinkish lilac-a very artistic color. The flowers are large in size and borne freely in fourflowered sprays.the newer varieties and quite the best of the pale pink selfs.

Oz.
\$0 75

## STUMPP \& WALTER CO.'S SWEET PEAS, SUMMER-FLOWERING, continued

Fiery Cross. This variety is considered the finest Pkt. deep cerise. The flowers are borne in many fourflowered sprays
Florence Nightingale. Among the older favorites, this is still claimed to be the finest rosy lavender. The rosy sheen in the lavender makes it a charming color.
George Herbert. The flowers of this variety are a most magnificent rich rosy carmine. The blooms are large and waved.
Hawlmark Cerise. This variety differs from the deep cerise form, Fiery Cross, and the rose-cerise Illuminator in that the blending tone is a pure salmon. Is esteemed the finest salmon-cerise.
Hawlmark Lavender. Without a doubt the finest pure lavender as yet introduced. The flowers are of the largest size.
Hawlmark Maroon. A rich red-maroon. The flowers have a glistening sheen resembling polished mahogany. A splendid grower, producing many fourflowered sprays on very long stems.
Hawlmark Pink. This might easily be considered the finest introduction in recent years. The color is a most beautiful shade of rich rose-pink, deeply flushed and shaded with salmon. The flowers are freely borne on many four-flowered sprays.
Heavenly Blue. A fine new variety, of a most beautiful soft tone of Delphinium blue. It is a pure blue self that does not show a trace of violet. The flowers are of immense size, with fours invariably wellplaced on long, stiff stems. The introducer claims this Novelty to supersede Mrs. Tom Jones, which up to this time, we considered the finest bright blue.. .
Helen Lewis. This old favorite is still largely grown on account of its color. The wings are orange-rose, the standard intense rich crimson-orange.
Hercules. A magnificent, large, soft rose-pink self. Still a great favorite at Sweet Pea exhibitions.
Illuminator. Glowing rose-cerise; under artificial light the flowers appear to be a glowing orangescarlet. The finest rose-cerise variety..
King White. Still holds the fort as being the finest pure glistening white.
Loyalty. Ground-color white, striped and flaked blue
Mary Pickford. A new variety, much on the order of Hawlmark Pink. The flowers are of large size and are borne freely in fours on long stems.
Mavis. A very charming shade of soft, yet rich rosepink on a white ground. One of the really good varieties of recent introduction.
Mrs. C. P. Tomlin. This is now considered the leader among the rich crimson-scarlets and is remarkable for its purity of tone and substance. The color is scarlet with a touch of fiery red in it. The flowers are of largest size, producing many four-flowered sprays. . .
Mrs. C. W. Breadmore. Creamy buff ground, beautifully edged with rose-pink.
Mrs. Cuthbertson. Standard clear rose-pink, wings white with a faint blush of pink; still considered a splendid exhibition bicolor.
Mrs. Tom Jones. Until the introduction of this beautiful variety there was no color like it in blues. The flowers are large, of great substance, exquisitely waved, and of a uniform bright delphinium-blue. A leader at all Sweet Pea exhibitions in its color.
Picture. Considered the largest Sweet Pea introduced to date and of unusual substance. The color is a blend of cream and pink shades, quite different from the usual cream-pink varieties, the color being flushed deeper in the wings, and the pink shade being brought out by the creamy flush in the center of the standard.
Prince George. Another interesting variety of the art shades. Standard rosy lilac with veinings of richer rose, having a distinct darker rose blotch at the base; wings violet-rose.

25 I 00


I

Io
$10 \quad 50$
10
10

25

10
$\qquad$

15 10

10


I5
25 I 00

Io
50

Royal Purple. Without a doubt this is the finest rich Pkt. royal purple. A large-flowering variety, with many four-flowered sprays..
\$o 10 \$o 50
Royal Scot. Considered one of the few of the really good novelties of recent introduction. A true scarlet self, the finest in its class-brilliant cerise-scarlet.
Senator. Chocolate- and seal-brown striped and flaked on ivory-white-a unique color combination.
Sparkler. A wonderful exhibition variety of recent introduction. The color is a lovely combination of rose and cream, the standard being a bright rose, the wings a creamy primrose lightly suff used soft rose.
Tangerine. This variety has been appropriately named-a deep orange, almost approaching the colors of the tangerine orange. Flowers of great size and well waved.
Tennant. A most pleasing shade of rosy mauve. . ..... .
Valentine. This is considered the finest blush-pink variety. The flowers are freely borne and of an even tone of blush-pink.

I5
Warrior. The finest dark maroon in our list. Hawlmark Maroon is the other fine variety of this shade but shows more red in the maroon, while Warrior shows more chocolate.

10
50
Oz.
$\qquad$

號 considered the best of its class until the introduction of Mrs. Tom Jones, which is brighter


Made from a photograph taken close to the plants to show length of stems and size of blooms

## GRAND PRIZE MIXTURE Giant Summer-flowering Sweet Peas

This is a combination of the best varieties of the Spencer Sweet Peas, and includes every described color and shade, good care being taken to have all the best varieties.

## Packet

Ounce.
Quarter-pound
Half-pound
Pound
$\$ 010$
25
85
150
150
250

## Summer-flowering or Spencer Sweet Peas

In order to make it less difficult for the amateur or professional gardener to choose varieties according to their colors and shades, we have prepared the following classification of all Summer-flowering Sweet Peas listed on pages 114 and $I I 5$ of our catalogue.

| Bicolor | Pkt. | Oz. |
| :---: | :---: | :---: |
| Blanche Ferry. Standards pink |  |  |
| Mrs. Cuthbertson. Standard clear rose-pink; wings white, with a faint blush of pink. | 10 | 50 |
| Sparkler. A lovely combination of rose and creamstandards bright rose; wings creamy primrose, lightly suffused soft rose. | IS |  |

## Blue (Bright)

Heavenly Blue. Bright delphinium blue; this and Mrs. Tom Jones considered finest bright blue....... Mrs. Tom Jones. Bright blue, similar to the above....
Wedgwood. A lighter shade than two preceding varieties

## Blue (Dark)

Blue Monarch. The finest deep navy blue IO

## Blush (Very Pale Pink)

Valentine. Pale blush-pink............................... I5

## Blush (Lilac)

Agricola. Pale tone of blush-lilac...................... .
Elegance. Exquisite even tone of blush-lilac.......... 15

## Carmine

George Herbert. Even tone of carmine. IO

## Cerise (Deep)

Fiery Cross. The finest deep cerise................... 10

## Cerise (Rose)

Illuminator. The finest rose-cerise.................... io
Cerise (Salmon)
Hawlmark Cerise. The finest salmon-cerise 25
Cerise (Scarlet)
Royal Scot. The finest scarlet-cerise ..... I5

## Cream

Dobbies' Cream. The finest cream and nearest tone to yellow in Sweet Peas.

## Cream-Pink (Deep)

Picture. The finest cream-pink variety. 25

## Crimson

Charity. The finest brilliant crimson................. I5
Lavender (Rosy)
Florence Nightingale. Fine rosy lavender........... Io
Lavender (Pure)
Hawlmark Lavender. The finest lavender self 25

Maroon (Dark)
Warrior. Darkest maroon, almost black.

## Maroon (Red)

Hawlmark Maroon. The finest reddish maroon, Pkt. Oz . beautiful in the sunlight. . . . . . . . . . . . .................. $\$ 0 \quad 25$ \$I oo

## Mauve

Tennant. The finest even tone of mauve............. so 50

## Orange

Tangerine. The finest pure orange.................... is 75
Orange (Pink)
Helen Lewis. The finest orange-pink. ............... ro * 50

## Orange (Scarlet)

Defiance. The finest orange-scarlet..................... 25 I 50

## Picotee (Cream Ground)

Mrs. C. W. Breadmore. Cream ground, fine picotee
edge of pink........................................................... 50

## Picotee (White Ground)

Blue Picotee. White ground, fine picotee edge of dark blue. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .50
Pink (Pale)
Elfrida Pearson. Magnificent pale pink.. ..... 50
Pink (Rose, Deep)
Countess Spencer. Even rose-pink ..... 40
Hercules. Finest rose-pink. ..... 50
Mary Pickford. New. Fine rose-pink. ..... 25
Mavis. Exquisite pale rose-pink. ..... 50
Pink (Salmon, Deep)
Hawlmark Pink. The finest deep salmon-pink........ 25 ..... I 00
Purple
Royal Puxple. The finest rich royal purple. ..... 50
Sailmon
Barbara. The finest salmon self.......................... io ..... 50
ScarletMrs. C. P. Tomalin. The finest crimson-scarlet. . . . . 1575
White
Constance Finton. The finest black-seeded white. ..... 10 ..... 50
King White. The finest exhibition white.
Art Shades
Brocade. A combination of salmon, rosy lavender, and rosy pink, with a satiny finish........................... I5 ..... 75
Prince George. Standard rose-lilac, with veinings of richer rose; having a distinct darker rose blotch at the base; wings violet-rose. ..... 10 ..... 50
Marked, Flaked, and Striped Varieties
Aurora. White ground, flaked orange-pink........... Io ..... 50
Loyalty. Ground-color white, striped and flaked blue.. $\quad$ io ..... 50
Senator. Chocolate and seal-brown, striped and flaked on ivory-white ..... Io

## GIANT DOUBLE-FLOWERING ZINNIAS

THE ZINNIA has, perhaps, gained more steadily in popularity than any of our annuals because of the interest taken in it by plant-breeders who have tried to excel one another in improving existing forms and bringing new ones each year to the attention of the flower-lover. We are offering, in the Novelty section of our catalogue, some of the newer forms which will soon, we feel sure, become popular in your gardens. Few, if any, of the annuals have greater utility value. In the mixed border they may be had in bloom from early summer until cut down by frost, and they are splendid also when used as a cut-flower for house decoration. We are offering, for the first time this year, in connection with this illustration, a new color of this Giant-flowering type-Salmon. This is best described as a beautiful clear salmon, much the same in color as that very popular Darwin tulip, Clara Butt. In order to get best results, seed should be sown either indoors in a sunny window and the plants transplanted to the garden early in May, or started outdoors and plants transplanted later. Leave at least 2 feet between plants as they are robust growers and need sufficient space to attain maximum development.

GIANT
YELLOW

The blooms frequently attain a size of 6 inches and plants the height of 3 feet.

## GIANT ZINNIAS

SPECIAL OFFERING
Giant Salmon. Giant White. Giant Rose. Giant Crimson. Giant Yellow. Giant Scarlet.
Each, pkt. 25 cts.; 1/4oz. 60 cts.; oz. $\$ 2$

## COLLECTION

One pkt. each of above 6 distinct colors $\$ 1.00$ $1 / 40 z$. each of above 6 distinct colors . 3.00


## SWEET WILLIAM (Dianthus barbatus)

A well-known, attractive biennial which flowers the second season from seed. Sow outdoors in May, and transplant in August.
$\begin{array}{lll}\text { Single White } & \text { Single Black-Red } & \text { Single Dark Crimson } \\ \text { Single Crimson } & \text { Single Finest Mixed } & \text { Single Red, Margined }\end{array}$ Single Crimson Single Finest Mixed Single Red, Margined

Each, pkt. 10 cts., $1 / 4 \mathrm{oz} 50$ Whit
COLLECTION; One pkt. each of 5 colors, 40 cts.

## Double White <br> Double Crimson <br> Double Black-Red <br> Double Finest Mixed <br> Double Pink <br> Each, pkt. 10 ets., 1/4oz. $\$ 1$

Newport Pink. A distinct new color which originated in one of the far-famed gardens at Newport, R. I. In color it is what florists call watermelon-pink or salmon-rose; strikingly brilliant and beautiful. The flowers are borne in massive heads, on stems 18 inches high. For midseason mass bedding it has no equal. It is also very effective for cutting. Pkt. 15 cts., 2 pkts. 25 cts.
Scarlet Beauty. A very effective, rich, deep scarlet variety. Pkt. I5 cts.; 2 pkts. 25 cts.
Holborn Glory. This strain is a large-flowered selection of the auriculaeyed section, the most beautiful and admired of all Sweet Williams. Individual flowers and trusses are of extraordinary size, while the range of color, all showing a clear, white eye, is truly superb. Pkt. Ioc., $1 / 4 \mathrm{oz} .50 \mathrm{c}$.

## TAGETES

Signata pumila. A dwarf, compact, bushy annual Marigold, with beautiful, delicate, fern-like leaves, densely covered with flowers of bright yellow, striped brown; a first-class border plant. Pkt. 10 cts., $1 / 40 z$. 50 cts.

## THALICTRUM (Meadow Rue)

Adiantifolium. A beautiful hardy perennial, with foliage like the Maidenhair fern and miniature white flowers in June and July. Pkt, io cts.
Dipterocarpum. Among the genus of hardy plants this is a rear gem, not only for the garden, but its dainty graceful sprays of flowers elegantly arranged on stems 4 feet high, are invaluable for cutting. The flowers are a charming shade of violet-mauve, which is brightened by a cluster of lemon-yellow stamens and anthers. Pkt. 25 cts., 5 pkts. \$I.

## THUNBERGIA (Black-eyed Susan)

Beautiful, rapid-growing annual climbers, preferring a warm, sunny situation; used extensively for hanging-baskets, vases, low fences, etc. Very pretty flowers in buff, white, orange, etc., with dark eyes. 4 feet. Mixed Colors, pkt. 10 cts., $1 / 40 z .50$ cts.



Sweet William (Dianthus barbatus)

## TORENIA

Fournieri. A very fine annual; splendid for vases, hanging-baskets, borders, etc. Sky-blue flowers, with bright yellow center. Pkt. 10 c.

## VALERIAN (Garden Heliotrope)

Hardy perennial. Pinnate foliage and panicles of flowers, with odor of heliotrope. 5 feet. June and July. Pkt. Oz.
Red..
\$o 10 \$0 50
White
IO
40

## MAMMOTH VERBENAS

We have been carefully selecting and improving this fine strain of Verbenas for years, and can recommend it as the very best procurable. The trusses and individual flowers are of the largest size, of brilliant colors, free-blooming and of vigorous habit. For best and quickest results seed should be sown early in the house or hotbed, and transplanted to flowering quarters in May. If sown outdoors in May, it blooms from the end of July on. Verbenas are better grown from seed than from cuttings, being more vigorous and not liable to disease. Pkt. Oz.
S. \& W. Co.'s Mammoth Defiance. Scarlet. . . . . . . So Io $\$ 200$ S. \& W. Co.'s Mammoth Blue. Deep blue......... Io 200 S. \& W. Co.'s Mammoth Pink. Deep pink S. \& W. Co.'s Mammoth White. Pure white S. \& W. Co.'s Mammoth Striped

IO 200
10 200 S. \& W. Co.'s Mammoth Yellow
S. \& W. Co.'s Mammoth Mixed. Fin..................... 10 200 Ellen Willmott. Fine rose-pink. Finest colors..... Io Ellen Willmott. Fine rose-pink

## VARIOUS VERBENAS

Lemon Verbena (Aloysia citriodora). Every garden should Pbt. have a few plants of this fragrant favorite. Its pale green,
delightfully scented foliage goes well with any flower.
Erinoides (Moss Verbena). This lovely variety produces a mass of moss-like foliage, spreading over the ground like a carpet, above which are borne heads of purplish blue and white blossoms in lavish profusion; comes into flower in June, and continues until frost. For beds, baskets or rockeries.

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## VERONICA

Spicata. An elegant hardy border plant, growing about $I x / 2$ feet high, bearing all summer spikes of bright blue flowers, which lengthen with age
Alba (White), Rosea (Pink), Mixed, each pkt. 10 cts.

## VINCA (Madagascar Periwinkle; Old Maid)

Ornamental, free-blooming plants and one of the most satisfactory flowering bedding plants we have. It is best to start the seed early indoors or in a hotbed, but they begin blooming in August from seed sown out-of-doors in May.

Pkt. Oz.
Alba. Pure white....................................... . $\$ 0$ о 10 . $\$ 200$
Rosea. Rose.
Rosea alba. White, with rosy eye
Mixed.

## VIOLA (Tufted Pansies)

While the flowers of Tufted Pansies are not so large as the regular type, yet they bloom so freely that they are superior to Pansies where effect is wanted, the colors being particularly clear and distinct. They also bloom for a longer time.

Pkt. Cornuta, Admiration. Large; dark blue

66 $\quad$ Purple Queen
Mauve Queen
alba. White
alba. White
ino. Blue, with dark eye
Perfection. Light bluc; large-flowered............... . . . 25
Yellow
Mixed.
VIOLET (Viola odorata). Single Sweet Violet

## VIRGINIAN STOCKS

Sown early, these pretty annuals are gay in the period between the spring and summer flowers, their fresh, bright colors in lines and beds producing a charming effect. May be sown like sweet alyssum; excellent for the border. White, Rose, or Mixed, pkt. 10 ets., oz. 60 ets.


Zinnia Haageana

## WALLFLOWER

These half-hardy perennial and annual Wallflowers are grown for early spring bedding and for their delightful fragrance. Perennial sorts should be sown in autumn and carried over in coldframe; annual sorts may be sown indoors in March and will flower the first year from seed. Pkt.
Early Parisian. Golden, shaded orange-red. . . . . . . . . . . . . . So Io Blood-Red. Red, orange shaded 10
IO
IO Golden Gem. Yellow.
The following varieties are not hardy but should be sown in early fall, and carried over winter in a frame and planted out in the spring. SINGLE-Cloth of Gold (Yellow), Eastern Queen (Salmon),
Ellen Willmott (Ruby-red), Feltham Early (Brown-red),
Golden Glory (Old-gold), Vulcan (Deep red).
DOUBLE-Black-Brown, Canary-Yellow, Lilac, Orange-
Brown, Yellow, Rosy Purple.
Any of the above varieties, pkt. 25 cts., 5 pkts. $\$ 1$

## ZINNIA (Youth and old $A$ ge)

The seed may be sown in a hotbed or sunny window and transplanted, or sown later in the open ground. The plants come into flower early in the summer and keep on blooming until hard frost.

## Giant Double-flowering

Trials of this Zinnia sown in the open ground in April produced flowers 6 inches in diameter on plants 3 feet high. If sown in the open ground in April, thin out as soon as the plants are well up, lcaving at least $\mathrm{I} 1 / 2$ feet each way, as they are robust growers, and requirc a large amount of space to attain maximum size. The colors listed below are pure in tone.

| Shrimp-Pink | Salmon | Rose |
| :--- | :---: | :---: |
| Buttercup | Yellow | Crimson |
| Scarlet | Purple | White |
|  | Each, pkt. 25 cts., oz. $\$ 2$ |  |

## S. \& W. Co.'s Giant Double-flowering Mixed.

We offer a well-prepared mixture of this greatly improved Zinnia and where our patrons are not desirous of growing them in separate colors, we suggest this mixture. Pkt. 25 cts., oz. \$2.

## Dwarf Double-flowering

This type of Zinnia, while not so tall as our Giant Double-flowering varieties, offered above, is a very satisfactory type for borders or cutting. Grows about $11 / 2$ feet high; flowers perfect.

## Crimson Purple Golden <br> Lemon-Yellow Salmon-Rose Scarlet <br> White

## Each, pkt. 15 cts., oz. $\$ 1.50$

Tall Double-flowering Mixed. This Zinnia is similar in height and form of plant to our Giant Double-flowering except the flowers which are about two-thirds the sizc. Pkt. 10 ets., oz. \$1.

## Zinnia, Lilliput

This variety forms a bush about I foot high, and is covered with small, very double flowers in profusion.

Pkt. 1/4oz. Pki. 1/4oz. Scarlet Gem..... . \$o io \$o 50 Orange Gem...... \$o Io \$o 50 Golden Gem. . . . Io 50 White Gem....... 10 . 50 Lilac Gem........ 10 ( 50 | Finest Mixed..... Io 50

## Various Zinnias

We offer below a selection of the various types of Zinnias, all of which, on account of the odd formation of the flowers, should be more generally cultivated.
CURLED AND CRESTED. The petals of this strain are curled and crested into the most fantastic and graceful forms. Our mixture includes all the brilliant shades. Pkt. 10 ets., $1 / 402.50 c$.
HAAGEANA. A dwarf, compact variety growing 9 to 10 inches high, and bearing masses of double flowers $11 / 2$ inches through in a most unusual range of color-rose grounds tipped yellow, maroon ground tipped cream, ycllow tipped wallfower-red. Pkt. 15 ets., $1 / 40 z$. $\$ 1$.
Picotee. We are offcring this in our Novelty and Specialty Section. The flowers of this new type are picoteed at the edge of the petals, with a color distinct from the body of the flower. Plants attain the height of $I 1 / 2$ feet and bear profusely. We offer them in a mixture of color. Pkt. 25 ets., 5 pkts. $\$ 1$.
VICTORY QUILLED. This type of Zinnia has petals similar in form to the cactus-flowered Dahlia. The petals have a rather refined looking appearance and are very graceful. We offer thein in a good mixture of color. Pkt. 25 cts., 5 pkts. \$1.

## Ornamental Grasses

The annual varieties are principally grown for their beautiful flower panicles which when dried are very useful for bouquet work. Perennial varieties are very valuable for borders or massed between shrubs or on the open lawn. Many of the varieties listed below have beautifully variegated foliage and, when planted as indicated above, they are most effective and pleasing.

Annuals, except where otherwise stated. Sow outside in May, transplant or thin out when large enough to handle. If grasses are cut before they are ripe, they will keep for a long period.


A Bed of Ornamental Grasses
AGROSTIS nebulosa. Annual. A very beautiful variety. Pkt. 10 cts.
Pulchella. A very striking sort. Pkt. io cts.
ANTHOXANTHUM gracile. Annual. Useful for edging. Pkt. Io cts.
BRIZA compacta. Very pretty annual. I 8 inches. Pkt. Io cts. Geniculata. Very pretty annual. I 8 inches. Pkt. io cts.
Gracilis. Very pretty annual for bouquets. I 2 inches. Pkt. Io cts. Maxima. Considered by many to be one of the best varieties for bouquet and dried flowers. . Annual. 12 inches. Pkt. Io cts.
BROMUS brizaeformis. Large drooping panicles, useful for bouquets. Annual. 2 feet. Pkt. Io cts.
COIX lacryma (Job's Tears). A strong broad-leaved grass with large shining pearly seeds. Annual. 3 feet. Pkt. io cts.
ERIANTHUS Ravennæ. A hardy perennial grass resembling the Pampas, with beautiful foliage and fine silvery plumes; excellent for lawn specimens. Blooms first year from seed if sown early. Pkt. Io cts.
COLLECTION: 12 distinct varieties of Ornamental Grasses
ERAGROSTIS elegans (Love Grass). Annual. I foot. Pkt. 10 cts.
EULALIA japonica foliis vittatis. A very beautiful perennial variety used for forming large clumps. Leaves dark green, striped white. 4 feet. Pkt. Io cts.
Zebrina (Zebra Grass). A very striking variety, very extensively used where an attractive variegated variety is wanted. 4 feet. Pkt. Io cts
GYNERIUM argenteum (Pampas Grass). Perennial, with magnificent silvery plumes. 6 feet. Pkt. Io cts.
Jubatum. Panicles silvery rose. Pkt. Io cts.
HORDEUM jubatum (Squirrel Tail Grass). Annual. Used for bouquets. 2 feet. Pkt. Io cts.
ISOLEPIS gracilis. Graceful dwarf grass for pots. Pkt. 25 c .
LAGURUS ovatus. Hardy annual, with silvery gray tufts. I foot. Pkt. Io cts.
PENNISETUM longistylum. An annual grass with gracefully. drooping heads. 2 feet. Pkt. Io cts.
Ruppellianum. The foliage is long and slender, gracefully recurved and glossy deep green in color. If sown in March in heat, the plants should bloom by the middle of July, and the silvery plumes, tinted with violet-purple, waving in the sunlight. are exquisitely beautiful; hardy perennial. 3 feet. Pkt. Io cts. STIPA elegantissima. Perennial. Pkt. io cts.
Pennata (Feather Grass). With silvery white feathery plumes. Pkt. Io cts.
SETARIA macrochaeta. Drooping plumes of graceful appearance. Annual. Pkt. io cts.
UNIOLA latifolia. Perennial; very pretty. Pkt. io cts.
ZEA japonica. Striped maize. Pkt. io cts.
TALL. Annual Varieties, Mixed. Pkt. io cts.
DWARF. Annual Varieties, Mixed. Pkt. io cts.

## Everlasting Flowers

The following list of Everlastings are annuals, except where noted. ACROCLINIUM. Hardy annual. Good for cutting. Double White, Double Pink, Single Rose, and Double Mixed. Each, pkt. io cts. GLOBE AMARANTH (Gomphrena). Sometimes called "Bachelor's Buttons." Popular bedding plants; flowers resemble clover heads and can be dried and used in winter bouquets. Rose, White, Purple, and Mixed. Each, pkt. io cts., oz. 75 cts.
HELICHRYSUM (Straw Flower). One of the best and most popular of the "Everlastings." Very effective double flowers, making a fine display in beds or borders. To produce excellent plants thin out to 2 feet. Rose Queen, Snowball, Salmon Queen, Golden Ball, Fireball, Violet Queen, and Mixed. Each, pkt. I5 cts., $1 / 402.50$ cts., oz. $\$ 1.50$.

Sow outside in May and thin out to 6 inches.
RHODANTHE. Very beautiful, delicate looking "Everlastings," much prized for winter bouquets.
Maculata. Single White, Rose, and Mixed. Each, pkt. Io cts. STATICE (Sea Lavender). Splendid hardy perennials, either for the border or rockery, producing all summer panicles of minute flowers, which can be dried and used for winter bouquets. Mixed varieties. Pkt. Io cts.
XERANTHEMUM annuum (Immortelle). Grows about 3 feet high, and can be sown in the open ground early in May, growing readily in any open, sunny position, remaining in bloom from early summer until frost, bearing in abundance. Rose, Purple. White, and Mixed. Each, pkt, io cts.

## Ornamental Beets

Beets that have no tubers, but with handsome ornamental foliage of very rich colors. Very effective in center of beds, or anywhere in contrast with other plants.

BRAZILIAN. Golden-leaved, scarlet-veined and crimson-veined. Pkt. Io cts., oz. 50 cts .

DELL'S CRIMSON. A small, compact-growing variety, with deep bronze-purple foliage. Pkt. Io cts., oz. 50 cts .

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## NEW AND CHOICE CANNAS

## DORMANT ROOTS

The wonderful size of flowers, depth of coloring, and graceful habit of plants in the modern Canna have greatly increased its usefulness to the garden-lover. It is much to be regretted that we occasionally observe mass plantings at railroad terminals and at some of our public institutions of the old Indian Shot. The modern Cannas we offer on this page are so far superior in every way that we feel certain that in a few years hence they will not only be used extensively for mass planting in beds, but will also be used in hardy borders, particularly for their foliage and color effect.

Dormant roots of Cannas should be potted in 4 - or 5 -inch pots or planted in shallow boxes in March or April, and kept in a warm place to start them into growth. The started plants may be planted out about May 20 to June 10 in the vicinity of New York; earlier in the South and later in the North. They should be set about 2 feet apart.

## City of Portland

This variety and Hungaria might easily be called the best two pink Cannas. It is a trifle taller in growth than Hungaria and of a deeper tone of salmon-pink, with beautiful green foliage. Height $4^{1 / 2}$ feet.

## Express

A scarlet-flowering Canna of great brilliance of color. It is of dwarf, compact habit and the foliage is a deep shade of green. Its very dwarf habit makes it an excellent Canna for border planting. Height 3 feet.

## Eureka

Canna hybridizers have worked patiently ever since the time of the introduction of the modern Canna, which bears such little relation as regards beauty of foliage and size of flowers to the old Indian Shot of bygone days, to produce a pure white. In offering Eureka we feel that our patrons are using the best all-round white variety for general mass planting or bedding. Height 4 feet.


## Hungaria

The ideal pink bedder. Flowers large, in good trusses; color not unlike that of Paul Neyron rose. One of the best of the newer introductions and without a doubt one of the finest pink bedding Cannas as yet introduced. Height $3^{1 / 2}$ feet.

## King Humbert

Of superlative beauty and by far the finest of all bronze-leaved Cannas. The enormous trusses are made up of flowers that measure 6 inches across, and are a rich salmon-scarlet, distinctly and numerously flecked with deep crimson markings. It is a free bloomer, and with its rich, coppery bronze, massive foliage, it produces an effect both bold and striking. Height 5 feet.

## Richard Wallace

While this variety is not new, it still remains among the best of the canary-yellow sorts. The habit of the plant is excellent. The flowers are very large and are borne gracefully above the foliage. Height $41 / 2$ feet.

SPECIAL NOTE. We offer and illustrate in color what we conand suggest that our patrons grow some in their gardens.

## The President

In color, a rich, glowing scarlet, and the immense, firm, rounded flowers, 7 inches across when open, are produced on strong, erect stalks well above the large, rich green foliage. "The President" is superior to any other red variety in quantity and quality of bloom, and the firm flowers resist drought and heat to a remarkable degree. Considered the finest Canna ever produced. Height 5 feet.

## Wintzer's Colossal

This is considered one of the largest flowering Cannas in our list, flowers frequently measuring 8 inches in diameter. A bright scarlet; splendid bedder. Height 5 feet.

## Wyoming

A bronze-foliaged variety, with immense spikes of large, massive orange flowers. Height 6 feet.

## Yellow King Humbert

A sport of that most popular of all Cannas, King Humbert, producing large flowers in most beautiful shades of yellow, lightly spotted red. Has green foliage and bears five and six clusters of flowers at a time. Height 5 feet.


## S. \& W. Co.'s Giant Hybrid Amaryllis

FEW, if any of the bulbous plants give the amateur greater pleasure for the window garden than these giant-flowering Amaryllis that are so easily managed. Up to a few years ago, the finest varieties of these were exhibited at our New York Flower Show and were in the hands of just a few fanciers who procured their bulbs from a famous English Collection. The United States Department of Agriculture, at Washington, has been improving on these strains for the past fifteen years, and our grower has been producing bulbs from a strain of seed secured from the Government. One of the most glorious sights in March is several thousands of these magnificent pot plants in bloom in the Government greenhouses at Washington, D. C. Our strain of bulbs produces vigorous stems with from four to six blooms of the most perfect form, ranging in color from pure white grounds with varied markings of rose, red, and crimson, to the richest self colors, such as scarlet, crimson, bright red, cherry, and almost maroon. Pot up bulbs, as soon as received, in good garden loam, enriched with a handful of bone fertilizer; water well and store in a dark place in a temperature of 50 to 60 degrees for four weeks until well rooted, then bring to light. Put in a sunny window and give water regularly. After flowering set outdoors in a partially shady place, laying pots on the side until bulbs become dormant. They may be repotted in the late autumn and be had in flower the following spring.

JUMBO BULBS, suitable for 6 -inch pots, $\$ 1$ each, $\$ 10$ per doz., $\$ 75$ per 100

## General List of Bulbs and Roots

## APIOS TUBEROSA

## (Tuberous-rooted <br> Wistaria)

Clusters of rich, deep purple flowers, which have a strong, delicious violet fragrance. Tubers, io cts. each, 75 cts. per doz., $\$ 5$ per 100.

## BEGONIAS TUBEROUS-ROOTED

Culture.-A popular method of culture adopted by most amateurs is to provide a pan or box, and cover bottom surface to the depth of say one inch or two with sphagnum moss, placing the bulb immediately on top and then covering with still another layer of sphagnum moss. They should be kept moist and moderately warm. Plant in pots in a light but finely sifted soil, about one inch below the surface, and water cautiously until plant has shown considerable growth, then increase the amount. Good drainage is essential. A finely developed plant might consist of three bulbs planted in a 7 -inch pot. Splendid for shady borders or beds. Plant bulbs outdoors 8 inches apart, as soon as weather is warm, in latitude of New York about the middle of May.

## ERECT TYPE (Large Bulbs, $11 / 2$ inches

## Single-Flowering Varieties

This class of the Tuberous-rooted Begonias is largely used for beds or border-planting.

## White <br> Yellow <br> Pink <br> Scarlet

35 cts. each, $\$ 3.50$ per doz., $\$ 25$ per 100
Select mixture of all sorts, equal proportions, 30 cts . each, $\$ 3$ per doz., $\$ 22.50$ per 100

## Double-Flowering Varieties

White Yellow Pink Scarlet 40 cts. each, $\$ 4$ per doz., $\$ 30$ per 100
Select mixture of all sorts, equal proportions, 35 cts. each, $\$ 3.50$ per doz., $\$ 25$ per 100

## CALLAS (Richardia)

The variety offered below succeeds best when treated in the same manner as gladioli, tuberoses and other summer-flowering bulbs. They should be planted in the open border in a dormant condition when danger from frost is over in spring, and will then flower during the summer months. When the tops are killed by frost in the autumn, dig and store through tbe winter as you would potatoes.
Golden Yellow (Richardia Elliotliana). This is the best of the Yellow Callas, its flowers being as large as the popular white winter-flowering variety, and of a rich, lustrous golden yellow of velvety texture; the foliage is dark green, with a number of translucent creamy white spots, which add much to its beauty. Strong bulbs 50 cts. each, $\$ 5$ per doz., $\$ 40$ per ioo.



Tuberous-rooted Begonias

## CINNAMON VINE (Dioscorea Batatas)

A beautiful, rapid-growing summer climber, with bright green, glossy foliage, and spikes of deliciously cinnamon-scented, white flowers. It is perfectly hardy, the stem dying down in winter, but growing with great rapidity in the spring, so as to cover any trellis or arbor very early in the season. Large, select roots, I 5 c. ea., $\$ 1.25$ per doz., $\$ 9$ per Ioo; mammoth roots, 25 c . each, $\$ 2.50$ per doz., $\$$ I 5 per ioo.

## FANCY-LEAVED CALADIUMS

Few, if any, of the summer foliage plants equal the Fancy-leaved Caladiums in their rich and gorgeous, yet soft, coloring. All the varieties are of marvelous beauty for the furnishing of the conservatory during the summer months, or even for outdoor bedding in shady or semi-shady positions. Bulbs do best if started in pots, planting one bulb to a 6 -inch pot. Bulbs should be planted and handled similar to suggested indoor culture of tuberous-rooted begonias.
Twelve Extra-Choice Named Varieties, 50 ets. each, $\$ 5$ per doz., $\$ 35$ per 100.
Extra-Choice Mixture of Named Varieties, 40 ets. each, $\$ 4$ per doz., \$25 per 100.

## CALADIUM ESCULENTUM

## Elephant's Ear

One of the most effective plants in cultivation for beds, borders or for planting out upon the lawn. Very frequently used as border plants about suburban residences, where their large, rich green leaves afford an excellent embellishment when contrasted with the colors of the dwellings. Leaves often measure 3 to 4 feet long and $21 / 2$ feet wide. Bulbs do best if planted outdoors in this latitude, about June 1.

|  | Each | Doz. | 100 |
| :---: | :---: | :---: | :---: |
| First-size Bulbs | \$0 20 | \$200 | \$10 00 |
| Large-size Bulbs | 25 | 250 | 1500 |
| Mammoth-size Bulbs | 45 | 450 | 3500 |
| Jumbo-size Bulbs. | 65 | 650 | 5000 |

## DIELYTRA (Dicentra spectabilis)

## Bleeding Heart or Seal Flower

An old-fashioned favorite; its long racemes of graceful heartshaped pink flowers are always attractive. It is used largely for forcing, but is also excellent for the garden border and especially valuable for planting in the shade. Strong clumps, 50 cts. each, $\$ 5$ per doz.

## GLOXINIAS

This is, perhaps, one of the handsomest of summer-blooming, tuberous-rooted plants and should be grown more by the amateur than it has been. As a pot-plant for the window-garden it is grand. The main points to observe are, proper care in watering, good drainage and properly mixed soil. The cultural directions given for Begonias might also be followed for starting and growing Gloxinias. One bulb is usually used for a 4 -inch pot.
S. \& W. Co.'s Mixture. A mixture of crimson, scarlet, pink, violet, and white. 40 cts. each, $\$ 4$ per doz., $\$ 30$ per Ioo.


Montbretia, Germania

## MONTBRETIAS

The Montbretias are one of the brightest of our summer-flowering bulbs, and deserve to be planted extensively. The bulbs should be set out during April or May, 3 to 6 inches apart, in clumps of a dozen or more. They should be protected during the winter with a heavy covering of leavcs or litter.

## SIX NEW GIANT-FLOWERING VARIETIES

The following six varieties of new, giant-flowering Montbretias should be grown by everyone desiring the best. The type is so distinct from existing kinds as to justify recognition as an entirely new race. The flowers are held erect, sometimes as much as 4 inches across, and are borne on stems 3 or 4 feet high.
Fire King. Splendid glowing scarlct-rcd, decidedly one of the most beautiful and compares favorably with any of the new and more expensive sorts. I5 cts. each, $\$ \mathrm{I} .25$ per doz., $\$ 7.50$ per ioo, $\$ 70$ per 1,000.
George Davidson. A splendid Montbretia. The stems are 3 to 4 feet high, eight to ten-branched, bearing lovely, pale orange-yellow flowers 3 inches across; among the first to flower, and makes a glorious show in the garden. 20 cts . each, $\$ 2$ per doz., \$10 per 100, \$90 per 1,000.
Germania. Grows from 3 to 4 feet high, producing graceful, free-branching flowerspikes, bearing very large, widely expanded flowers 2 to 3 inches across. The color is a rich, glowing orange-scarlet, with red throat. I5 cts. each, $\$ 1.25$ per doz., $\$ 7.50$ per 100, $\$ 70$ per 1,000.
King Edmund. A very strong grower. The flowers are of large size, and of a rich golden yellow, with brown markings in the throat. I5 cts. each, $\$ 1.25$ per doz., $\$ 7.50$ per 100, $\$ 70$ per 1,000.
Messidor. A variety of recent introduction. The flowers are of a pale yellow color and it is a tall grower. 25 cts. each, $\$ 2.50$ per doz., $\$ 15$ per 100 .
Westwick. Distinct orange-red with a clear yellow eye surrounded by a circle of maroon. If cts. each, $\$ \mathrm{I} .25$ per doz., $\$ 7.50$ per 1oo, $\$ 70$ per 1 ,ooo.

## LILY-OF-THE-VALLEY (Convallaria)

This beautiful plant is often planted in an out-of-the-way place in the garden, particularly in the shade, but, like many plants that do well in any situation, it repays good treatment. If the bed is given a liberal top dressing of well-decayed manure in the fall or early spring, it will show the effect by increased size, number, and vigor of the flowers. We offer strong clumps especially suited for outdoor planting. They should be set I foot apart so as to allow the plant ample space to spread. Strong clumps, 50 cts. each, $\$ 5$ per doz., $\$ 40$ per roo.

## Splendid for the Shady Places in Your Garden

## HYACINTHUS CANDICANS (Summer Hyacinth)

Luxuriant, free-growing summer-flowering plant; spreads 2 to 3 feet, throwing up great, tall spikes, 4 to 5 feet in height, each bearing twenty to thirty large, white, bell-shaped flowers. From our own personal
 trials we desire to advise our patrons against so-called "Jumbo" bulbs of this delightful plant, as this size frequently decays in the center after being planted. Choice bulbs, 15 cts. each, $\$ \mathrm{I} .50$ per doz., $\$ 10$ per 100 .

## MADEIRA VINE (Climbing Mignonette)

A beautiful and popular vine, covering a large space in a short time. Fleshy heart-shaped leaves of a light green, and numerous racemes of feathery flowers of delightiul fragrance. Protect with litter in this latitude. 15 cts. each, $\$ 1.50$ per doz., \$1o per Ioo; by mail, 15 cts. per doz. extra.

## TUBEROSES

One of the most delightfully fragrant and beautiful of the summerflowering bulbs. By skillful management a succession of flowers may be obtained all the year round. For early flowers they can be started in February or March in the greenhouse or hotbed; and for a succession they can be planted at intervals as late as July. For flowering in the open border, plant about the middle of May, or as soon as the ground becomes warm.
Excelsior Double Pearl. Pure white, double-flowering Tuberose.
First-size Bulbs, io cts. each, \$1 per doz., \$6 per roo.
Jumbo Bulbs, I5 cts. each, $\$_{1.50}$ per doz., \$1o pcr 100.
Albino. A single white variety blooming in July or August. Not as well known as the Double Pearl, and the odor is not as pronounced. I5 cts. each, \$1.50 per doz., \$10 per 100.


## HARDY LILIES

The Lilies offered below are among the best for spring planting. For a more extensive list we refer to our Fall Bulb Catalogue, issued in August. Our list is confined to those varieties we know from actual trials do best, and the following varieties will prove satisfactory if planted by June I .
Lilies do best in the hardy border or among shrubbery, for the reason that the flowering stems bear bery, for the reason that the flowering stems bear
masses of roots immediately below the ground surface, masses of roots immediately below the ground surface,
and the shady situation helps these roots to better and the shady situation helps these roots to better
feed the plant; when through flowering, these roots help in the rehabilitation of the bulbs for another season. Any good garden soil with good drainage will do. In planting, cover bulbs at least twice their height, and, if possible, spread I inch of sharp builders' sand under the base, so that after the bulbs make basal roots the sand will provide drainage if water-logged in winter. When hard frost sets in, cover with 4 to 6 inches of leaves or litter which should be removed when spring sets in.

## Lilium auratum

## Golden-Rayed Lily of Japan

The flowers are pure white, thickly studded with crimson spots, while through the center of each petal runs a clear golden band. Fully expanded, the flowers measure nearly a foot across, are produced abundantly from July to September, and possess a most delicious fragrance. 3 to 5 feet.

|  | Each | Doz. | 100 |
| :---: | :---: | :---: | :---: |
| 8 -in. to 9 -in. bulbs. | \$0 35 | \$3 50 | \$2500 |
| 9 -in. to $1 \mathrm{I}-\mathrm{in}$. bulbs. | 45 | 450 | 3500 |
| ax-in. to 13-in. bulbs | 65 | 650 | 5000 |

## Liliurn speciosum magnificum Oriental Orchids

Words cannot describe the beauty of this variety. Frosted white, spotted, clouded and bordered with deep pinkish crimson. A much superior variety to the Roseum, Rubrum or Melpomene of the Speciosum type. For the border, among hardy plants or naturalized among rhododendrons, this is an equal favorite with the handsome Lilium auratum offered above. Splendid for pot culture as well. Blooms outside during August.
8 -in. to 9 -in. bulbs

| Each | Doz. | 100 |  |
| ---: | ---: | ---: | ---: |
| $\$ 0$ | 35 | $\$ 3$ | 50 |
| $\$ 25$ | 00 |  |  |
| 45 | 4 | 50 | 35 |

## Lilium speciosum album

The White Speciosum, which is usually grown with Magnificum and Lilium auratum, is a very dainty Lily. It flowers outside in the border or among rhododendrons at the same time as Auratum and Magrificum, and is one of the most extensively cultivated varieties.
8-in. to 9 -in. bulbs. . . . . . . . . . . . . . . . . . . . . . . . $\$ 0$ Each $35 ~ \$ 350 ~ \$ 2500$
9 -in. to II-in. bulbs.
$\$ 350$ \$25

## Lilium Henryi $\left.\begin{array}{c}\text { The Yellow } \\ \text { Speciosum }\end{array}\right)$

A new and very beautiful hardy Lily from northern China. The plants are of vigorous growth, frequently attaining the height of 6 feet. This Lily is noted for its graceful habit and is an unusually excellent bloomer. It is thoroughly hardy, and, when well established, will increase rapidly. Color rich golden yellow, lightly spotted with brown, and in shape quite resembles the Speciosum types. Flowers during August. Choice bulbs, 75 cts . each, $\$ 7.50$ per doz., $\$ 60$ per 100 .

## Lilium Hansonii

Attains a height of 3 to 4 feet. Flowers reddish orange, eight to twelve in a cluster; petals thick and durable; a native of Japan and has always been high in price, but we have a stock of strong, homegrown bulbs that will give splendid satisfaction. Flowers during June. Choice bulbs, 75 cts. each, $\$ 7.50$ per doz., $\$ 60$ per ioo.


Lilium auratum (Golden-rayed Lily of Japan)

9 -in. to II-in. bulbs. ry-in. to 13 -in. bulbs.

## OTHER HARDY LILIES

## Suitable for Garden Culture

Canadense (Canadian Bellfower Lily). One Each Doz. 100 of the most beautiful native Lilies; flowers bright yellow, with spots of red. Blooms in July and August.
Pardalinum. A California variety bearing
twelve to thirty flowers on stems 4 to 6 feet high; bright orange, spotted dark crimson.

Flowers in July.
$40 \quad 400 \quad 3000$

Regale (Myriophyllum). The most beautiful Lily, with $21 / 2$ - to 4 -foot stems, bearing three to nine large trumpet-shaped white flowers, flushed with yellow, shaded outside with deep brownish pink. Very hardy
$75 \quad 7 \quad 50 \quad 6000$
Superbum. In a collection of best plants of all countries, our native Superbum Lily would deserve a first place. In deep, rich soil it often grows 8 feet high, with twenty to thirty flowers. It is of the easiest culture, and may be grown as a wild flower in any swampy or rough part of a place where the grass is not mown. Extra-selected bulbs. .
Tigrinum splendens. The finest type of the quaint and much-loved Tiger Lily. Large, selected bulbs.
$30 \quad 300 \quad 20 \quad 00$

Tigrinum splendens, Double. The double form of the above..
$40 \quad 400 \quad 3000$
$30 \quad 300 \quad 2000$
$30300 \quad 2000$

Lilium speciosum magnificum and album may be had from cold storage for July and August delivery. Write for prices.


## FIVE FINE NEW AND RARE GLADIOLUS

We believe the following five Gladiolus, which are this year obtainable at more moderate prices, to be the finest in their respective colors.

1. Mrs. Dr. Norton
2. Maine.
3. Rose Ash.
4. Golden Measure
5. Crimson Glow

| Each | Doz. | 100 |
| ---: | ---: | ---: |
| $\$ 0.20$ | $\$ 2.00$ | $\$ 15.00$ |
| .25 | 2.50 | 20.00 |
| .20 | 2.00 | 15.00 |
| .35 | 3.50 | 25.00 |
| .20 | 2.00 | 15.00 |

## SPECIAL OFFER

We offer, in collection only, at the following rates:
5 bulbs each of the above 5 varieties, 25 bulbs, $\$ 5.00$ 10 bulbs each of the above 5 varieties, 50 bulbs, 9.00 20 bulbs each of the above 5 varieties, 100 bulbs, 17.00

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## GLADIOLUS

WE frequently receive requests from our friends for a limited number of varieties of Cladioli to plant in their gardens for cutting purposes, and also to use as certain distinct colors for mass effect. From the standpoint of vigorous growth and good flowering qualities, these six varieties have become increasingly popular, and we find our sales of these splendid sorts increasing each year.
We offer on the following page a complete list of other standard as well as the newer and rarer varieties. If Cladiolus bulbs are planted from earliest spring until the middle of July, a succession of blooms may be obtained.


If you are planning a color scheme in your garden and want Gladioli noted for their distinct colors and good flowering qualities, we suggest the varieties illustrated in color on this page,

SIX SPLENDID SORTS

|  | Each | Doz. | 100 |  |
| :--- | :--- | ---: | ---: | ---: |
| 1 | Alice Tiplady | $\$ 0.15$ | $\$ 1.50$ | $\$ 10.00$ |
| 2 | Halley | .10 | .75 | 5.00 |
| 3 Schwaben | .15 | 1.25 | 8.00 |  |
| 4 | Peace | .10 | 1.00 | 7.50 |
| 5 | Mrs. Frank Pendleton | .15 | 1.25 | 8.00 |
| 6 | Baron Hulot. | .15 | 1.50 | 10.00 |

SPECIAL OFFER
We offer, in collection only, at the following rates: 5 Bulbs each of above 6 varieties ( 30 Bulbs), $\$ 3$ 10 Bulbs each of above 6 varieties ( 60 Bulbs), $\$ 5.50$ 20 Bulbs each of above 6 varieties

## STUMPP \& WALTER CO.'S SELECTED BULBS

## GLADIOLUS <br> The Cream of the World's <br> Best Varieties <br> most popular of all summer-flowering bulbous plants

Few of the Summer-flowering Bulbous Plants have met with the same increased interest that Gladiolus have in the past ten years. Their adaptability for garden decoration or use as a cut-flower during the summer and autumn months is not surpassed by any bulbous plant we know of. In cutting Gladiolus for the house, it is best to cut the spikes as soon as the first one or two flowers are open. The remainder will open in the house. If you take pains each day to remove the faded flowers, cut a little off the end of the stem and change the water, a spike will last a week or ten days.

America. Delicate lavender-pink flowers of large size, borne on popular cut-flower variety. 10c. each, 75c. per doz., $\$ 5$ per $\mathbf{1 0 0}$
Anna Eberius. Dark velvety purple, throat deeper shade; very variety in an unusual color. 15c. each, $\$ \mathbf{1 . 5 0}$ per doz., $\$ 10$ per $\mathbf{1 0 0}$. Baron Hulot. Rich, royal violet-blue. One of the finest of its color. Flowers are medium in size, well placed, and borne on strong spikes. A variety used for contrasting with the pale and deep yellow sorts. 15 cts. each, $\$ 1.50$ per doz., $\$ 10$ per 100. Byron L. Smith. A most refined lavender-pink on white Cattleya orchid. Exceedingly fine as a cut-flower. 30 ets. each, $\$ 3$ per doz., $\$ 20$ per 100 .
Captain Boynton. A fine shade of lavender with small blotch are well placed on tall, erect of deener color on lower petals. Flowers Crimson Glow. Deep, brilliant crimson, overlaid with darker Crimson slow. shades; lower petals blothed with deep velvety crimson. The flowers are immense and plentifully spread on the tall graceful stem. A very striking variety with a very vigorous constitution. 20 ets. each, $\$ 2$ per doz., $\$ 15$ per 100 .
Dream. Large, massive bloom, deep salmon-red, with very Showy blothes. 20 ets. each, $\$ 2$ per doz., $\$ 15$ per 100 . Dr. F. E. Bennett. Deep peach-red, with flame-scarlet suffusion, lip speckled ruby and white. Large flowers borne on tall, stifif stems. The general effect of the flower is red and it is considered the finest of its color. $\$ 2$ each, $\$ 20$ per doz., $\$ 150$ per 100 .
Early Sunrise. Large, red blooms with salmon-yellow throats. per doz., $\$ 10$ per 100 .
E. J. Shaylor. Tall, very strong plants and large blooms of a E. J. Shaylor. beautiful deep rose-pink. This variety has recently been awarded a certificate of merit in London. 20 cts. each, $\$ 2$ per doz., 115 per 100 .
Evelyn Kirtland. The flowers, of strong substance, are a beautiful shade of rosy, pink, darker at the edges, fading to shell-pink at the center with brilliant scarlet blotches on the lower petals, the entire flower showing a glistening, sparkling luster. Very tall spike. Extra-fine form and color. 15 cts. each, $\$ 1.50$ per doz., $\$ 10$ per 100 .
Flora. A variety on the order of Sulphur King, but of a deen, rich, pure yellow. A splendid cut-flower variety. 20 cts . each, $\$ 2$ per doz., $\$ 15$ per 100 .
Glory. This beautiful ruffled Gladiolus has become quite popular. -The flowers are broadly expanded and well placed on straight strong spikes. The color is a creamy pink with a most attractive crimson stripe on the center of each lower petal. 15 cts. each, $\mathbf{\$ 1 . 5 0}$ per doz., $\$ 10$ per 100 .
Golden Measure. A deeper shade of yellow, heretofore This is a reate. This 1 a real gem. Severat these gorgeous fowers in iloom at once per doz., 825 per 100 .
Gretchen Zang. A beautiful rose tone of pink, blending variety of great merit on account of its splendid substance and size. 15 ets. each, 81.25 per doz., 88 per 100 .
Halley. A variety that is largely grown on account of its aarliness. Halley. The flowers are large in size, of beautiful sal mon-pink, with creamy white blotch in throat. One of the earliest-blooming varieties in our list. 10 cts. each, 75 ets. per doz., 85 per 100 .
Herada. Blooms of immense size on tall, straight spikes. The Hida. large blooms are pure mauve, glistening and clean, with deeper markings in the throat. 15 ets. each, $\$ 1.50$ per doz., $\$ 10$ per 100 .

[^0]Ida Van. A most beautiful deep salmon-red or flaming orange$\$$ \$1.25 per dozz., 88 per 000 .
Le Marechal Foch. A beautiful light salmon-pink and one Le Marcechal that will be more generally grown when better known. 15 cts. each, $\$ 1.25$ per doz., $\$ 8$ per 100 .
Lily White. A comparatively recent, reliable, frrst-class, early blooms, and many onen at at a time variety of good height, with large blooms, and many open at a time. Excellent for forcing or as a cutflower for the garden. 15 cts. each, $\$ 1.25$ per doz., 88 per 100 .
Louise. Well-opened orchid-like flowers of attractive bluish tall and stately new, with wine-colored mark in the throat. This $\$ 2$ per doz., $\$ 15$ per 100 .
Lustre. This variety makes a very striking note in the garden.
Lustre. It is a brilliant orangevermilion. The flowers are well placed on good, strong spikes. 200. each, $\$ 2$ per doz., $\$ 15$ per 100 .
Maine. A very fine new white, which opens a bit lemon toned.
Maine. but bleaches out pure white when wide open. The stems are tall and slender and the flovers beautifully shaped and placed. with a goodly number open at one time. 25 cts . each, $\$ 2.50$ per doz., 820 per 100 .
Mary Fennel. A beautiful shade of deep lavender, with petals borne on sikes mentinciled primrose Fow iners are large in size, medium in height. An excellent variety for conrasting with pale pink and primrose sorts. 20 ets. each, 82 per doz.,
L15
515 \$15 per 100 .
Mary Pickford. We are pleased to be able to secure sufficient Cladiolus this. stock to justify us offering this beautiful Gladiolus this year. An extraordinary flower and spike of a most delicate creamy white. Throat finest soft sulphur-yellow; stem and calyx also white. 20 cts. each, 82 per doz., $\$ 15$ per 100 .
Mona Lisa. Palest soft rose-pink or blush-white One of the Ha Lisa. finest of the ruffied types. The flowers are well placed on strong stems and many are open at the same time. 20 cts. each, $\$ 2$ per doz., $\$ 15$ per 100 .
Mr. Mark. A new light blue. There are few varieties of this or $\$ 2.50$ per doz., $\$ 20$ per 100 .
Mrs. Frederick C. Peters. This beautiful new variety,
 with crimson blotech bordered white on lower segments. Flowers large and many open at one time. 50 c . each, 85 per doz., 835 per 100. Mrs. Francis King. Brilliant flamingo-pink, blazed with Mr ving vermilion-red. Popular variety on account of its attractive color. Splendid for mass effects. Flowers are large in size, well placed on strong, tall spikes. 10 cts. each, 75 cts. per doz., $\$ 5$ per 100 .
Mrs. Frank Pendleton. Salmon-pink which extends to as in the center, with a rich, deep maroon bloteth on the three lower petals. Flowers are wide open and well placed on strong spikes. A variety that has become very popular since its introduction some years ago and now can be obtained at a more moderate price. 15 cts. each, 81.25 per doz., $\$ 8$ per 100 .
Mrs. Dr. Norton. Delicate cream and pink, deepening to$\frac{\text { Flowers widely expanded. }}{}$ wards the edges; sulphur-yellow center. mired at Gladiolus exhibitions. 20 ets. each, $\$ 2$ per doz., 815 per 100.
Mrs. H. E. Bothin. Light geranium-pink with flame-scarlet ns. center. A splendid color combination and one of the newer varieties which will become more popular when better known. 25 ets. each, $\$ 2.50$ per doz., $\$ 20$ per 100 .
Mrs. Watt. $\begin{aligned} & \text { This variety is perhaps best described as a rich } \\ & \text { dee }\end{aligned}$ deep American Beauty shade of red. 15 cts. each, 81.25 per doz., 88 per 100 .
Niagara. Soft primrose, faint lines of lilac in the throat. with Niacara. purple stamens and pale carmine stigmas which add to the attractiveness of the variety. Flowers are large in size, borne on tail spikes. 15 cts. each, 81.25 per doz., 88 per 100 .

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

##  Everybody Can Grow Them

Culture,-Any good garden soil will grow Gladiolus well, provided they are planted in a sunny location. Bulbs should be planted 4 inches deep and at least 6 inches apart; frequent cultivation with a hoe or weeder, around the base of the plant, to prevent the soil from becoming hard or cakey, is advisable. Where desired for garden decoration or exhibition, we advise plants being staked after attaining the height of $\mathbf{I}$ foot. (We offer light green dyed bamboo canes, which are excellent for this purpose.) Water copiously, and as the flower-buds begin to form, apply liquid manure for the best results.

Odin. An early variety of a deeper salmon color than Prince of Orange Glory. s. each, $\$ 1.50$ per doz., $\$ 10$ per 100 The color is a splendid shade qualities of the original variety, Glory. a splendid shade of rosy orange. The flowers are exquisitely ruffled and are well placed on strong, stiff stems. 20 cts. each, \$2 per doz., \$15 per 100.
Panama. Similar in type to America, but of a deeper shade of placed on tall, pure rose-pink. The flowers are large in size and well Peace. Few varieties have become as popular as Peace. The Peace. general effect of the flower is white, with a pale lilac feathering on the interior petals. They are large in size, well placed, and are borne on tall, strong spikes. 10 ets. each, $\$ 1$ per doz., $\$ 7.50$ per 100 .
Pride of Lancaster. A brifliant orange-salmon, with shading of deep orange in the throat. A beautiful ruffled variety named in honor of the birthplace of Luther Burbank. The flowers are of good size and are well placed on long stems. 20 cts. each, $\$ 2$ per doz., $\$ 15$ per 100.
Prince of Wales. The flowers are large and well placed and It is a sport of the variety Halley, but larger and of taller growth and also somewhat earlier. The delicate tint is practically without any throat markings. 15 cts. each, $\$ 1.50$ per doz., $\$ 10$ per 100.
Rev. Ewbank. A beautiful light porcelain-blue, giving the sized flowers. $\mathbf{2 5}$ cts. each, $\$ \mathbf{2} .50$ per doz., $\$ 20$ per 100.
Rose Ash. Peculiar soft, old-rose tones, fading to ashes of roses on Rose Ash. the outer edges of petals. Very unique in coloring and greatly admired. If you have a room with mahogany furniture and mulberry hangings, this is an ideal indoor setting for Rose Ash. This is a decidedly new color in Gladiolus and one that will appeal to the lover of this splendid summer blooming bulbous plant. 20 ets. each, $\$ 2$ per doz., $\$ 15$ per 100.

Rose Glory. This beautiful ruffled variety is a pure rose-pink each, $\$ 2.50$ per doz., $\$ 20$ per 100 .
Scarlet Wonder. Few Gladiolus are as strong growers as a rich deep green and the plant attains a height of 4 to 5 feet. The flowers are large, many open at one time, and of a rich, velvety scarlet. 60 cts. each, $\$ 6$ per doz., $\$ 45$ per 100.
Schwaben. Pure canary-yellow, with a carmine blotch deep in formity in the throat which aids in detracting from its union strong spikes of medium height. 15 cts. each, $\$ 1.25$ per doz., $\$ 8$ per 100 .
The Pearl. A very excellent cut-flower variety. Pale pink with the Pearl. cream-yellow throat. The flowers are well placed on straight stems. 15 cts . each, $\$ 1.25$ per doz., $\$ 8$ per 100.
War. (Originator's stock.) The finest of its color yet introduced. Fed shaded crims often measure 7 inches across, of a deep ox-bloodred, shaded crimson-black. The flowers are well placed on spikes frequently attaining a height of 5 or 6 feet. The foliage is broad, deep green, almost as heavy as an iris leaf. A wonderful variety that can now be had at a reasonable price. 15 cts. each, $\$ 1.50$ per doz., $\$ 10$ per 100 .
White Glory. A gorgeous pure white variety of the same type White Giory. as Glory. The flowers are exquisitely shaped, splendidly ruffled, of pure white color with a lovely iris-blue throat. 40 cts. each, $\$ 3.50$ per doz., $\$ 25$ per 100.

## AMERICAN HYBRIDS MIXED

In preparing this mixture of Gladiolus, some surplus named sorts, we have endeavored to cover all the conceivable colors that obtain in this beautiful family of fowers. The mixture is prepared from the finest named as well as seedling sorts, and has with it a popular price so as to encourage the liberal planting of them. The varieties used in the mixture are varieties of matured good growers and are excellent for cut-flower purposes or for planting in mixed borders, and we offer them at 75 cts. per doz., $\$ 5$ per 100 , $\$ 45$ per 1,000 .


Field of Gladiolus growing on our Long Island Farms. Few soils produce Gladiolus bulbs of stronger vitality than Long Island soil does

## NEW AND RARE PRIMULINUS HYBRIDS

To the flower-lover who has become interested in the Primulinus Hybrids and knows them, the following varieties will have a strong appeal.

Primulinus Hybrids are distinguished mainly for their fine and various shades of yellow, orange, and saffron tones. The flowers are borne on graceful stems and when cut are of splendid decorative value.

The commercial florists have come to recognize this wonderful new type of Gladiolus. The pure self-tones of the flowers suggest refinement. They are splendid growers and are excellent for mass effect.

## Alice Tiplady

Tall, straight spike with ten to twelve blooms. Immense flowers of brilliant orange-salmon, with golden throat. A very showy, magnificent flower. We have featured this variety in a colored illustration this year. A few spikes of this placed in a tall vase makes a very attractive and imposing exhibit. The general color of the flower is magnificent under artificial light. 15 cts. each, $\$ 1.50$ per doz., $\$ 10$ per 100.

## Brilliant (Novelty)

The Gladiolus lover who has grown Alice Tiplady will be pleased to try this sterling novelty. It is a cross between Alice Tiplady and Orange Glory. It has all the good characteristics of bloom that Alice Tiplady has, and in addition greater height, length of stem and size of flower. The color a true even orange-saffron of great brilliance either in daylight or under artificial light. We are able to offer only a limited quantity of these bulbs this year. 75 ets. each, $\$ 7.50$ per doz., $\$ 50$ per 100.

## Dorothy Wheeler

Awarded Silver Medal by Massachusetts Horticultural Society in 1921. It is a most beautiful rose-pink. Slightly ruffled with lighter throat. Plant tall and many flowers open at once. 20 cts. each, $\$ 2$ per doz., $\$ 15$ per 100.

## Maiden's Blush

A very popular variety on account of its beautiful shell-pink color and earliness. Splendid for forcing. 15 cts. each, $\$ 1.50$ per doz., $\$ 10$ per 100.

## Salmon Beauty

A very large and showy flower; in fact the last two or three seasons it has been pronounced the best Primulinus by the Massachusetts Horticultural Society. The color is deep orange-salmon with a rich salmon-yellow throat. 15 cts . each, $\mathbf{\$ 1 . 5 0}$ per doz., $\$ 10$ per 100.

## Souvenir

Of the many shades and tints in this beautiful type of Gladiolus, we consider Souvenir as being the best pure yellow variety. 15 cts. each, $\$ 1.50$ per doz., $\$ 10$ per 100 .

## Primulinus Hybrids Mixture

When the original Primulinus was first grown in this country, many Gladiolus-growers were impressed with the graceful habit of the plant and flowers. They were small and somewhat hooded. The original species, as they were first introduced from South Africa, created interest among these growers mainly for their habit and the beautiful colorings of the fowers: They proceeded to cross them with the finest of the large-flowering Gladioli and the resultant crosses brought forth a really beautiful acquisition. The flowers were larger, more open, retaining their graceful placement on the spikes and also their beautiful range of artistic colors. Our hybrids range in color from pale sulphur-yellow-apricot to the deepest chrome-yellow and excellent shades of pink, orange, and scarlet. We are pleased to offer this splendid mixture and suggest that our patrons try some, as for artistic decorations these flowers borne on long slender spikes are wonderful. 80 cts. per doz., $\$ 6$ per 100, $\$ 55$ per 1,000 .

## NEW AND RARE EXHIBITION DAHLIAS

The garden-lover who has become interested in Dahlias and vies with his neighbor in excelling him at his local Dahlia show, will be interested to know that some of the very high-priced varieties of last year are now available at more attractive prices. Our list of New and Rare Exhibition Dahlias has been reduced to those that we consider worthy of a place in every garden, and represents the cream of the finest varieties that are available in reasonable quantities. We offer strong tubers for spring delivery.


#### Abstract

Ambassador. (Hybrid Cactus.) An outstanding Dahlia at many of the Dahlia exhibitions this autumn, and considered by many as being one of the best and most artistic of recent Dahlia introductions. Its color is, perhaps, best described as a soft yellow at the center, with salmon, amber, and pink shadings, gradually deepening toward the tips. The flowers are of largest size and are set just right on perfect stems. A strong grower and free bloomer. (See colored illustration.) $\$ 2$ each, $\$ 20$ per doz.


Amun Ra. (Decorative.) A Dahlia of unusual color. Coppery with rounded bronze, shading to gold and amber. Flowers are flat, A notable addition every collection. $\$ 1$ each, $\$ 10$ per doz.
Ballet Girl. (Cactus.) English Cactus of the finest type and of clear orange and large size. Flowers of orange tipped white, Very interesting and pretty. Excellent for contrast with other varieties of solid color. \$1 each, \$10 per doz.
Bashful Giant. (Decorative.) Gigantic apricot flowers, . with golden shadings, produced on long strong stems. Probably the largest Dahlia in cultivation. $\$ 1.50$ each, \$15 per doz.
California Gold. (Decorative.) Enormous, perfectly formed, carried aloft on lons stems pure, glistening gold. The flowers are grown 9 to io inches across. Very free flowering. An excellent sort. \$1 each, \$10 per doz.

## California Superba. (Decorative.) Immense flowers of delicate lavender-pink, shading to

 white in the center. Very good form; free flowering and straight stems. The flowers are held well above the foliage. A magnificent Dahlia. $\$ 2$ each, $\$ 20$ per doz.Champagne. (Decorative.) This Dahlia has many qualities that commend it to the Dahlia fancier. It has not only large size, perfect form, splendid habit of growth and stem and free flowering qualities, but a very distinct and delightful color. The introducer describes this as golden champagne with chamois shadings, which color combination doubtless suggests its name. $\$ 2$ each, $\$ 20$ per doz.
Dakota. (Giant Decorative.) This variety was very promiDakota. nently displayed at the autumn Dahlia shows this year. It is of splendid habit, and the blooms are held erect on strong stems. The color is, perhaps, best described as flame. \$1 each, \$10 per doz.
Dorothy Robbins. (Decorative.) Large flowers of a real of buff, with carrot-red center. Better than King of the Autumn. \$1 each, $\$ 10$ per doz.
Ear1 Williams. (Giant Decorative.) This giant flowering tention at Dahlia shows Decorative Dahlia attracted considerable atbrilliant crimson and white. One of the finest and most attractive of the newer varieties. $\$ 1$ each, $\$ 10$ per doz.
Effe May Walter. (Hybrid Cactus.) A Hybrid Cactus Dahlia of beautiful color and petal formation. The color, while rather difficult to describe, might best be called a beautiful raspberry shade that seems to be blended with old-rose; toward the center of the flower there is a blending of dull yellowish salmon that seems to have a faint suggestion of dull brown. In size it is medium to fairly large, and while it could never be put in the giant-flowering class, even through heavy disbudding, anyone who really enjoys a beautiful Dahlia will appreciate that the color and the formation of the flower are very much more important than huge size, which many growers do not consider an asset for a cutflower Dahlia. The bush is a strong grower, with beautiful foliage that is somewhat different from the average Dahlia, and the buds are produced so plentifully that the plant should be disbudded. $\$ 1.50$ each, $\$ 15$ per doz.
Elinor Martin. (Decorative.) An enormous flower of deep of the mulberry with rose shading. The habit ant is ideal, being a vigorous grower and a splendid bloomer. A wonderful exhibition variety. $\$ 3$ each, $\$ 30$ per doz.
Elite Glory. (Decorative.) This sensational new giant Dahlia glowing red; perfect type and stem. $\mathbf{\$ 1 0}$ each, $\$ \mathbf{1 0 0}$ per doz.

Emperor. (Decorative.) An exceptional variety. Its enormous size, beautiful deep color, the perfect form of the flower, and the extra-long stem, make this a magnificent prize-winner of the highest quality. It is a maroon of the finest type. The flower is made up of long, flat petals, and the color is so intense it does not spot under any weather conditions. $\$ 1$ each, $\$ 10$ per doz.
E. T. Bedford. (Decorative.) Rich purple, with silvery shadings. The enormous flowers are very freely produced on long, strong stems, held erect, well above the foliage. $\$ 2$ each, $\$ 20$ per doz.
Grace Sperling. (Decorative.) In introducing this new variety, we do so believing it will become exceptionally popular, both as a garden and cut-flower Dahlia. Its splendid color, beautiful form, and fine habits make it a very desirable Dahlia. The color is perhaps best described as a two-tone face of golden iridescent buff with reverse of petals amaranth-purple. Exceptionally free-flowering on long, perfect stems. \$2.50 each, $\$ 25$ per doz.
Insulinde. (Decorative.) This variety, which proved quite scarce in supply for several years, is always very much admired on account of its fascinating autumnal color. It is probably best described as a deep warm Havana brown. The flowers are borne upright on strong, stiff stems. $\$ 1$ each, $\$ 10$ per doz.
Islam Patrol. (Hybrid Cactus.) Very dark velvety scarlet, - tipped and flushed with gold. A most attrac tive Dahlia with wonderful stem; a fine keeper. $\$ 2.50$ each, $\$ 25$ per doz.
Jean Chazot. (Hybrid Cactus.) This is a fine exhibition Jean variety, as well as excellent for garden decoration, and is unsurpassed by any of the autumn-tinted Dahlias as a cut-flower. The habit of the plant is ideal, being a tall, upright grower, its long, stiff, wiry stems holding the flowers well above the foliage making a wonderful display in the garden. It is a free and early bloomer, starting at the beginning of the season and continuing until cut down by frost. The color is, perhaps, best described as a golden bronze with a faint suffusion of nasturtium-red, which adds to the brilliancy of the color. \$1 each, \$10 per doz.
Jersey's Beacon.
(Decorative.) This fine novelty is chinesescarlet in color, paler on the reverse, giving a two-toned effect. It is a great favorite and a real 'beacon of the garden." Very large; free bloomer; vigorous grower. \$3 each, \$30 per doz.
Jersey's Beauty. This is, without a doubt, the finest true pink Decorative Dahlia yet introduced are pink flowers are of perfect form and are supported on long, straight, stiff stems, held well above the foliage. As a cut-flower, it is a wonderful keeper and is instantly admired. A splendid exhibition Dahlia, and equally valuable for garden decoration. Owing to a good supply of tubers, we are able to offer this fine Dahlia at a reasonable price this year. $\$ 1.50$ each, $\$ 15$ per doz.

Jersey's King. (Decorative.) Very large, perfect flowers of a The flowers are borne on long, stiff stems, well above the foliage. $\$ 1$ each, $\$ 10$ per doz.
Jersey's Pride. (Decorative.) A large, attractive flower of a combination of apric color that is, perhaps, best described as a and orange, with a golden suffusion, freely produced on long, stiff stems. $\$ 1.50$ each, $\$ 15$ per doz.
John Merritt. (Decorative.) Giant creamy white flower, carried on the finest of stems. A splendid bloomer. One of the best. $\$ 2$ each, $\$ 20$ per doz.
Tudge Marean. (Decorative.) Very large flower of perfect Decorative type. The color is rather difficult to describe, being a combination of salmon-pink, orange, and gold. $\$ 1$ each, $\$ 10$ per doz.
Kitty Dunlap. (Decorative.) Delightful shade of American large, deep flower, beauty rose; broad, slightly rolling petals

Margaret Masson. (Decorative.) Very large flowers on One of the best new Dahlias. $\$ 3.50$ each, $\$ 35$ per doz.


## FOUR FINE NEW EXHIBITION DAHLIAS

Each year we endeavor to offer a new collection of Dahlias which have proven of outstanding merit, and to feature them in a colored illustration. The above varieties are very desirable in any collection, however rare.



## FOUR FINE EXHIBITION DAHLIAS

The dahlia lover who desires to grow a very limited number of varieties will find the following four fine Dahlias very desirable ones to include in the finest collection. We consider Ambassador the finest Cactus Dahlia of its color thus far introduced; Jersey Beauty the finest Decorative of its color. This also applies to Mrs. I. de Ver Warner and Penatiquit. Penatiquit, new with us this year, will also become a favorite. We offer fine strong tubers.

1. Ambassador

Each
2. Jersey Beauty
3. Mrs. I. de Ver Warner
4. Penatiquit
4PECIAL . . . . . . . . . . . . 150150

[^1]
## NEW AND RARE EXHIBITION DAHLIAS

Mariposa.
(Hybrid Cactus.) A delightful shade of orchid-pink which is intensified by a deeper center, with a violet suffusion. One of the gigantic Californian introductions which has depth as well as diameter of flower. The flowers are borne on long, straight, stiff stems, well above the foliage. Blooms early and continues in good shape until the end of the season. $\$ 2$ each, $\$ 20$ per doz.
Mephistopheles. (Decorative.) V ery large, full flowers of a beautiful shade of ruby-red, showing tiny yeliow points at the very end of the petals. A great exhibition Dahlia. $\$ 1.50$ each, $\$ 15$ per doz.
Merrick. (Hybrid Decorative.) Glorious shade Merick. of light maroon, tipped and edged mahogany. A combination that has instantly appealed to all who have seen it. Fine stem and a good keeper. Very free and constant bloomer. $\$ 1.50$ each, $\$ 15$ per doz.
Mrs. George Stumpp. (Decorative.) One of and considered one of the finest new Decoratives. The flowers are of great depth, of true Decorative form, and vary from 5 to 8 inches in diameter. In color they are of a delightful autumn shade-an exquisite blending of yellow and fawn. The plants are strong, sturdy growers, with rigid stems, and produce blooms continuously. $\$ 1.50$ each, $\$ 15$ per doz.
Mrs. I. de Ver Warner. (Decorative.) A pink Dahlia, of perfect form, impressive on account of its size and beautiful orchid color. It is an abundant bloomer, splendid for exhibition and fine for the garden. (See color illustration.) $\$ 1$ each, $\$ 10$ per doz.
Mrs. John T. Scheepers. (Decorative.) Mrs. John T. Scheepers. Very large flower, standing well above the foliage on long, upright stems. The color is, perhaps, best described as a canary-yellow, shading to delicate pink on outer petals. Strong, vigorous, free-blooming variety. $\$ 1$ each, $\$ 10$ per doz.

## Mrs. William Wincott. (Decorative.) At

 Decorative of perfect habit and form; fine for exhibition or cut-flowers; long stem and very free flowering. \$1 each, \$10 per doz.Myra Valentine. (Decorative.) A beautiful shade of golden brown. The flowers are perfectly formed and are borne on long, straight, stiff stems, held erect, well above the foliage. An ideal Dahlia for exhibition or garden decoration. \$2.50 each, $\$ 25$ per doz.
Penatiquit. (Decorative.) One of the finest Dahlias grown. golden brown flowers cot in growth, form, and color. The large A wonderful cut-flower and exhibition variety. (See color illustration.) \$1.50 each, $\$ 15$ per doz.
Robert Treat. (Decorative.) Flowers 9 to II inches across and 4 inches deep, of a pleasing American Beauty rose-color, unlike any existing variety. Strong, healthy grower and free bloomer. A sensational Dahlia. (See color illustration.) $\$ 2.50$ each, $\$ 25$ per doz.
Rosa Nell. (Decorative.) It is not possible to find a better Rosa Nell. Dahlia of its color. The flowers are large, of perfect Decorative type, a bright even tone of rose-pink, and they are borne on long, stiff stems. An early and splendid bloomer throughout the season. \$1 each, \$10 per doz.
Samson. (Decorative.) Large, perfectly formed flowers of best. $\$ 1$ each, $\$ 10$ per doz.
Shudow's Lavender. (Decorative.) We consider this one Dahlias of recent introduction. A splendid Decorative type, of a uniform silvery lavender color; very lovely under artificial light. Splendid exhibition variety and most attractive in any planting. \$2.50 each, \$25 per doz.


Splendid decorative effects can be obtained by using various types of Dahlias as illustrated above

Sunkiss. (Hybrid Cactus.) One of the best of this type. free fowering Straw-yellow, heavily edged fawn-pink; very large and free flowering. $\$ 1.50$ each, $\$ 15$ per doz.
Tommy Atkins. (Decorative.) A brilliant flaming scarlet with a metallic luster glistening in the sunshine. An early bloomer; large flowers on stiff stems. $\$ 1.50$ each, $\$ 15$ per doz.
U. S. A. (Decorative.) A splendid Dahlia for all purposes. It has met with great favor on account of its distinct color. A pure deep orange color, sparkling and glistening. The flowers are of large size, of good formation and are borne on long strong stems, held so as to display their full beauty. It is a remarkably free-flowering variety, being early and continuing in good condition to the end of the season. $\$ 1.50$ each, $\$ 15$ per doz.
Viola Phillips. (Hybrid Cactus.) Salmon suffused with all. Giant flowers on strong stems. This splendid Dahlia should be in every garden. \$2 each, \$20 per doz. (See color illustration.)

Semesan is a good bulb and tuber disinfectant. Dust your
Dahlia roots with it at planting-time. It protects against fungus and disease. 2 ozs. 60 cts., $4 \mathrm{ozs} . \$ 1,1 / 2 \mathrm{lb} . \$ 1.60$, lb. $\$ 2.75,5$ lbs. $\$ 13$.

## SELECT DECORATIVE DAHLIAS

We offer below 16 fine standard varieties of Decorative Dahlias, which can now be had at moderate prices.

## D. M. Moore.

 In this offering we have the best near-black Victoria-lake, which is a shade deeper than deep maroon. A mammoth flower that is always a favorite. 50 cts. each, $\$ 5$ per doz.Dream. (Giant Decorative.) A very beautiful shade of salmon, Dream. blending to amber. The plants are tall and healthy growers, producing their blossoms on strong, stifif stems, well above the foliage. This variety was considerably admired where exhibited at the Dahlia shows this past season. 50 ets. each, $\$ 5$ per doz.
Dr. H. L. Tevis. One of the California Giant varieties which Dre has been exhibited quite extensively this past fall and has been greatly admired. The color is a blending of copper, old-rose, and gold. Flowers are borne well above the foliage. 75 cts. eaeh, $\$ 7.50$ per doz.
Eveque. An elegant, bright purplish violet flower, always held Hortulanus Fiet. The coloring of this variety is exceedingly Hortulanus Fiet. wonderful, and it is, without doubt, the very largest and finest of its color. A beautiful shade of salmon with dainty blending of yellow at base of petals toward the center. \$1 each, $\$ 10$ per doz.
King of the Autumn. (Decorative.) A Holland Dahlia wide reputation as a cut-flower sort. The coloring is something quite new and unique-a buff-yellow suffused terra-cotta. The habit of the plant is absolutely perfect, with strong, sturdy stalks and long, stiff stems. Although classed as a Decorative Dahlia, over 90 per cent of the flowers usually come semi-double, showing that beautiful golden yellow so characteristic of the Peony-flowered Dahlia, which adds an additional charm to the flower. 50 cts. each, $\$ 5$ per. doz.
Le Grand Manitou. The color combination in the blooms tive-pure white, artistically striped, splashed, and blotched deep violet-purple. The plants occasionally produce all purple flowers, as is customary with all variegated varieties. The effect produced by the gigantic flowers of this variety is most phenomenal, giving it a



Decorative Dahlia, Souvenir de Gustave Doazon
Millionaire. The color of this much-admired Dahlia is a pleasing shade of lavender with a faint pink cast overshading. The flowers are of gigantic size, frequently measuring Io to 12 inches across, and of unusual depth. $\$ 1$ each, $\$ 10$ per doz. Mrs. C. H. Dresselhuis. For many years we have Delice as a favorite cut-flower, and recommended the variety not free flow This new wariety is a beaumilar colo it was thee flowering. This new variety is of a similar color-a soft rose-pink, with white suffusions toward the tips-and is a most prolific bloomer. The flower is of medium size, excellent for cutting, and is splendidly supported on very long stiff stems. 75 cts . each, $\$ 7.50$ per doz.
Mrs. Carl Salbach. Few varieties among the newer creations greater favor than of the Dahlia enthusiasts meet with gigantic gigantic size and perfect form and the color is a beautiful shade of lavender. 75 cts. each, $\$ 7.50$ per doz.
Patrick O'Mara. An unusually soft and pleasing shade Patrick O Mara. of orange-buff, slightly tinged Paul Neyron rose. Good keeping qualities. 50 cts. each, $\$ 5$ per doz. Pride of California. Considered by many Dahlia enthusiasts as the most brilliant of the new Dahlias. The flowers are of large size, perfect in form, and of a glowing cardinal-red. The finest of the dark rich crimson decorative Dahlias for all purposes. 50 cts. each, $\$ 5$ per doz. Princess Pat. A Dahlia of splendid form, producing diameter. The magnificent large flowers 9 to Io inches in diameter. The color is a most pleasing shade of old-rose, the center suffused with lavender or mauve, the flowers lighting up splendidly under artificial light. 75 cts , each, $\$ 7.50$ per doz.
Sequoia Gigantea. A very large full flower of an even tone of buttercup yellow. A good, tall grower, the flowers being borne on fine, strong stems, well above the foliage. $\$ 1$ each, $\$ 10$ per doz.
Snowdrift. One of the finest white Decorative Dahlias, ( either for garden decoration or exhibition. A gigantic flower, of perfect form, with broad, waxy white petals, borne on stiff stems held erect. \$1 each, $\$ 10$ per doz. Souv. de Gustave Doazon. This variety is a good flower. It is the largest comparison to the sunis the largest Dahlia in existence, and the color is a pleasing shade of red. The flowers are full to the center, and often measure 9 inches and over in diameter, and can be forced to measure 12 inches. 35 cts . each, $\mathbf{\$ 3 . 5 0} \mathbf{~ p e r ~ d o z . ~}$

## STUMPP \& WALTER CO.'S SELECTED BULBS

## CHOICE CACTUS DAHLIAS

We offer below a choice list of Cactus Dahlias which have proven to bloom well under varying conditions. They are all excellent cutflower varieties as well as splendid varieties for garden decoration. While numerous Dahlia enthusiasts are growing the Decorative type of Dahlias on account of their massiveness, the Cactus Dahlia is still preferred by many flower-lovers on account of its artistic appearance.

Attraction. A gigantic Hybrid Cactus Dahlia that is one of the best cut-flower sorts to date. An elegant deep full flower of a clear lilac-rose. The habit of the plant is perfect, with long stems, as stiff as a cane, holding the bloom high and upright. 75c. each, $\$ 7.50$ per doz.
Countess of Lonsdale. The best-known and most desired of all the Cactus解 It is of the older Hybrid Cactus type, with broad, straight-pointed petals and is a very abundant and continuous bloomer. If only one Cactus Dahlia could be had, ninety-nine people out of a hundred would select this one. A deep salmon-red in color. 35 cts. each, $\$ 3.50$ per doz.
Dorothy Durnbaugh. One of the best and largest Cactus Dahlias or an at tractive shade of deep rich pink. The flowers are held erect and on long, stiff stems. \$1 eaeh, \$10 per doz.
Etendard de Lyon. Rich carmine-rose. The large with broad curling wavy howers are distinct in shape, F. W. Fellowes. We consider this one of the best Cactus varieties ever raised. The flowers are of unusual size for the long, narrow-petaled type, of which this is one of the finest examples. In color it is an intense coral-red with deeper suffusion toward the center. A leader in this type at all Dahlia exhibitions or for the garden. Excellent as a cut-flower. 75c. each, $\$ 7.50$ per doz. George Walters. A Hybrid Cactus Dahlia we can highly recommend for all purposes, proving an exceptional garden variety, unexcelled for house decoration, and one of the most dependable for exhibition purposes. A variety of exquisite coloring, being a bright salmon-pink, artistically suffused old-gold. It has won the gold medal and first prize in several instances for the largest specimen flower at the exhibition. 50c. each, $\$ 5$ per doz.
Golden Crown. Rich, bright yellow. A very freeflowering variety, borne on long, stiff stems. 50 cts. each, $\$ 5$ per doz.
J. B. Riding. A blending of yellow and orange, tipped long, stiff stems, with apricot. A large flower, borne on each, $\$ 5$ per doz.
J. H. Jackson. The finest black Cactus Dahlia in J. An exceptionally satisfactory all-round Dahlia and one of the most prominent for garden decoration. 35 cts. each, $\$ 3.50$ per doz.
Kalif. A truly majestic flower, frequently measuring over Hyrid 9 inches in diameter. The flower is of perfect Hybrid Cactus form, and in color a beautiful pure deep glowing scarlet. 75 ets. each, $\$ 7.50$ per doz.
Mary Doucett. Perfect sharp-petaled cactus on upright stems. Flowers delicate pink, white center. Great favorite. 50 cts. each, $\$ 5$ per doz.

Mrs. Edna Spencer. A Hybrid Cactus with flowers of pink. Very beautiful and of good formation with stems. 75 cts . each, \$7.50 per doz.
Mrs. W. E. Estes.
We consider this the finest white Hybrid Cactus Dahlia of recent introduction. The flowers are snow-white, of large size, and are borne on long, stiff stems. A splendid exhibition variety. \$1 each, $\$ 10$ per doz.
Nibelungenhort. One of the old favorite Hybrid Cactus Dahlias. A beautiful shade of old-rose with a suggestion of salmon-pink shading apricot. Well-formed


Pompon Dahlias flowers borne on fine long stems. 75 cts. each, $\$ 7.50$ per doz.

AMBER QUEEN. Rich amber,
shaded apricot.
BOBBY. Plum-color.


Cactus Dahlias

Pierrot. A unique variety, combining, as it does, the qualities - looked for in an exhibition Dahlia as well as a splendid garden variety. The flowers are exquisite in form, composed of very long, tubular, narrow petals, which are of a deep amber color, sometimes showing white tips, but even when it comes a self-color without these tips it possesses an individual refinement different from all other sorts. 75 cts. each, $\$ 7.50$ per doz.
Southward Ho. A Hybrid Cactus of very unique and fascinatVery free bloomer on fine upright stems. 75 cts. each, $\$ 7.50$ per doz. Yellow King. Pure yellow, shading to almost white at the tips much resembling a chrysanthemum. 50 cts . each, $\$ 5$ per doz.

## POMPON DAHLIAS

We offer below a select list of these beautiful Pompon Dahlias, a miniature form of the Show Dahlias, having the same ball-like form, but much smaller in size. The plants are also smaller, of branching habit, and produce an endless profusion of flowers, which are invaluable for table decoration and boutonnieres.

SNOW. Snow-white.
SUNBEAM. Crimson-scarlet.

## SELECT PEONY-FLOWERED DAHLIAS


#### Abstract

This splendid type of Dahlias, which originated in Holland, is now quite popular. The artistic flowers are very large and are perhaps best compared in form to the semi-double peonies. They all flower very frcely and are borne on long, strong stems, making excellent material for cutting as well as for garden decoration. We offer a select list of standard varieties.


Aurore. Flowers are very large and are produced freely on long, - stiff stems, standing well above the foliage. The color is a very beautiful deep orange-salmon, with wonderful autumn tints. Splendid for cutting or for the garden. Vigorous and healthy grower. 50 ets. each, $\$ 5$ per doz.
Avalanche. Pure white. Considered the fincst white peonyflowered Dahlia. A very free-flowering variety, with splendidly formed flowers held erect above the foliage. 50 ets. each, $\$ 5$ per doz.
Berch Von Heemstede. Fine yellow variety petals shading to rose. A splendid free-flowering Dahlia. 50 cts. each, $\$ 5$ per doz.
Billie Burke. Straw-yellow, edged rosy lavender. An enormous, free flowering Dahlia which is exceptionally attractive. Fine form and stems. $\$ 1$ each, $\$ 10$ per doz.
Diermant van Bijstein. A variety imported from Holland, and one we can highly recommend. It is a very distinct and new shade-lilac-blue throughout. The plants are tall and sturdy growers, holding the blooms well above the foliage. 50 ets. each, $\$ 5$ per doz.
Kankakee. A very striking variety on account of its even tone of purplish maroon. It is a very prolific bloomer on long, stiff stems. 75 cts. each, $\$ 7.50$ per doz.
King Albert. A very large and freeroyal fowering Dahlia of rich forple coloring; well-formed flower on fine long stems. 75 cts. each, $\$ 7.50$ per doz.
Pitti Sing. Those who love the old Geisha with its will beautiful combination of scarlet and gold will welcome this fine Dahlia of the same color, and, unlike Geisha, the tubers are fine keepers. 75 cts. each, $\$ 7.50$ per doz.
Sweethearts' Bouquet. The flowers of this variety salmon-pink. The habit of the plant is ideal, being a good grower and free bloomer, carrying its flower on long, stiff stems. 75 cts. each, $\$ 7.50$ per doz.


Single Dahlia, Rose-Pink Century

## NEW CENTURY SINGLE DAHLIAS

We offer below a list of the best varieties of these Dahlias. They are very popular for garden decoration or for cutting.

Eckford Century. Pure white, beautifully spotted and penciled with crimson.
Poinsettia. The color of this variety reminds one of the brilliant flower.
Rose-Pink Century. Flowers 6 inches and over in diameter, of a long, stiff stems; fine for cutting

St. George. An even shade of primrose-yellow.
Snowflake. A very free-flowering, pure snow-white variety.
Wildfire. Brilliant cochineal-red with orange-scarlet suffusion. Habit, dwarf and free.
Price, any of the above, 35 cts . each, $\$ 3.50$ per doz.
COLLECTION, 1 each of 6 Century Dahlias, $\$ 1.50$.


## FIVE SPLENDID EVERBLOOMING ROSES

WJE are again making a special offer of the above 5 Roses. The varieties offered are distinct in their colors and are noted for their free-flowering qualities, Owing to our having had a large quantity especially grown, we are able to offer them at a slightly reduced price in collections only. If our patrons desire to purchase any of these varieties separately, we suggest their referring to the following two pages, where they will be found listed and more fully described.


## FIVE SPLENDID EVERBLOOMING ROSES

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## HYBRID TEA ROSES

Our Roses are all American-grown, two-year-old stock. They are budded or grafted, and while some planters prefer stock grown on their own roots on account of the liability of budded plants to throw up suckers, this will rarely occur if deep plantings are made, and if a wild shoot should appear, it is readily distinguished by the most casual observer, and should be removed close to the root. Budded plants are more vigorous, produce finer blooms, come to bearing sooner, and are equally as permanent and hardy as those on their own roots, and many of the choicest varieties do not succeed unless budded or grafted.

Culture and Hints on Growing. The best soil in which to grow Roses is good top soil to which rotted cow-manure has been added. Dig out the bed to a depth of 2 feet or more, and, if drainage is imperfect, it must be provided for. Fill in with a mixture of soil and manure as above. It is best to make beds, if possible, in advance of planting, so as to allow time for settling. Beds may be made any size, but it is best to have them about $3 \mathrm{~J} / 2$ by 5 feet, which enables you to pick the blooms without stepping on the beds. The ideal time to plant is just after severe frost has passed. Hybrid Teas should be set $11 / 2$ feet apart; Hybrid Perpetuals 2 feet apart, and both 8 inches from the edge of the beds. They should be planted with the roots well spread out and placed about 9 inches below the surface of the ground, the soil made firm about them, and liberally watered. Throughout the summer the surface soil should be cultivated weekly. If good cultivation, like the above, is given, watering will rarely be necessary.

Winter Protection. In this latitude the most satisfactory form of protection is to draw up a mound of soil from 8 to to inches high around the base of the plant, then cover the entire bed after the ground begins to freeze with any loose material, such as strawy manure, evergreen boughs, or corn-stalks. The most serious insect pest that attacks Roses is the rose bug. We recommend the use of Melrosine listed on page 177 of our catalogue, as the best-known remedy for this pest.
BETTY. When established it produces blooms of marvelous beauty' particularly in the autumn. Large flowers of a glowing coppery rose color, suffused with gold.
COLUMBIA. This beautiful Rose has not only become one of the most popular greenhouse blooming varieties, but has proved itself one of the best bedding and garden sorts. It is of strong, vigorous habit and exceptionally free blooming. In color it is a most pleasing shade of rose-pink.
CONSTANCE. A free-flowering variety, producing beautiful long orange-yellow buds of perfect form, which, as they develop, open to a full globular flower of golden yellow. Rosarians consider this among the best of the yellow garden Roses. \$1 each, $\$ 10$ per doz., \$75 per 100.
DEAN HOLE. Silvery carmine with salmon shadings; large, full, of fine form and very fragrant. An excellent variety.
DUCHESS OF WELLINGTON. As the flower develops it changes in color from a saffron-yellow to a deep coppery saffron-yellow. The flowers are fairly full, with petals of great substance. A very free-flowering and fragrant variety.
ETOLLE DE FRANCE. A vivid crimson with darker shadings; very double, of good size, and fragrant. One of the finest red varieties, succeeding equally well in all parts of the country.
FRANCIS SCOTT KEY. One of the rich crimson-reds that is particularly good in the autumn. A very sturdy grower and free bloomer.
GENERAL MACARTHUR. This well-known favorite is much admired on account of its delightful fragrance. It is one of the earliest and most perpetual flowering varieties in our list. The blooms are well formed and of a rich crimson-scarlet color.
GOLDEN EMBLEM. A very beautiful clear yellow Rose, and much admired on account of its rich glossy green foliage. The wellshaped buds are borne on long stems. Another real good worthwhile yellow Rose. $\$ 1$ each, $\$ 10$ per doz., $\$ 75$ per 100 .
GRUSS AN TEPLITZ. Of a rich scarlet, shading to a velvety crimson. A very free grower and in bloom all the time; succeeds well under the most ordinary conditions.
HADLEY. Considered by many as being one of the best garden varieties of its color-a rich crimson, varying to deep velvety crimson. The flowers are well formed and very fragrant. It is a very free and continuous bloomer.
JONKHEER J. L. MOCK. Deep pink, with outer petals rosewhite. Large flowers borne on long, stiff stems.


Splendid effect was obtained by planting one variety of Hybrid Tea Rose. Mme. Caroline Testout in full bloom in June

JULIET. The color of this lovely variety is old-gold on the outside of the petals, interior a rich rosy red.
KILLARNEY BRILLIANT. Sparkling cerise-pink in color, shading lighter at the base of petals. A strong, vigorous grower and free bloomer. A wonderful improvement over Killarney.
KAISERIN AUGUSTA VICTORIA. A soft pearly white, faintly tinted lemon in the center. Very fragrant, beautifully formed flowers on long, graceful stems.
LADY ALICE STANLEY. A very much admired variety on account of its delightful fragrance and free-blooming qualities. A beautiful shadc of coral rose, the inside of the petals shading to flesh-pink, with deeper flushes.
LADY ASHTOWN. Pale carmine-pink, shading to golden yellow at the base of the petals. The blooms are large, globular, and well formed, rather higher in the center than at the edge.
LaURENT CARLE. Produces its large, deliciously scented, brilliant carmine flowers throughout the season, nearly as good in hot, dry weather as under more favorable conditions. A vigorous grower.
LOS ANGELES. The following is the originator's description, all of which we fully endorse: "Los Angeles is, by all odds, one of the finest Roses ever introduced. The growth is very vigorous, and produces a continuous succession of long-stemmed flowers of luminous, flame-pink, toned with coral and shaded with translucent gold at the basc of the petals. In richness of fragrance it equals in intensity the finest Maréchal Niel. The buds are long and pointed, and expand into a large flower; the color is maintained from the bud until the last petal drops.

LOUISE CATHERINE BRESLAU. Entirely distinct from all the other Roses in color. The buds are coral-red, shaded with chromeyellow, while the expanded flowers, which are very large and fragrant, are of a lovely shrimp-pink, shaded coppery orange and chrome-yellow.
MISS LOLITA ARMOUR. A beautiful new variety. The flowers are of large size, and as they expand they develop to a deep, coralred with a golden, coppery red suffusion, the base of the petals a rich golden yellow with coppery red sheen. $\$ 1$ each, $\$ 10$ per doz., $\$ 75$ per 100 .
MME. BUTTERFLY. A sport of Ophelia, it shows even better growth than this sterling variety, with more and larger flowers of a brilliant pink, suffused apricot and gold. The flowers are of splendid form, good texture, and fragrance.
MME. CAROLINE TESTOUT. Largc, globular flowers of bright satiny rose, with deeper center. Very free and fragrant, and one of the most popular and valuable bedding varieties.
MME. EDOUARD HERRIOT. The buds are coral-red in color, shaded with yellow at the base; the medium-sized open flowers, medium double, are coral-red, shaded yellow and bright rosy scarlet, passing to shrimp-red.
MRS. A. R. WADDELL. A lovely colored variety that everyone likes-a delicate, soft, rosysalmon, with a golden sheen. Flowers of medium size; handsome in half-expanded form. A free-flowering garden variety; should be in every collection.
MRS. AARON WARD. Splendidly formed full double flowers, equally attractive when full blown as in the bud state, of distinct Indian yellow, shading lighter toward the edges. Under certain weather conditions the entire flower will sometimes come a yellowtinted white, but it is a beautiful variety under all color variations.
MRS. CALVIN COOLIDGE. The beautiful new Rose named after the good wife of our President, is a sport of that wonderful Rose, Ophelia. Its color is a bright yellow, changing to deep orange as the flower develops. The habit and growth resemble Ophelia. \$1 each, $\$ 10$ per doz., $\$ 75$ per 100 .
MRS. S. K. RINDGE. A beautiful and distinct Rose that has given general satisfaction. It is of strong, free-branching habit of growth, with dark green, mildew-proof foliage, and long-pointed buds carried erect on stiff stems. Color clear, rich chrome-yellow, which, as flowers mature, becomes suffused with salmon-pink. The flowers are of good size, moderately double, and produced freely and continuously. \$1 each, $\$ 10$ per doz., $\$ 75$ per 100.


White Killarney Rose


## Radiance Roses

OPHELIA. Flowers of perfect form, large size, and a most pleasing delicate tint of salmon-flesh, shaded rose, are borne erect on long, stiff stems. A variety that is exhibited in all Rose collections and flower shows on account of its sterling merit.
PREMIER. A new variety which was introduced as a forcing Rose, but it does well also as a bedding variety. Pure rose-pink in color, of good size and form.
RADIANCE. A brillíant carmine-pink, with salmon pink and yellow shadings at the base of the petals. A Rose that will withstand the most unfavorable hot summer weather.
RED RADIANCE. A counterpart of Radiance, except in color, which is a clear cerise-red. A most valuable addition to our list of Roses.
SENSATION. This fine new Rose is deservedly well named. Large, double, fragrant flowers of fine form, scarlet-crimson with blackish shades, similar to Hoosier Beauty.
SOUVENIR DE CLAUDIUS PERNET. The new yel.ow Rose that promises to become what has long been wanted, a hardy everblooming real yellow. $\$ 1.25$ each, $\$ 12.50$ per doz., $\$ 90$ per 100.
SOUVENIR DE GEORGES PERNET. A strong, vigorous grower, producing large flowers which are beautiful in both bud and fully developed bloom. The color is an intense Oriental red, shading to cochineal-carmine at the margin of the petals, the whole being suffused with a golden sheen. A splendid Rose in every way. $\$ 1.25$ each, $\$ 12.50$ per doz., $\$ 90$ per 100.
SUNBURST. A beautiful sulphur-yellow variety, the flowers of which stand the sun remarkably well. A very frce bloomer and exceedingly beautiful in the bud form.
WILLOWMERE. The color of this lovely variety is perhaps best described as a coral-red in the bud state, opening to a large, full handsome flower of a rich shrimp-pink, shaded yellow in the center and flushed carmine-pink toward the edges of the petals.
WHITE KILLARNEY. Snowy white blooms with enormous petals. The opening buds are beautiful. A splendid white Rose for bedding and cutting.

Price of any of the above varieties, except as noted, 75 cts. each, $\$ 7.50$ per doz., $\$ 60$ per 100

## STUMPP \& WALTER CO.'S SELECTED PLANTS

## HARDY HYBRID PERPETUALS

Before the wonderful development of the Hybrid Tea Roses, the Hardy Hybrid Perpetual Rose was the most popular type for garden planting, and even now most of the varieties offered are grown by Rose-lovers in conjunction with the other sorts. The collection offered below will be found excellent.

In pruning Hybrid Perpetuals it is advisable to cut away all weak growth, and if quality of bloom is desired, cut back the strong canes to within 8 or 9 inches of the ground, but if quantity of bloom for garden effect is desired, leave these canes from 2 to 3 feet high, according to their strength.
FRAU KARL DRUSCHEI. Pure white in color, perfect in form, strong grower and remarkably free flowering.
GENERAL JACQUEMINOT. One of the old favorites and probably the best known Rose in cultivation. Brilliant scarlet-crimson.
HEINRICH MUNCH. This is a wonderful Rose, the blooms are a soft pink, much resembling Frau Karl Druschki, and are borne on plants of great vigor.
PAUL NEYRON. Perhaps the largest of all; dark rose in color.
SOLEIL D'OR (Golden Sun). A distinct type. A cross between Persian Yellow and a Hybrid Perpetual. Color varies from orange-yellow to reddish gold, shaded with nasturtium-red. Conical-shaped buds opening to large, full, flatshaped flowers. Perfectly hardy and free blooming.
ULRICH BRUNNER. A good strong grower with large, full flowers, of a bright cherry-red.
Any of the above, field-grown plants, 75 cts. each, $\$ 7.50$ per doz., $\$ 60$ per 100

## CLIMBING AND RAMBLER ROSES

We offer on this page a selection of the best modern hardy Climbing and Rambler Roses. Climbing Roses require no pruning in the spring, except the cutting out of very old or dead wood, and the shortening of the laterals and long canes to make the growth conform to the space to be covered; but a severe pruning in July, directly after they have finished flowering, is beneficial. Cutting away at that time all old flowering wood will encourage a vigorous growth, which will give an abundance of flowers the following season.
AMERICAN PILLAR. A single-flowering variety of great beauty. The flowersare of large size -3 to 4 inches across-of a lovely shade of pink, with a clear white eye and cluster of yellow stamens, and are borne in immense bunches.
CLIMBING AMERICAN BEAUTY. One of the best Climbing Roses. It is a strong, healthy, vigorous grower, frequently making shoots from io to 12 feet long, with good-sized flowers for a Climbing Rose that blooms so freely. A pleasing rose-pink of splendid form and substance.


Mrs. John Laing Roses

DOROTHY PERKINS. Soft shell-pink flowering profusely in large clusters; very fragrant and lasting; a splendid Rose in every way.
DR. W. VAN FLEET. A Rose which, on account of its dainty color and exquisitely shaped buds and flowers, has become a great favorite. The long, pointed buds are of a rich flesh-pink on stems 12 to 18 inches long. One of the


Dorothy Perkins Roses

EMILY GRAY. Considered the best yellow rambler. The color is a beautiful shade of golden yellow. The flowers are nearly double and are carried on strong stems. Strong, field-grown plants, $\$ 1$ each, \$10 per doz., \$75 per 100.
EXCELSA. A distinct variety in form, color, and habit. It is vigorous in growth, with dark glossy green foliage and the double flowers are produced in large trusses. They are intense crimson-maroon in color.
GARDENLA. Pleasing yellow buds, turning white on opening. Has been, until the introduction of Emily Gray, the nearest dependable yellow of the climbing Roses. Altogether a beautiful and desirable variety on its own merits.
MARY WALLACE. This beautiful new climbing Rose, raised by the late Dr. Van Fleet, and first disseminated by the American Rose Society; under the auspices of the Department of Agriculture, is a beautiful, semi-double bright clear rose-pink, with salmon shadings at the base of the petals. Strong, fieldgrown plants, $\$ 1$ each, $\$ 10$ per doz., $\$ 75$ per 100.
PAUL'S SCARLET CLIMBER. Rosarians generally concede that this is the finest Climbing or Pillar Rose introduced to date. No Rose can compare with it for brilliancy of color-a vivid scarlet which does not bleach or fade throughout the life of the flower. Strong, field-grown plants, \$1 each, \$10 per doz., $\$ 75$ per 100.
SILVER MOON. Pure white in color, with petals of great substance, beautifully cupped, forming a cle-matis-like flower. The large bunch of yellow stamens in the center adds to its attractiveness.
Price, any of the above varieties, except where noted, extra-strong, field-grown plants, 75 cts . each, $\$ 7.50$ per doz., $\$ 60$ per 100.


Bed of Baby Rambler or Polyantha Roses

F. J. Grootendorst Roses


Hugonis Roses

## MISCELLANEOUS ROSES

## F. J. Grootendorst, New Hybrid Rugosa Rose

This is a new type of Rose-a cross between Rugosa and the Crimson Baby Rambler. It is not a Rose that you would want to plant in with your bed of Hybrid Teas or Hybrid Perpetuals, but is valuable as an isolated specimen, in masses in a bed, in an exposed position, among shrubs in the shrubbery border, or for an everblooming hedge. It is absolutely hardy and continues in bloom until late in the fall. \$1 each, \$10 per doz., \$75 per 100.

## Hugonis Rose

This species, recently introduced from China, is unlike any other Rose. It is of a shrub-like habit of growth and naturally forms symmetrical bushes about 6 feet high, and the same in diameter. Valuable for planting in connection with other shrubs or as a single specimen in the garden. Its single, delicate yellow flowers are produced on long, arching sprays early in May, every branch of the previous season's growth becoming lined on both sides to the very tips with the attractive flowers, and after it has finished blooming it remains an attractive decorative shrub for the remainder of the season. Perfectly hardy. $\$ 1$ each, $\$ 10$ per doz., $\$ 75$ per 100.

## Baby Rambler or Polyantha Roses

This type of Roses forms shapely, compact, bushy specimens, most of the varieties growing about $I 1 / 2$ feet high. They begin blooming early in June and bear their immense trusses of small flowers until cut down by frost. They are fine for garden decoration, and their miniature flowers are excellent for cutting as well. This type of Roses requires no spring pruning; the flower-stems of the previous season need only be removed.
Cecile Brunner (Sweetheart Rose). This Polyantha has dainty, double, little flowers of perfect form, produced in many-flowered, graceful sprays. Color a soft rosy pink on a rich creamy-white ground.
Ellen Poulsen. A newer variety of Baby
Rambler, bearing very freely of its dark
brilliant pink flowers.

Miss Edith Cavell. Blooms a very pretty shade of deep carmine-pink, changing to carmine-red; very free-flowering variety.
Orleans. A very striking variety, with large, brilliant geranium-red flowers, becoming suffused with rose as they mature, and having an attractive white center.

Price, any of the above varieties, 75 cts. each, $\$ 7.50$ per doz., $\$ 60$ per 100

## Moss Roses

Moss Roses derive their name and beauty from the delicate mossy covering which surrounds the buds and gives the opening flowers a rather unique appearance. These Roses should be pruned sparingly; cut out the old wood and cut back the growth of the previous year.
Blanche Moreau. Large; pure white.
Henri Martin. Fine crimson; vigorous. Crested Moss. Rose; beautifully crested. Princesse Adelaide. Silvery rose; large. Price, any of the above varieties, 75 cts. each, $\$ 7.50$ per doz., $\$ 60$ per 100


Planting of Japanese Iris

## GERMAN IRIS (Iris germanica)

We list twelve of the best modern varieties, also the Siberian. This variety does not belong to the Germanica family. It is the most delicate and elegant of all the small-flowered Irises. The foliage is narrow, grassy-like, with tall stems; the flowers resemble somewhat, in form, the bulbous Iris listed in our catalogue as Spanish. It is splendid as a cut-flower and a very free-blooming variety.

FAIR Y. Standards and falls white, delicately bordered and suffused soft blue; very beautiful. 30 cts. each, $\$ 3$ per doz., $\$ 20$ per 100. GRACCHUS. Standards clear yellow; falls crimson, reticulated white. A very conspicuous variety. 30 cts. each, $\$ 3$ per doz., $\$ 20$ per 100.
HER MAJESTY. Standards lovely rose-pink; falls bright crimson, tinged with darker shade. The blending tints and coloring are rare for an Iris. 35 cts. each, $\$ 3.50$ per doz., $\$ 25$ per 100.
KHEDIVE. Standards beautiful soft lavender; falls white, veined brown, deep lavender at the tips. 30 ets. each, $\$ 3$ per doz., $\$ 20$ per 100.
LOHENGRIN. Foliage and flowers of gigantic size, with petals 2 inches wide; standards and falls are of a uniform shade of violetmauve. 30 cts. each, $\$ 3$ per doz., $\$ 20$ per 100.
LORELEY. Standards light yellow; falls ultramarine-blue, bordered cream. 20 ets. each, $\$ 2$ per doz., $\$ 15$ per 100.
MONSIGNOR. Standards rich satiny-violet; falls velvety purplecrimson, with lighter margin; very large flower. 30 cts. each, $\$ 3$ per doz., $\$ 20$ per 100.
MOTHER OF PEARL. Standards and falls pale bluish lavender, with a faint creamy undertone. Large flowers of perfect form and exceptional substance. The creamy undertone of this exceptional

Iris often assumes the luster and iridescence which we see in the beautiful lining of many seashells producing mother-of-pearl. The plant is tall, a vigorous grower, and a profuse bloomer. \$1 each, $\$ 10$ per doz., $\$ 80$ per 100 .
PALLIDA, ALBERT VICTOR. Standards soft blue; falls beautiful lavender; large and fine. 30 cts. each, $\$ 3$ per doz., $\$ 20$ per 100.
PAULINE. An unusually large flower; the standards and falls are a rich pale pansy-violet. A variety with a decided perfume. 20 cts. each, \$2 per doz., \$15 per 100.
PRINCESS VICTORIA LOUISE. Standards sulphur-yellow; falls rich plum, bordered cream. A good landscape variety, similar to Loreley, but with slightly lighter general color. 30 ets. each, $\$ 3$ per doz., $\$ 20$ per 100.
QUEEN ALEXANDRA. Standards fawn, shot with lilac; falls reticulated at base with bronze; beard yellow, 30 ets. each, $\$ 3$ per doz., \$20 per 100.
QUEEN OF MAY. (Pallida.) Like all Irises of this section, a tall grower. The color of the flower is a lovely soft rose-lilac, almost pink. 35 cts. each, $\$ 3.50$ per doz., $\$ 25$ per 100.
SIBERIAN BLUE. A very beautiful variety and a most satisfactory species for all situations. Clear sky-blue color, with horizontal falls. 30 cts. each, \$3 per doz., \$20 per 100.

## JAPANESE IRIS (Iris Kaempferi)

The Japanese Irises usually flower after the German. They are much admired on account of their variety of color and large size. We offer nine of the finest distinct varieties that we know of. They have been selected by us from a large collection of best named sorts. Sixpetal varieties are termed double; three-petal varieties, single.
Azure. Double. Immense flower; exquisitely wavy; mauve-blue with darker halo surrounding the yellow blotch at base of petals. Blue Bird. Single. Deep velvety blue.
Gold Bound. Double. Pure white. One of the best.
Grace Sperling. Single. Hortense violet; petaloid stigmas light hortense violet. Very early. Extra fine.
Hokahu-no-Neum. Double. White, edged plum color. Very fine.

Indo. Single. Broad wavy petals of great size; color dark rich blue only slightly veined. The yellow central blotch is unusually bright.
Mars. Single. Reddish purple, striped and blotched white.
Mount Hood. Double. Light blue shaded darker, bright orange center.
Pyramid. Double. Violet-purple, veined white in center of each petal.


## HERBACEOUS PEONIES

Peonies rank among the most beautiful of all hardy perennials, and no garden is complete without their charming influence. The popular interest in many parts of the world has brought a very gratifying improvement in the Peony. In the newer sorts gigantic flowers have been produced, reaching, in many instances, the large size of 7 to 9 inches in diameter and 5 to 6 inches in depth, with strong, stiff stems $21 / 2$ to 3 feet long. The permanency of Peonies should especially recommend them to your favor; for, once planted in suitable soil, they will continue to grow better and larger each year. A situation well open to the sun suits them best but they thrive in partial shade also.

Culture.-The culture of Peonies is quite simple. They require a good, deep, rich soil and an abundant supply of water during the growing season. When enriching the ground, the use of too much fresh manure near the roots should be avoided. The main point to observe is, while the ground should be well spaded and cultivated, not to plant the roots too deep. The roots should be planted so that the eyes are barely covered (about ' 1 to 2 inches). Too deep planting is the cause of shy flowering.

Size of Roots. -The roots we offer have been grown two years from root divisions. If planted during April or May these roots should become well established and give some flowers the following year.

COMTE DE DIESBACH. Medium size; rich dark red, splendid grower; free bloomer; early. 50 ets. each, $\$ 5$ per doz.
COURONNE D'OR. (Calot 1872 .) Large, flat, semi-rose type; pure white, with a ring of yellow stamens around a tuft of center petals, tipped with carmine. Medium tall; splendid grower; free bloomer. Late. One of the best white varieties. 75 cts. each, $\$ 7.50$ per doz.
DUCHESSE DE NEMOURS. (Calot 1856.) Medium size; pure white crown, sulphur-white collar, no crimson flecks; fragrant. Vigorous grower; medium height; very free bloomer. Early. Extra good commercial variety. Two days later than Festiva Maxima. 75 cts. each, $\$ 7.50$ per doz.
DUKE OF WELLINGTON. (Calot 1859.) Large; bomb type, with white guards and sulphur center. Medium tall; vigorous grower; free bloomer. Late. 75 cts. each, $\$ 7.50$ per doz.
EDULIS SUPERBA. (Lemoine 1824.) Large; loose, flat crown; bright mauve-pink collar mixed with narrow lilac. Early. Strong, upright; free bloomer. One of the best commercial pinks for Decoration Day. 50 ets. each, $\$ 5$ per doz.
FELIX CROUSSE. (Crousse 188i.) Large; globular; typical bomb; brilliant red. Strong, vigorous grower; medium height; free bloomer. One of the best reds. 75 cts. each, $\$ 7.50$ per doz.
FESTIVA MAXIMA. (Miellez 185I.) Very large; globular, rose type; pure white center, prominently flecked crimson, outer petals sometimes faint lilac-white on first opening. Very tall, strong, vigorous grower. Early. The most popular white variety for cut-flowers. 60 ets. each, $\$ 6$ per doz.
FLORAL TREASURE. Large, globular shape; medium tall grower; rich, soft pink. 50 ets. each, $\$ 5$ per doz.
FRANCOIS ORTEGOT. (Parmentier 1850.) Dark amaranthred. Loose; medium height. Midseason. 50 cts. each, $\$ 5$ per doz.
LA SUBLIME. (Parmentier 1850 .) Bright rich crimson; fragrant. Tall; very fine. 50 ets. each, $\$ 5$ per doz.

LA TULIPE. (Calot 1872.) Very large; flat, semi-rose type; lilacwhite, outer guard petals striped crimson; fragrant. Tall, strong grower; free bloomer. Late midseason. A good Peony on account of growth and general habit. 75 cts. each, $\$ 7.50$ per doz.
LADY BRAMWELL. Midseason; medium grower; silvery pink. 50 cts. each, $\$ 5$ per doz.
LOUIS VAN HOUTTE. (Calot I867.) Medium size; semi-rose type; deep carmine-rose, tipped silver, with fiery reflex-very brilliant coloring; fragrant. Medium height and habit. Late. 50 cts. each, $\$ 5$ per doz.
MME. CROUSSE. (Calot 1866.) Medium size; globular crown; pure white, center flecked crimson. Strong; medium height; free bloomer. Midseason. 75 cts. each, $\$ 7.50$ per doz.
MONS. JULES ELIE. (Crousse I888.) Very large; medium compact high crown; pale lilac-rose, collar lighter shaded amberyellow at the base. Medium height; strong growth. Early. Extra. \$1 each, $\$ 10$ per doz.
PRINCE IMPERIAL. (Calot 1859.) Very large, loose, semirose type; amaranth-red; tall, very strong grower; medium bloomer. Late midseason. 50 cts. each, $\$ 5$ per doz.
QUEEN VICTORIA. Whitleyi. Large full, compact bloom, with collar of flesh-white, fading to white, center petals flaked with red. Very strong grower; medium height; very free bloomer. The standard market variety for storage. 50 ets. each, $\$ 5$ per doz.
RICHARDSON'S DORCHESTER. (I87o.) Large, compact, rose type; pale hydrangea-pink. Fragrant. Medium dwarf; upright; free bloomer. \$1 each. $\$ 10$ per doz.
RICHARDSON'S GRANDIFLORA. ( 8833 .) Very large, flat rose type. Uniform rose-white. Tall, erect, strong grower. Very late. Perhaps the most valuable late variety of its color. $\$ 1$ each, $\$ 10$ per doz.
ROSA SUPERBA. Brilliant deep cerise-pink blooms; compact and perfectly formed. Healthy growth. Long stems. Midseason. 60 cts. each, $\$ 6$ per doz.


Culture.-Hardy Phlox may be planted in spring or fall; a mulch of old manure thrown around the roots will be of benefit to the plants. Phlox should be set out 18 inches apart, and if kept well watered will produce both individual blossoms and heads of bloom far larger than otherwise, and amply repay the extra trouble. To procure best effects, plants should be massed in from six to twelve clumps of each variety.

## Twelve Superb Hardy Phlox

Our plants are choice divisions from field-grown plants which we have found to give excellent satisfaction.

Albion. A vigorous-growing variety; pure white, with a pale pink eye.
Australia. A comparatively new Phlox bearing immense florets. Color, a remarkable shade of crimson-purple.
Bridesmaid. Pure white with large crimson center.
Elizabeth Campbell. Large soft pink. 40 cts. each. $\$ 4$ per doz., $\$ 30$ per 1on.
La Vague. Florets of moderate size, borne in large trusses. Soft pink.
Obergartner Reichenau. Extra-large flowers of bright rose. Strong, compact grower; extra-heavy foliage.
Rynstroom. Dark salmon rose. Easily one of the finest Phlox of its color.

Rheinlander. A beautiful salmon-pink the center of each floret relieved with a distinct carmine-crimson eye. Blooms and trusses very large size.
Selma. A clear, bright rose, highly relieved with a distinct carminecrimson eye. One of the best of all the Phloxes of this color.
Vesuvius. A dwarf Phlox bearing large trusses of bright fiery crimson flowers. Height I ${ }^{I / 2}$ feet.
Wanadis. Immense trusses with large individual florets. Delicate lilac shade with bluish purple ese.
Wida. Exquisite two-toned color. Lavender, rayed with white.

Price of the above varieties, except Elizabeth Campbell, 30 cts. each, \$3 per doz., \$20 per 100

## Early-flowering Hardy Phlox (Phlox suffruticosa)

Miss Lingard. A grand variety; which begins flowering after the middle of June and continues throughout the season. Extensively used for cut-flowers. 30 cts. each, $\$ 3$ per doz., $\$ 20$ per 100.

## TRITOMA PFITZERI

The greatest bedding plant ever introduced, surpassing the finest cannas for attractiveness and brilliancy; equal to gladiolus as a cut-flower, and blooms incessantly from June until December, regardless of frost. Plants are perfectly hardy in the open ground all winter south of Philadelphia; further north they must be protected or wintered in a cellar like the ordinary Tritoma. Just bury the roots in sand. Should be planted out early in spring, and will commence growth and bloom at once, growing larger and finer every day. $\$ 3.50$ per doz., $\$ 25$ per 100.


Tritoma Pfitzeri


## HARDY CLIMBING PLANTS

## AKEBIA QUINATA (Akebia Vine)

A very graceful, hardy climber, with small, deep green foliage, producing in early spring bunches of violet-brown flowers which have a pleasant cinnamon odor. Strong plants, 50 cts. each, $\$ 5$ per doz.

## AMPELOPSIS Sometimes called Boston Ivy

Veitchii. This is the most deservedly popular of all climbing plants, being entirely hardy in the most exposed places and attaining a height of 30 feet in two or three years; clings to stones, brick or woodwork with the greatest tenacity. During the summer the leaves are a rich shade of green and lap over each other with great regularity, like a coat of mail or like slates on a roof. But it is in the fall that it shows its exquisite beauty. The leaves then change to the brightest tints of scarlet, crimson and orange, so dazzling as to be seen at a great distance. Extra strong field-grown plants, 75 cts . each, $\$ 8$ per doz., $\$ 60$ per 1oo; extra strong, 3 -yr.-old plants, 75 cts . each, $\$ 7$ per doz., $\$ 50$ per 100 .
Quinquefolia (Virginia Creeper; American Ivy). This well-known climber is one of the best and quickest growing varieties for covering trees, trellises, arbors, and the like. The large, deep green foliage assumes brilliant shades of yellow, crimson and scarlet in the fall. Strong field-grown plants, 75 cts. each, $\$ 8$ per doz., $\$ 60$ per 100 .

## ARISTOLOCHIA SIPHO

## Dutchman's Pipe Vine

A vigorous and rapid-growing climber, bearing brownish colored flowers which resemble a pipe in shape. This plant is, however, more admired for its light green leaves, which retain their color from early spring until the fall. Strong plants, $\$ \mathrm{I}$ each, $\$$ Io per doz., $\$ 75$ per ioo.

## BIGNONIA RADICANS

## Scarlet Trumpet Vine

For covering unsightly places, stumps, rockwork or planting in crevices in ledges, the Bignonias will be found very useful. The flowers are large, attractive and showy, and borne profusely when the plant attains a fair size. 50 cts . each, $\$ 5$ per doz., $\$ 40$ jer 100.

## CELASTRUS SCANDENS

## Bittersweet, or Waxwork

One of our native climbing plants of rapid growth, succeeding in almost any situation, sun or shade, with attractive light green foliage and yellow flowers during June, followed in the autumn by bright orange fruit which usually remains on the plant throughout the winter. Strong plants, 50 cts . each, $\$ 5$ per doz., $\$ 40$ per 100.

## POLYGONUM AUBERTI (Silver Lace Vine)

One of the most desirable flowering climbers. The plant is of strong, vigorous growth, attaining the height of 25 feet or more, and producing through the summer and fall great foamy sprays of white dowers. Strong plants, \$I each, $\$ 10$ per doz., $\$ 75$ per ioo.

## CLEMATIS

The Clematis we offer this season are exceptionally fine, strong 2 -year-old plants. We have reduced the number of varieties to such sorts as, from experience, we know to succeed best in our climate. Many failure are the result of too shallow planting. The crown of the roots should be set at least 3 inches below the surface of the soil. Paniculata (Japanese Virgin's Bower). This handsome hardy climber is one of the choicest and most satisfactory climbing flowering plants we know. The plant is of strong, rapid growth, with small, dense, cheerful green foliage, giving it a grace and elegance possessed by no other hardy climber. The flowers appear in the greatest profusion during August, and continue until late in the fall, are white in color and most deliciously fragrant. The plant succeeds in almost any position; not only is it well adapted to run up all kinds of supports, but is just as useful for planting among rockwork, sloping banks, covering graves, or, in fact, in any position where a graceful vine is desired. Strong, field-grown plants, 75 cts. each, $\$ 7$ per doz., $\$ 50$ per ioo.
Jackmanii. The best known and most valued variety of this popular family. A perfect mass of bloom when in full flower. Color dark, rich, royal purple. Strong, field-grown plants, \$I each, \$1o per doz., \$75 per Ioo.
Henryi. Pure white; large and remarkably handsome. Strong, field grown plants, \$ each, \$1o per doz., \$75 per ioo.
Ville de Lyon. Bright red, well-formed flowers; a very fine variety. Strong, field-grown plants, \$1 each, \$1o per doz., \$75 per yoo.

## EUONYMUS

Radicans. This trailing form of Euonymus is particularly desirable for its dense deep green evergreen foliage. It is extremely hardy and useful for covering low foundation walls or may be clipped the same as boxwood for an edging plant. Strong, field-grown plants, 75 cts. each, $\$ 7$ per doz., $\$ 50$ per roo.
Radicans vegeta (Evergreen Bittersweet). A strong-growing variety with larger leaves than the preceding, producing bright orange-red berries which remain on the plant the greater part of the winter. As a hardy evergreen plant for wall-covering, this variety is unequaled. Strong plants, 75 cts. each, $\$ 7.50$ per doz., $\$ 60$ per 100 .

## HONEYSUCKLE

Halliana (Hall's Japan Honeysuckle). A strong, vigorous, almost evergreen sort; white flowers changing to yellow; very fragrant; flowering from July to December; holds its leaves nearly all winter. Extra-selected plants, 50 cts. each, $\$ 5$ per doz., $\$ 40$ per 100 .
Scarlet Trumpet Honeysuckle. This and its varieties are the handsomest in cultivation. It is a strong, rapid grower and produces scarlet, inodorous flowers. 50 cts. each, $\$ 5$ per doz., $\$ 40$ per IOO.

## WISTARIA

Sinensis (Chinese Wistaria). A most beautiful climber of rapid growth. When well established it makes a growth of I5 to 20 feet in a season. Flowers pale blue. Extra-strong plants, 75 cts . each, $\$ 7.50$ per doz., $\$ 60$ per 100 .
Sinensis, White. A white-flowering form of the above. Strong plants, 75 cts. each, $\$ 7.50$ per doz., $\$ 60$ per Ioo.


Abelia grandiflora


Calycanthus floridus


Buddleia


Berries of Cornus sibirica


Flowering Almond


Althea


Deutzia gracilis

## Hardy Flowering Shrubs

Shrubs are of great importance for the ornamentation of home-grounds. They have many uses; some are valuable as cut-flowers, while others are as decorative as any ornamental foliage plant. They may be used as a dividing-line between the flower and vegetable-garden, or between the lawn and the uncultivated land beyond, as a background for the flower border, and for hiding an unsightly building, fence or foundation. Soil where they are to be planted should be well spaded and enriched with bone-meal. Unless a very immediate effect is required, sufficient space should be allowed between them to permit of full development3 feet for dwarf varieties and 5 feet for the taller ones. As a general rule, shrubs should be thinned or pruned just after they have finished flowering, and then only slightly, just enough to keep them in nice, symmetrical shape.
NOTICE. The best time to plant is from early spring, when ground can be worked, until about May 15, the earlier the better.

## Abelia grandiflora

This, to our minds, is one of the finest of all the shrubs, and should be in every foundation planting. The habit and foliage is distinctly ornamental, and it blooms almost continuously from early summer until frost. The flowers are white, tinted lilac, and are produced so freely as to almost entirely cover the plants. Strong plants, 75 cts. each, $\$ 7.50$ per doz., $\$ 60$ per 100 .

## Almond, Flowering Amygdalus

This beautiful shrub is one of the loveliest. The fowers are borne on its slender branches during May, and are very fragrant.
Pink. Double-flowering; pink.
White. Double-flowering; white
Strong plants, 2 to 3 feet, $\$ 1$ each, $\$ 10$ per doz.

## Althea (Rose of Sharon)

The Altheas are among the most valuable of our tall, hardy shrubs on account of their late season of blooming, which is from August to October, a period when few shrubs are in flower. They are extensively used as hedge plants, for which they are admirably adapted. We offer in four distinct colors. Red, Pink, White, and Purple. Strong plants, 2 to 3 feet, 75 ets. each, $\$ 7.50$ per doz.

## Azalea Hinodigiri

This beautiful plant is considered one of the brightest of the Azaleas. It makes a little lower plant than the class, and in May is thickly covered with bright carmine-red. One of the finest Azaleas and should be in every foundation planting. Selected, well-formed plants, 12 to 15 inches high, $\$ 3.25$ each, $\$ 32.50$ per doz.

## Calycanthus

Floridus (Sweet or Strawberry Shrub). A very pretty shrub flowering during May. The flowers are double, chocolate-colored, and strawberry scented. Strong plants, 2 to 3 feet, 75 ets. each, \$7.50 per doz.

## Buddleia variabilis Veitchiana Butterfly Shrub, Summer Lilac

One of the most desirable of summer-flowering shrubs, beginning to bloom in July and continues until cut down by severe frost. The flowers are of a pleasing shade of violet-mauve, and are borne in dense, cylindrical spikes from 12 to 15 inches in length by 3 inches in diameter. It succeeds everywhere, and flowers the first season it is planted. The plant dies down in winter, coming up the following spring. Strong plants, 75 cts. each, $\$ 7.50$ per doz.

## Deutzias

Well-known, profuse-flowering shrubs blooming in early summer. The Deutzias succeed well in any sunny position, and should find a place in every flower garden.
Gracilis. A great favorite, dwarf, covered with spikes of pure white flowers in early summer. Strong plants, $11 / 2$ to 2 feet, 75 cts. each, $\$ 7.50$ per doz.
Pride of Rochester. A fine, tall-growing, double. white-flowering variety. Strong plants, 2 to 3 feet, 75 cts. each, $\$ 7.50$ per doz.

## Dogwood (Cornus)

This is a very well-known shrub. The flowers appear in May, before the foliage. In autumn it takes on a rich crimson shade, and is most effective at that time.
Sibirica (Siberian Dogwood). A strong-growing variety with white flowers. The branches are crimson colored in winter. Strong plants, 2 to 3 feet, 75 cts . each, $\$ 7.50$ per doz.

## Euonymus alatus

## Corkbark

A shrub different in character from all others. It is particularly ornamental and interesting on account of its curious corky bark. The small flowers of spring are followed by attractive red berries in the fall. The foliage turns to bricht scarlet in the fall and its appearance is most pleasing at that season of the year. Strong plants, \$1.50 cach, $\$ 15$ per doz.


Hydrangea paniculata grandiflora


Forsythia viridissima

## Exochorda grandiflora

## Pearl Bush

A medium-sized shrub, bearing white flowers in slender racemes in early spring. Very graceful and useful for cut-flowers. Strong piants, $\$ 1$ each, $\mathbf{\$ 1 0}$ per doz.

## Forsythia

A very decorative shrub with bright golden yellow, star-shaped flowers which burst into bloom at the beginning of spring while the bush is otherwise bare.
Suspensa (Weeping Golden Bells). A tall shrub of willowy growth, the branches gracefully arching and covered with golden yellow bells in early spring.
Viridissima (Golden Bells). Similar to the above but of more erect habit.
Strong plants of either of the above, 2 to 3 feet, 75 cts. each, $\$ 7.50$ per doz.

## Honeysuckles (Bush Honeysuckles)

We offer two varieties of the Bush Honeysuckles. They are splendid for lawn or border planting.
Tatarica (Tartarian Honeysuckle). Pink flowers, contrasting beautifully with the foliage. Blooms in June.
Tatarica alba. White form of the above.
Either of the above, strong plants, 2 to 3 feet, 75 cts. each, $\$ 7.50$ per doz.

## Hydrangea

We offer two varieties of this, perhaps the most popular of flowering shrubs.
Arborescens grandiflora (Snowball Hydrangea). This magnificent, perfectly hardy American shrub has snow-white blossoms of largest size. One of its most valuable characteristics is its coming into bioom just after the passing of all the early spring-blooming shrubs, flowering from early June to late July. Strong plants, 75 cts. each, $\$ 7.50$ per doz.
Paniculata grandiflora. Considered the most popular summer-flowering shrub. The flowers, which are borne in dense, pyramidal panicles a foot long, in greatest profusion, are white when they first open but gradually change to rose color, and remain in good condition for weeks. Strong plants, 75 cts . each, $\$ 7.50$ per doz.

## Kerria (Corchorus)

One of the most graceful and beautiful of the lower-growing shrubs for the front of a shrubbery border, or in a mixed planting of low shrubs around porches.
Japonica. Attractive golden yellow flowers are borne continuously from June to October. Strong plants, $\$ 1$ each, $\$ 10$ per doz.


Hydrangea arborescens

## Philadelphus

Mock Orange
This old-fashioned sweet-scented shrub has long been a close rival of the lilac in popularity.
Coronarius (Garland Mock Orange). This is a popular tall variety, refined and beautiful; large white flowers. Strong plants, 75 cts. each, $\$ 7.50$ per doz.
Coronarius foliis aureis. The golden-leaved Garland Mock Orange. Strong plants, 75 cts. each, $\$ 7.50$ per doz.

## Pyrus japonicus <br> Japan Quince

A very showy and popular shrub of medium height, which blooms profusely in early spring; flowers dazzling scarlet. Makes an excellent hedge-plant. Strong plants, \$1 each, \$10 per doz.

## Prunus

We offer two varieties of the Flowering Plum.
Pissardii (Purple-leaved Plum). A dwarf shrub covered with single white flowers in spring. When they first appear the leaves are a lustrous crimson, changing to rich purple.
Triloba (Double-flowering Plum). An interesting shrub, of medium height, bearing in early spring semi-double, delicate pink flowers over an inch in diameter.
Either of the above, strong plants, $\$ 1$ each,
$\$ 10$ per doz.

## Spiræa

Anthony Waterer. A valuable variety. Color bright crimson. It is of dwarf, dense growth, never exceeding 30 inches in height and blooms the entire summer and fall, if the old flowerheads are removed.
Van Houttei. Extremely popular. The grandest of all the white Spireas. It is of compact habit and a beautiful ornament for the lawn at any season, but when in flower is a very beautiful sight, the white blooms almost entirely covering the foliage.
Either of the above, strong plants, 75 cts. each, $\$ 7.50$ per doz.

## Symphoricarpos racemosus

## Snowberry

A well-known dwarf shrub with pink flowers and white berries that hang on the greater part of the winter. Strong plants, 75 ets. each, $\$ 7.50$ per doz.
Symphoricarpos vulgaris (Red-fruited or Indian Currant). Similar to the above, but with bright red fruit. Strong plants, 75 ets. each, $\$ 7.50$ per doz.


Spiræa Van Houttei

## Syringa, or Lilac

We offer two of the common varieties of Lilac, but will be pleased to correspond with our customers who are desirous of growing the better named varieties.
Common Purple (Syringa vilgaris). Purple. Common White (S.vulgaris alba). White.
Either of the above, strong plants, 75 cts . each, $\$ 7.50$ per doz.

## Viburnum

Plicatum (Japan Snowball). One of the choice hardy shrubs, with healthy dark green foliage. The perfect balls of pure white flowers are borne in great profusion in May. Strong plants, $\$ 1$ each, $\$ 10$ per doz.
Opulus (High-Bush Cranberry). The white flowers in June are followed in autumn by bright scarlet berries, which are very attractive until late in winter. Strong plants, 75 cts. each, $\$ 7.50$ per doz.


Pyrus japonicus

## Tamarix

Africana. Strong, slender, tall-growing shrub of irregular habit, with feathery foliage and small, delicate flowers, borne profusely on gracefully bending branches. The pink flowers are very attractive during May. Strong plants, 2 to 3 feet, 75 c . each, $\$ 7.50$ per doz.

## Weigelas

These easily take rank among the most popular flowering shrubs, covered, as they are, in May and early June by their large, trumpetshaped flowers.
Eva Rathke. Considered the finest Weigela in cultivation, blooming continuously throughout the summer and autumn. The flowers are a rich ruby-carmine.
Rosea. Soft rosy carmine.
Either of the above, strong plants, 75 cts . each, $\$ 7.50$ per doz.

## RHODODENDRONS

It is a source of much pleasure to know that the beautiful Hybrid Rhododendrons which we formerly largely imported from England and Holland in young plants, previous to the Federal Quarantine, are now being produced by a Hollander in this country. He has started their culture in the United States and we are pleased to offer four fine varieties of this beautiful evergreen shrub, without which few plantings are complete.
Amphion. Very large truss; clear pink with white eye.
Catawbiense album. Pure white.
Charles Dickens. Brilliant red.
Mrs. C. S. Sargent. Large flower; clear pink.
Price, well-shaped plants 12 to 15 inches high, $\$ 7$ each, $\$ 70$ per doz.

## HEDGE PLANTS

We offer two of the principal shrubs that are extensively used for Hedge Plants

## Berberis Thunbergii <br> Japan Barberry

Where a dwarf, deciduous hedge is wanted, nothing equals this beautiful Barberry. It requires but little pruning to keep it in shape. The leaves are small, light green, and towards fall assume rich, brilliant colors, the fruit or berries becoming scarlet. It is used extensively throughout the country and is perfectly hardy. Extra-strong, 1 to $11 / 2$ ft., 4 to 6 branches, packed in bundles of 10 or 25 at $\$ 4$ for $10, \$ 7.50$ for $25, \$ 25$ per 100 .

## California Privet

## Ligustrum ovalifolium

This is, perhaps, the most popular of all the hedge plants. Being absolutely hardy, it increases in beauty with each successive year. To get best results, plants should be set I foot apart in double rows in zigzag fashion, so that the plants are diagonally opposite each other. This practically places them 6 inches apart, which is desirable to get quick. dense growth. May be planted from March 15 to May 15 , or from October to frost. The Privet which we are offering is grown specially on contract for us and is selected and well-graded plants. This is the best size to plant and is in the most vigorous condition. It will immediately establish itself. Extra-strong, 2 ft., $\$ 2$ for $25, \$ 7$ per 100, $\$ 60$ per $\mathbf{1 , 0 0 0}$.

## GRAPE-VINES

We receive many flattering testimonials as to the quality of our Grape-vines.
Selected vines, except where noted, 75 cts. each, $\$ 8.50$ per doz.; extra-strong, $\$ 1.25$ each, $\$ 12.50$ per doz.

## White Grapes

Diamond. White. Bunch large, compact, shouldered; berries large, round; skin thin, but tough; flesh tender, juicy, with but little pulp. Vine is a good grower, with thick, healthy foliage; hardy and productive; of fine quality. Ripens a little before Concord.
Niagara. White. Bunch very large and handsome, often shouldered; compact; berries large, round; skin thin, tough, does not crack, and carries well; has not much pulp when fully ripe; melting, sweet, with a flavor and aroma peculiarly its own, and agreeabie to most tastes; ripens with Concord.
Pocklington. Pale green, usually with tinge of golden yellow where exposed to the sun; bunch large, very compact; berries very large, covered with a beautiful white bloom; flesh juicy, sweet, with considerable pulp.

## Red Grapes

Agawam. Red or maroon. Bunch usually loose, shouldered; berries large; skin thick; flesh pulpy, meaty, juicy, of a rich, peculiar aromatic flavor; ripens about with Concord; a good keeper. Vine a strong, rank grower, hardy and productive; should be pruned, leaving long canes.
Brighton. Red. Bunch medium to large, long, compact, shouldered; berries medium; skin thin; flesh tender, sweet, with scarcely any pulp; quality best. Vine a vigorous grower, healthy, hardy and productive; one of the best early red Grapes. The flowers have reflexed stamens and do not always fertilize fully unless planted with Concord, Worden, Martha, or other varieties which blossom at the same time. Ripens with Delaware.
Catawba. Dark red when fully ripe. Bunch large, moderately compact, shouldered; berries medium to large; skin thick, tough; flesh somewhat pulpy, with rich, vinous flavor, of best quality for both table and wine. Vine a good grower, hardy, with healthy foliage; very productive and profitable where it succeeds and matures well. Ripens too late for high latitudes.
Delaware. Red. Bunch small, compact, sometimes shouldered; berries small; skin thin, but firm; flesh juicy, very sweet and refreshing, of best quality for both table and wine; ripens with Concord or a little before. Vine hardy, productive, a moderate grower; requires rich soil and good culture. Is regarded by many as the best American Grape, all things considered. It should be in every garden and vineyard.
Lucile. Red. Very large in bunch and berry; compact; skin thin but tough. Good shipper; exceedingly productive. Flesh pulpy, sweet, somewhat foxy.

## NEW GRAPES

Hubbard. Black. Quality sweet and delicious, having that fine and pleasant flavor approaching the European or Vinifera Grapes. Seeds few and small, separating freely from the tender pulp. Skin thin and firm. Berries and bunch large and uniform. Ripens about io days earlier than Concord.
Portland. White. Earliest of all. Large bunch and berry. Resembles Niagara but is superior in quality. Fruit sweet, juicy, and of fine flavor. Vigorous and healthy grower.
Regal. Red. Cluster medium to large, very compact. Berries large, juicy, piquantly flavored. Pulp tender. Seeds free easily. Skin thin but tough. Exceedingly productive, very hardy and a strong vine grower.
2-yr., first-class Vines, $\$ 1.50$ each, $\$ 12$ for 10, delivered by parcel post

VINEYARD BONE FERTILIZER. Very coarse. Ideal for giving proper nourishment to grape vines. Ioo lbs. $\$ 5.50$ 500 lbs. $\$ 25$. ton, $\$ 85$.


Niagara Grapes

## Black and Blue Grapes

Concord. Black. Early. Decidedly the most popular Grape in America, and deservedly so. Bunch large, shouldered, compact; berries large, covered with a rich bloom; skin tender, but sufficiently firm to carry well to distant markets; flesh juicy, sweet, pulpy, tender. Vine a strong grower, very hardy, healthy and productive. For general cultivation the most reliable and profitable variety.
Eaton. Black. Similar in foliage to Concord. In growth, health, and hardiness of vine, in every respect its equal, while in size of bunch and berry it is much larger and more attractive. Leaf large, thick, leathery, covered on the under side with a thick brownish yellow down. Bunch very large, compact, double shouldered; berries very large, many 1 inch in diameter, round, black, covered with a heavy blue bloom, adheres firmly to the stem; skin thin, but tough; pulp tender, separating freely from the seeds and dissolving easily in the mouth; very juicy. Ripens with Concord or a little earlier.
Moore's Early. Black. Bunch rarely shouldered; not quite so large as Concord; berries larger and very much like it in flavor and quality. Vine a moderate grower; very healthy and hardy; foliage thick, leathery, somewhat resembling Concord, except on the under side, which is covered with a yellowish brown down. Produces a fair, and, with high cultivation, a heavy crop. Ripens so early as to be nearly out of market before Concord is ripe and is, therefore, a very popular early market variety. Succeeds best in rich soil.
Worden. Black. Bunch large, sometimes shouldered, compact; berries very large, skin thin. Superior to the Concord in the following points: It is better in quality, has a larger berry, a more compact and handsome cluster, and ripens five to ten days earlier.

## STUMPP \& WALTER CO.'S SMALL FRUITS

## CHOICE SMALL FRUITS

Orders for CURRANTS AND GOOSEBERRIES for shipment outside of the states of New York, New Jersey, Pennsylvania, and Connecticut, we cannot accept.
We have endeavored to list only the choicest sorts and, while our list is a short one, only the finest sorts are offered. This is preferable to a long list which would necessarily contain varieties of less merit.

SHIPPING SEASON APRIL AND MAY


Wilder Currants

## CURRANTS

Plant in rows 6 feet apart, and 4 feet apart in the rows, or, if to be cultivated both ways, 5 feet apart each way. The soil should be well cultivated to a depth of I2 inches. Plants should be well set and roots firmed in the soil. After planting cut back the tops onehalf of the previous year's growth. For the first 4 or 5 years some of the wood made in the spring should be cut back in the fall, in order to make a more symmetrical plant and a greater number of fruit-buds. Rotted stable manure around base of plant forked in each fall will prove very beneficial.

Selected 3-yearold stock, 50 cts. each, $\$ 5$ per doz., $\$ 40$ per 100

Wilder (President Wilder). Bush upright, vigorous; clusters above medium length; berries averaging large; bright red; excellent, with a mild subacid flavor. Ripens early and remains bright and firm until very late. Because of its exceedingly vigorous growth, great productiveness, high quality, and remaining good so long after ripening, we recommend this as one of the best Red Currants, both for table and market.
White Transparent. Bush vigorous and very productive; clusters large; berries very large, sweet and most delicious. This is the best of the White Currants, and fine for the table. Equally desirable as a market Currant.
Red Cross. Quality is good and the size of berries uniform. The red clusters are large, making it easy to pick. It makes abundant wood-growth and is not much bothered by borers.
Black Currants. We are unable to supply these on account of blister rust which injures pine trees. The Conservation Commission of the state and the Federal Government have prohibited the shipment of these bushes.

## GOOSEBERRIES

Plant in the same manner as described for currants, and give the same annual manuring. The American varieties will need close pruning every year.

## AMERICAN VARIETIES

Selected 3-year-old stock, 60 cts . each, $\$ 6$ per doz., $\$ 45$ per 100
Downing. Pale green, large, prolific and good. Best for home and market use.
Josselyn. Bush vigorous, upright and productive. Fruit varies in size from medium to above medium. Color pale red.
Chautauqua. Golden yellow; large variety and of fine quality.

> We offer for August delivery strong pot-plants of Strawberries. Write for our Midsummer catalog, issued in July.

## BLACKBERRIES

Blackberries require the same treatment as raspberries and should be planted the same distance apart. We have avoided listed varieties of the prostrate habit, the tips of which constantly root in the ground.

Extra-strong canes, 20 cts. each, $\$ 2$ per doz., $\$ 15$ per 100
Blowers. Large; glossy; fine quality. Ripens early and continues long in season.
Eldorado. Large, coal-black, sweet, melting, without hard core. Vigorous, hardy and very productive. Fine market variety.
Iceberg. A snowy white Blackberry. Early. sweet, and tender.
Rathbun. Very large, jet-black; firm; best quality; very productive.

## RASPBERRIES

Raspberries succeed well on any good land suitable for corn or wheat, but amply repay high cultivation. Ground bone is the best fertilizer. Red and yellow varieties should be planted in rows 6 feet apart and 3 feet apart in the rows; black- and purple-cap varieties 7 feet apart and 3 feet in the rows. Cut out all old wood as soon as the canes have done bearing-to give more vigor to the young canes. Blackcap varieties should be planted only in the spring.

Extra-strong canes, 20 cts. each, $\$ 2$ per doz., $\$ 15$ per 100

## RED

Cuthbert. Deep rich crimson; large to very large; very firm. One of the very best market varieties. Season medium to late. A remarkably strong, hardy and productive variety.
Marlboro. Light crimson, large, very firm, and of good quality. A fine early market variety; vigorous and productive.
Early June. A new, early, red Raspberry, originated at the New York Experiment Station. Berries large and firm, attractive, bright red color; very productive. A valuable sort for the garden or market.

## BLACK AND PURPLE

Columbian. Dull purple, very large, moderately firm. A good market berry and one of the best for canning. Bush remarkably strong and wonderfully productive.
Plum Farmer. A large, blackcap berry of rich, sweet quality. Hardy and very productive. One of the best market varieties and very popular.

## YELLOW

Golden Queen. Large, golden yellow, of fine quality. Very hardy and productive; succeeds almost anywhere, and is a most desirable berry, bringing good prices in the market.

## TWO FINE EVERBEARING RASPBERRIES

## EXTRA-STRONG CANES

We consider the following two Raspberries of superior quality and quite the finest of recent introduction.
White Queen. This wonderful new Raspberry bears an August until well ind abundance of almost white fruits from August until well into November. The extra-large. firm berries. which are free from seeds and acid, are of exquisite flavor and aroma. Plants attain a height of 6 feet and bear good crop the first year. 30 ets. each, $\$ 3$ per doz., $\$ 20$ per 100.
St. Regis. A remarkable Raspberry and, all things considin the last quarter of a century. The berries, though not of large size, are bright red and of excellent quality. It ripens very early, in advance of all the other red varieties, and the canes, in addition to being exceedingly hardy and drought-resistant, are exceedingly prolific. It has rich green foliage that does not scald or rust, hence it succeeds on hot, sandy soil where other varieties fail. Besides yielding an enormous crop in June, it gives also a moderate one in the autumn, and, unlike other red Raspberries, it produces a crop of berries the first year, or the season it is planted. 20 cts. each, $\$ 2$ per doz., $\$ 15$ per 100.

# SELECTED FRUIT TREES 

We recommend northern-grown fruit trees to our customers, as they will be found to give better satisfaction than southern-grown or western-grown trees. We furnish excellent clean trees, which, if planted carefully, are almost sure to succeed. Trees, when received, should be planted at once in rich, prepared soil, the roots being carefully separated and spread. If dry weather follows planting, the trees must be watered and mulched. Branches of last season's growth should be well cut back, thus encouraging the vigorous growth of new healthy shoots.

## Apples

The following is a list of the best Apples we have decided to include after trial. The months indicated are those in which the different varieties usually mature.

## SUMMER VARIETIES

Early Harvest. Medium size; pale yellow; mild, fine flavor. August.
Red Astrachan. One of the best of the summer varieties. Apples are of medium size but uniform; flesh white, streaked with red; juicy and tender. August.
Sweet Bough. Splendid for baking; large; pale yellow; tender and sweet. August.
Yellow Transparent. A splendid early variety; fruit good size; mild and delicious; yellowish white when ripe.

## AUTUMN VARIETIES

Fall Pippin. Very large; yellow; tender, juicy and rich. A favorite fall cooking Apple. October to November.
MeIntosh Red. A valuable hardy Canadian sort. Medium size; nearly covered with dark red; flesh white, fine, tender, juicy and refreshing. A good annual bearer of fair, handsome fruit. Resembles the Fameuse, but is larger and more hardy, and fully equal in quality to this standard sort. November to February.
Gravenstein. Vigorous growth; fruit large; greenish yellow, striped with red; good for home use or market. September, October.
Wealthy. A native of Minnesota, where it has proved perfectly hardy, vigorous and productive. Fruit of medium size; red, streaked with white. Oct. and Nov.

## WINTER VARIETIES

Baldwin. A fine keeper in a common dry cellar. Very large, round; red-and-yellow skin. Very profitable market sort. December to March.
Delicious. Distinctive in shape and beautiful in color. Large; brilliant dark red, blending to golden yellow at the blossom end; sweet in flavor, slightly touched with acid, but only enough to make it more pleasing. Bears annually. Dec. to April.
King (Tompkins County). Large and handsome; striped red and yellow. Tree vigorous and productive. November to May.
Northern Spy. Large; bright yellow; juicy, crisp and tender. Splendid for table or cooking. Ready to eat in November and will keep in good condition until June.
Rhode Island Greening. A splendid cooking variety. Fruit large; green, sometimes with red cheek. October to February.
Roxbury Russet. Medium size; dull green, nearly covered with russet; skin tough; flesh mild and appetizing. January to June.
Winesap. Medium; dark red; subacid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the West. December to May.
Any of the above, Standard 3-year-old XX, $\$ 1.50$ each, $\$ 15$ per doz.

## SULCO-V.B.

A specific for the control of San José, Red Orange, Cottony Cushion and other scale insects infesting fruit. Plant Lice, Pear Psylla, Leaf Blister Mites, Scurfy Bark Louse. Qt. 80 cts., gal. $\$ 2.50,5$ gal. $\$ 11.25$, to gal. $\$ 20$, 5/2 bbl. (30 gal.) $\$ 52.50, \mathrm{bbl}$ ( 50 gal .) $\$ 82.50$.

## Crab-Apples

Hyslop. Large size; red in color; hardy; sharp acid flavor. September, October.
Large Yellow Siberian. Nearly as large as the above; fine amber or golden yellow.
Transcendent. All things considered, this is one of the most valuable varieties of Crab-apples grown. Tree remarkably vigorous, growing to a good size and very productive. One of the best sellers.
Any of the above, 3-year-old XXX, $\$ 1.50$ each, $\$ 15$ per doz.

## Pears <br> SUMMER VARIETIES

Bartlett. Splendid flavor; large; yellow and red; good for eating or canning. September.
Clapp's Favorite. Good bearing variety. Fruit large; yellow and crimson. August.
Wilder. Regular in form, fair size and very handsome; greenish yellow with reddish cheek; flavor sweet and pleasant. August.

## AUTUMN VARIETIES

Anjou. Fruit large; yellow; very little core; splendid flavor; keeps well into midwinter. November.
Beurre Bosc. Large; yellow-russeted; halfmelting, high-flavored and excellent. A poor grower. September and October.
Duchesse d'Angouleme. Very large; greenish yellow, sometimes a little russeted. Makes a beautiful tree; does best on quince. One of the best. October and November.
Seckel. A splendid Pear for the home garden. Of very rich flavor; small; color brownish green with reddish cheek. September, October.
Sheldon. Medium to large; yellow and red. Very excellent and promising variety from Wayne County, N. Y. Tree a fine grower and productive; must be double worked to grow on quince. October.

## WINTER VARIETIES

Kieffer. Tree a remarkable grower, with so vigorous a constitution that it rarely, if ever, blights. Fruit of fine size, rich color, and fair quality. Brings high prices in competition with other varieties, and is a great market Pear. Best when picked at maturity and house-ripened. October and November.
Any of the above, 3-year-old XXX, $\$ 2.50$ each, $\$ 25$ per doz.

## Cherries

## BIGARREAU or SWEET

Black Tartarian. Vigorous growth; very large; purplish black; one of the best. Ripening end of June.
Governor Wood. Vigorous growth; medium; clear, light red; tender and delicious. Ripening end of June.
Schmidt's Bigarreau. A most promising Cherry. Fruit of immense size, of a rich, deep black; flesh dark, tender, very juicy, with a fine flavor. Bears abundantly, and makes a most excellent dish for the table.
Windsor. Originated at Windsor, Canada. Fruit large, liver-colored.
Yellow Spanish. Large; pale yellow, with red cheek; firm, juicy and excellent. Last of June.

MORELLO or SOUR CHERRIES
Early Richmond. Medium size; dark red; juicy, rich acid flavor. The stone adheres to the stem. One of the most valuable of sour Cherries.
Montmorency (Large Montmorency). A Cherry of the Richmond class, but larger and more solid. Ripens from seven to ten days later than the Richmond.
Morello, English. Large; dark red, nearly black; tender, juicy, subacid; valuable for preserves; tree small; productive.
Three-year-old XXX, \$4 each, $\$ 40$ per doz.

## Plums

Coe's Golden Drop. Large and handsome; light yellow, firm, rich, sweet; one of the best of the late Plums. Last of September.
German Prune. A large, long, oval variety, much esteemed for drying; color dark purple; of very agreeable flavor. September. Imperial Gage (Flushing Gage; Prince's Imperial Gage). Fruit large, oval; skin pale green; flesh juicy, sweet, rich and excellent. Middle of August.

## JAPAN PLUMS

Abundance, or Botan. Lemon-yellow ground, nearly overspread with bright cherry and heavy bloom; large to very large, oblong, tapering to a point; flesh orange-yellow, melting. August.
Burbank. Fruit medium to large, roundish conical; dark red or purplish, running to bright amber; flesh amber-yellow, melting, juicy, with rich sugary flavor; stone small and free. One of the best. August.
Three-year-old XXX, $\$ 2.50$ each, $\$ 25$ per doz.

## Peaches

Belle of Georgia. Very large; skin white with red cheek; flesh white, firm and of excellent flavor; fruit uniformly large and showy. September I to 5 .
Crawford's Early. A magnificent large, yellow Peach of good quality. Tree vigorous and very productive. Its fine size, beauty and productiveness make it one of the most popular sorts.
Crawford's Late. Very large; yellow; juicy, good; freestone. End of September.
Carman. A hardy rot-proof Peach, ripening with Early Rivers. Large, round, with pale yellow skin and red blush on sunny side; white flesh, sweet flavor.
Elberta. Large, light-colored yellow Peach; juicy, well-flavored; finest yellow freestone. Greenboro. The largest and most beautifully colored of all the early Peaches. Of good quality; juicy; a freestone, but adheres slightly.
J. H. Hale. New. Large, late Peach. Fine. Waddell. Fruit medium to large, oblong; skin rich creamy white, nearly covered with red; flesh white, firm, rich and sweet; freestone. Very prolific and very early.
Two-year-old $\mathbf{X X X}, 75$ cts. each, $\$ 8$ per doz.

## Quinces

Apple, or Orange. Large, roundish; bright golden yellow; very productive.
Bourgeat. One of the finest yet offered. Color, rich golden, and quality extra good. Extra large.
Champion. A vigorous and productive variety. Ripening very late.
Rea, or Rea's Mammoth. A very large and fine variety of Orange Quince. One of the best.
Three-year-old XXX, $\$ 2.50$ each, $\$ 25$ per doz.

# Planet Jr.Wheel Hoes and Seeders 

## Enable You to Cultivate a Larger Garden with Less Effort

Wheel Garden Tools do the work of three to six men, make your garden yield more abundantly, and save several times their cost in a single season. Every tool is fully guranteed.

SINGLE WHEEL GULTIVATOR

No. 16
The highest type of single-wheel Hoe made. Light, but strong and can be used by man, woman, or boy. Con-
sists of SINGLE WHEEL GULTIVATOR


No. 17
Comprises I pair of 6-inch Hoes, I Plow and Cultivator

## SINGLE WHEEL GULTIVATOR

No. $17^{1 / 2}$ Teeth; sufficient for most Consists of I pair of 6 -inch Hoes and 3 Cultivator Teeth. garden work. Price \$7.75. vator Teeth. I large Garden Plow, I Rake inches wide, Price $\$ 9$.


DOUBLE WHEEL GULTIVATOR
No. 11
A Single and Double Wheel Cultivator in one. Straddles crops until they are 20 inches high. Has steel frames and $14-$ inch steel wheels. Comprises one pair of 6 -inch Hoes, I pair $41 / 2$-inch Hoes
steel Cultivator
Teeth, I pair of Slows, 2 Rakes, each with three teeth, 2 Rakes, each with five teeth,

$\qquad$
10



COMBINED SEEDER AND CULTIVATOR
(Single wheel.) The seed-box holds $2^{1 / 2}$ quarts of seed, and the combination includes I pair of 6 -inch Hoes, 4 Cultivator Teeth, 1 pair of Plows for hilling includes I pair of 6 -inch Hoes, 4 , and I Marker. Price $\$ 21.50$.


SEEDER No. 4D
Consists of the seeding mechanism only of Outfit No. 4 but does not include the cultivating attachments. Sow ${ }_{s}$ efficiently in rows or in hills. Capacity $21 / 2$ quarts. Price \$15.

SEEDER No. 3
This holds 3 quarts of seed. A favorite among onion-growers, market-garmarkers, and deners, and seed - growers. Sows in a narrow line, making wheel - hoe cultivation easy. Price \$17.50.
$\stackrel{\text { No. }}{ } 3$ \$17.50

## HOTKAPS. They Keep Plants Warm

Made of strong, weather-proof paper. Hotkaps are quickly placed in "position, over newly sown seeds, or newly transplanted seedlings, by means of a "Setter," and they are fixed by drawing a little soil around the edge.

Better than coldframes, they insure against damage by late spring frosts; they protect against wind, rain, and hail; they guard against insects. By the use of Hotkaps, crops may be matured sooner and an early market secured.

Protect tomato plants, pepper and eggplants with Hotkaps. Corn may be sown earlier and will yield sooner with their help. Cucumbers, muskmelons, pumpkins, and squashes grow quickly and are shielded from borers. Tomato, pepper and eggplant seeds may be sown directly in the ground, and, protected by Hotkaps, they will yield a full crop. Hotkaps are packed in 1,000 lots. Shipping weight 20 pounds.

PRICES OF HOTKAPS

| I, OOO | \$10 00 | ro,000...... . . . . . . . . . . . . . . . \$95 00 |
| :---: | :---: | :---: |
| 5. |  |  |

Setter, for placing Hotkaps in position $\$ 2.50$.
Carrier, for transporting Hotkaps in the field; holds I50, \$2.75.


## S. \& W. Co.'s Lime and Fertilizer Sower

 Clover Manure, Pulverized Limestone, Sheep-Manure, Bone-Meal, Dry Wood Ashes, etc. Hopper holds 10 bushels. Actual width of sowing is 8 feet. Capacity from 50 to 4,500 pounds. The screen in the hopper and revolving agitator prevents clogging and packing of material on the feeds and insures an even distribution of fertilizers. All feeds can be instantly shut off or opened to any desired amount. Has two 30 -inch wheels with 4 -inch concave tires. Shipping weight, 360 lbs. $\$ 65$ each.

## Little Wonder Hedge Trimmer

A well-designed machine which entirely revolutionizes hedgetrimming. It actually cuts a hedge as fast as you walk, and in an hour will trim the top and two sides of a hedge 300 feet long; this is from five to ten times as fast as hand-work.

The cutting blades are of tough steel, holding a sharp edge for a long while and trimming every variety of hedge grown. Use it for trimming, and not for "cutting back" a hedge, and it will last for years. 3 -inch one-man Trimmer, $\$ 25 ; 40$-inch one and two-man Trimmer, $\$ 27$; 60 -inch two-man Trimmer, $\$ 35$.


## Electric Little Wonder Hedge Cutter

10 0 l.

## A MARVEL FOR HEDGE TRIMMING

The most rapid, practical, and easy method yet devised. A proven success. It is guaranteed to trim 300 to 500 feet (top and both sides of ordinary hedge) in one hour, and the only effort required is to guide the machine. 40 -inch machine, including Ioo feet of weather-proof extension cord and General Electric motor, \$106.

## Putting-Green Roller

The S. \& W. Co.'s Putting-Green Roller is an indispensable part of the equipment required by golf clubs in maintaining perfect putting-greens. This Roller being of wood is more satisfactory for gathering worm-casts and smoothing down all uneven spots caused by frost, worms, ants, etc. The roller is 4 feet wide, having four 12 -inch sections, 10 inches in diameter. The ends of each section are banded with 2 -inch steel bands, to prevent splitting. The handle is reinforced with steel braces, bolted to solid cast heads on both ends of the roller. The S. \& W. Co.'s Putting-Green Roller is endorsed by many of the best golf clubs of America. The net and shipping weight is 186 lbs., \$22.50 each.

will cut from 25,000 to 35,000 feet of sod, and at this.rate you can save the price of a machine in a short while.

This machine is so constructed that it can be adjusted to cut the sod the one uniform thickness, I to 2 inches, i2 inches wide. This is very important, especially when a vast amount of sod is to be laid. One man can lay as much sod as three or four men can by the old method of cutting. $\$ 55$ each. Extra Knives, $\$ 13.50$ each.

## Burners for Leaves, Paper, and Rubbish

The best receptacle used for burning leaves, papers, and all kinds of rubbish. This handy knock-down Burner is a safeguard against many fires that have their origin in the burning of rubbish in the open. The Burner is extra strong, manufactured of heavy galvanized steel wire, reinforced with iron supports. Made to give life-long satisfaction. We supply this Burner in two sizes.

| No. | Square Height | Each |
| :---: | :---: | :---: |
|  | . 5 in. . . 22 in. | \$300 |
| 2 | 17 in.... 29 in. | 400 |



## Scotch Chain Harrow

Hundreds of wrought-iron links are woven into what is practically a blanket of chain. This arrangement is ideal in smoothing land as a final preparation for grass seeds; it may also be drawn over the soil after seeds are distributed for the purpose of covering them. Used on driveways and race-tracks, it smooths the surface, eliminating ruts and footprints. The Scotch Chain Harrow is made in three sizes, the Small for one horse, the Medium for two horses, and the Large for tractor. Small size, $5 \times 6 \mathrm{ft}$., $\$ 35$; Medium, $6 \times 71 / 2 \mathrm{ft}$., $\$ 45$; Large, $71 / 2 \times 71 / 2 \mathrm{ft}$., $\$ 55$.

## Meeker Smoothing Harrow



The Meeker Harrow is invaluable in the final preparation of land for seeding; it leaves the soil in a condition similar to that obtained by hand-raking. The frame is of wood, holding four sets of discs.
No. 1. Frame 4 ft . 6 in. by 4 ft ., with 588 -in. dises......... $\$ 4000$

## PRICES SUBJECT TO MARKET CHANGES



## S. \& W. Co.'s Fertilizer Sower for TopDressing Lawns

Has a revolving agitator and adjustable feed device; will sow all commercial fertilizers. The hopper is 34 inches long and holds one and one-half bushels. Besides top-dressing lawns, greens, etc., it is a handy machine for all kinds of garden and field work. When two blades are removed, it will sow damp sand. Also is an excellent machine in the winter for covering icy roads and walks with sawdust, sand, etc. Shipping weight, 83 lbs . Price, $\$ 27$.


A sturdy, hardwood stake 7/8inch square, 3,4 , or 5 feet long, with a strong wire support instantly adjustable to any height. Saves space because it keeps your plants in the air and sun, and from the ground. Enables you to cultivate close to the plant. "Adjusto" supported tomatoes ripen to perfection. "Adjusto"' supports bring out the full beauty of dahlias, chrysanthemums, and all the slender, tallgrowing varieties.


## Bird Houses

Encourage the birds; they are your friends. They have a keen appetite for grasshoppers, grubs, beetles, flies, and other pests. It is said that if all birds were suddenly to perish there would not be a leaf, a blade of grass, or any green thing left upon the earth within a few years
-it would be uninhabitable. The presence of birds in the garden should indeed be welcome. You can easily find places for bird houses on your fences and trees and we can offer same as follows:



## S. \& W. Co.'s Garden Barrow

One of the most useful articles on the list of garden and lawn tools. Materials are selected oak, mortised and bolted together, strengthened with six iron braces. Made substantial, light and for long service. Wheels with 3 -inch tread.

| Size | $\begin{aligned} & \text { Front } \\ & \text { Width } \end{aligned}$ | Size of Box |  | Rear Width | Size of Wheel |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Depth | Length |  | Diam. | Tread | Price |
| Medium | $181 / 2 \mathrm{in}$. | 12 in . | $261 / 2 \mathrm{in}$. | 23 in. | 20 in. | 3 in . | \$8.50 |
| Regular | 20 in . | 12 in. | 28 in . | 24 in . | $22 \mathrm{in}$. | 3 in . | 9.50 |

## S. \& W. Co.'s Boys' Barrow

Suitable also for ladies' use. The front width is $151 / 2$ inches, box is 9 inches deep and 21 inches long, and the rear width is 18 inches; wheel diameter is 16 inches with $\mathrm{I}^{1 / 2}$-inch tread. Just as substantially made and just as practical as the standard barrow. Price, $\$ 6.75$.

## Canal Barrow



## Greenhouse Barrow



This is specially designed to run between the benches of a glasshouse and readily to turn corners. Its body is thus constructed narrow, as also is the distance between the handles. Price, \$1I.


## Flat Screen

Handy for compost. soil, sands, gravel, etc. Extra-heavy galvanized wire; spruce frames, painted grey. Size, 28 in . x 68 in . $1 / 2$ - in . mesh. Price, \$16.

## Tampers



8 by 8 -in.
Io by Io-in.
S. \& W. Co.'s I ron Sod Tamper. Used when laying turf and for compacting the sod after frost. The Tamper is square and is furnished complete with a 4 -foot handle.

Weight
Price
I7 lbs............. . $\$ 275$
20 lbs............... 300


## S. \& W. Sod Perforator

The best low-priced device for renovating bare spots in lawns. Use before sowing grass seeds, permitting the seeds to enter the soil. The spikes are set firmly in an oak block, made in two halves and put together with screws. A 4 -foot handle is included. I2 by I 2 ins. $\$ 4.50$.


## Rich Lawn Cultivator Rake

This consists of a heavy, solid head, carrying 13 curved, sharp-pointed and sharp-edged teeth. The Cultivator Rake tears out clover or crab-grass and roughens the turf to prepare it for reseeding. With handle, $\$ 3.50$ ea.


## Asparagus Knives

American Asparagus Knives.
Straight Edge. 50 cts . each, $\$ 5.50$ per doz. V-Shape. 50 cts . each, $\$ 5.50$ per doz.


Acme Asparagus Buncher
No. 1 makes bunch 3 to $3^{1 / 2}$ in. diam. $\$ 5$ each

No. 2 makes bunch 4 to $4^{1 / 2}$ in. diam. Length, adjustable, 7 to 9 in. $\$ 5.25$ each.

## Forks



Spading Forks. Best grade; tines spearpointed with diamond-shaped backs; handle strapped both sides. Of superior quality and very strong. Each 4-tine, D-Handle. . . . . . . . . . . . . . . . \$2 25 5-tine, D-Handie. . . . . . . . 275


## Manure Fork

Manure Forks. Best grade; strong oval tines.

Each
4-tine, D-Handle \$2 00
5-tine, D-Handle. . . . . . . . . . . . . . . . . 225
6-tine, D-Handle.
250
Long-Handle Forks, same price.
Hay Forks.
Best grade; strong oval tines, made only with long handles.

Each
3-tine, Long Handle. ................ . $\$$ I 65
4-tine, Long Handle
I 75
Boys' Spading Forks . . . . . . . . . . . . . . . I 25


Norcross Cultivator Hoe and Weeder
Wherever vegetables, plants and flowers are grown, these modern tools are rapidly replacing the ordinary hoe. They are made in three sizes, and can be used in wide or narrow rows. Will also cultivate both sides of a row at one operation, when the middle prongs are removed. The three-prong weeder is the women's size. They destroy weeds, leave the soil level, loose and untrampled. 5-prong, \$1.40; 3-prong, \$I; Midget, 65 cts.


English Scuffle Hce. Imported. Positively the best. The quality of material used and finish is superior to all others.
Size Each Size Each
 6-in........ I 20 Io-in.......... 10 I 70 7-in........ I 30
Extra-strong handles, $4^{1 / 2} \mathrm{ft}$., 50 cts . $6 \mathrm{ft} ., 80 \mathrm{cts}$. each.


Warren, or Heart-Shaped. The best Hoe for making drills, covering, hoeing, and weeding.

Each
Small size.
\$I 25
Medium size
I 50


Draw, or Garden. Sizes for boys, ladies and men. Each
$\qquad$


## Rakes

Reversible Steel. Suitable for lawn and garden. Has 24 teeth. 75 cts. each.


## 

Steel Garden. Cut from one piece of steel; strong and durable. Polished teeth.

| Each | Each |
| :---: | :---: |
| Io-tooth. . . . \$ 100 | 14-tooth.... SI 20 |
| 12-tooth..... I 10 | 16-tooth |

Steel Gravel. Like the Garden Rake. Made substantially, with short teeth. Each 14-tooth. . . \$I 25 16-tooth. . . . I 35 I8-tooth. ... I 60 Hay and Lawn. Made light and substantial. with tubular steel bow; does not break like the wood bow.

Each ${ }^{\text {- }}$ Doz.
14-tooth Hay.. \$I 20 \$I2 00 24-tooth Lawn. I 50 I 500


Ames Shovels are the best manufactured; give best service.

Each
Square Point, D-Handle
. \$2 75
Round Point, D-Handle............. . 275
Long-Handle Shovels, same price.
S. \& W. Co.'s Shoveis.

Square Point, D-Handle. . . . . . . . . . . I 75
Round Point, D-Handle
Round Point, D-Handle.............
Long-Handle Shovels, same price.


Ames Spades are the same grade as the Ames Shovels.

Each
D-Handle and Long Handle....... . \$2 75
S. \& W. Co.'s Spades are the same grade as S. \& W. Co.'s Shovels.

Each
D-Handle and Long Handle......... $\$ 175$
Boys' Spades............................ . . I 75

## Small Garden Tools

## Dibbles or Dibbers

Just the tool for transolanting tomatoes, cabbage. celery, etc.

## $B$ rass <br> point

Brass Dibber
wood handle. The best Dibber.
Polishes quickly; does not rust. \$1.25 each, \$12 per doz.
Steel point and wood handle. Regular size, $93 / 4$ in., \$I each, \$1o per doz. Small size, 8 in., 90 cts. each, \$9 per doz.


All-Iron
All-Yron. Made hollow and light; japanned handle. Regular size, $93 / 4$ in., 90 cts. each, \$9 per doz.

##  <br> Gem Hand Fork

Has three steel prongs and finished handle. Is a handy Fork for transplanting strawberries, loosening the soil, etc. 60c. each.

## Grass Hooks



Imported English. With heavy riveted back, thin cutting blade, easy to sharpen; forged from the best-grade steel. Medium, \$I; Large, \$1.I5.


Blue Ribbon. Tempered steel blade; blackenameled handle. Used also for a Corn Hook and for clipping hedges. Blade can be detached and packed for parcel post. 50 cts . each. 3 lbs. packed.

## Grass and Lawn Scythes



Imported English. Has a riveted back, broad, thin, light blade. Best Scythe for cutting grass, rye. oats, etc.
3 -inch. Medium.
\$3 25
34 -inch. Large medium............... . . 350
36-inch. Large . . . . . . . . . . . . . . . . . . 375


Domestic. Cutlery steel, natural oil finish, cutting edge web and backs polished. 32 -in. Med.. . $\$ 235$ | 36-in. Large.. $\$ 20$ Scythe Snath, or Handle. The very best, with patent socket. $\$ 2.50$.


## Mole Traps

Schroeder Improved No. 1. It has a rest on top for a weight, also eight sharp prongs and a strong spiral spring. $\$ 2.50$ ea., $\$ 25$ per doz.

## The Ritten-

 house. The simplest safest, and surest mole trap ever invented. Self-setting. No off unless is touched. Made of all steel and tinned. Six in a crate. The spears are spring steel, therefore not so long as soft steel. \$i.lo ea., \$in per doz.Schroeder Improved
Garden Line Reels
Malleable Iron. Holds roo feet. \$I. 25 .
Eureka. Galvanized steel. Single, 500 feet size, $\$ 3.25$. Double, i,000 feet size, \$4.

## Garden Line

Best Braided Linen. 100 feet, one length, SI. 75 . 200 feet, one length, $\$ 3.50$.

## Trowels



Slim Jim. Excellent for setting bulbs or transplanting. 5 -inch size, 20 cts.; 7 -in. size, 30 cts . each.


Forged Steel. This trowel is second to the Stumpwall Trowel in quality and finish. The blade and shank are one piece, forged out of the best of steel. Made in three sizes. 5 -in., 60c. each; 6-in., 75 c., 7 -in., 85 c.


The Stumpwall is the best made Trowel. The ferrule and shank, as well as the blade, are forged in one piece. Only the very best material used. 6-in., \$I. 25 each.


Florists' Steel Trowel
This Trowel is made in one picce of heavy sheet steel. One size only, 6-in., 50 cts. each.

PRICES SUBJECT TO

## MARKET CHANGES



TROWELS, continued
Transplanting. Very handy for transplanting cabbage, tomatoes, etc. Solid steel shank and blade. \$I each, \$io per doz.

## Weeders



Excelsior Finger. This five-short-prong Weeder is excellent for loosening the soil in small flower-beds, etc. 35 cts. each, $\$ 3.50$ per doz.


Hazeltine's Hand. Better known as Beet Weeder. A handy tool for weeding between beets, carrots, and all small vegetables and flowers. Made of I -inch-wide spring steel 85 cts. each, $\$ 8.50$ per doz.

## Dandelion Digger



Used for digging out Dandelions from lawns. Blade, 6 inches. 60 cts. each, $\$ 6$ per doz.


Midget Warren Hoe. Blade and shank forged from the best quality of steel. Handle is turned, polished, and enameled. Excellent for making drills and covering; also for transplanting and weeding. 80 cts . each, $\$ 8$ per doz.
Cleveland Lawn Weeder. Is simple to operate; it not only saves the back, but is actually a pleasure to use. The cut is a good illustration, showing how to work it. \$I.j0 each, \$I5 per doz.


Cleveland Lawn Weeder

## Flower Boxes, Baskets, Pots and Fibreware



## Flower Boxes

| Cardboard, Flower. Ivy green; lock corners. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Depth | Length | Width | Doz. | ${ }^{100}$ |
| No. 1. 3 in . | 18 in. | 5 in. | \$ 100 | \$6 00 |
| No. 2. 3 in. | 21 in. | 5 in. | I 20 | 700 |
| No. 3. 4 in . | 24 in. | 8 in. | I 75 | 1050 |
| No. 4. 5 in. | 28 in. | 8 in. | 225 | I3 oo |
| No. 5. 5 in. | 36 in . | 8 in | 300 | I6 00 |
| Violet. - Length | Width | Depth |  |  |
| No. 5. II in. | $51 / 2 \mathrm{in}$. | $8 \mathrm{in} .$. | 130 | 700 |
| No. ro. 9 in . | 5 in . | 6 in. | I 20 | 600 |
| Corrugated Cardboard. Very heavy and durable; extensively used by florists for shipping cut-flowers. |  |  |  |  |
| No. |  |  | Doz. | 100 |
| A $20 \times 7 \times 4 \mathrm{in}$. |  |  | \$3 50 | \$25 00 |
| B $28 \times 8 \times 5 \mathrm{in}$. |  |  | 450 | 35 oo |
| C $\quad 30 \times 12 \times 6 \mathrm{in}$. |  |  | 600 | 45 oo |
| D $36 \times 14 \times 8 \mathrm{in}$. |  |  | 800 | 60 oo |
| E $\quad 48 \times 14 \times 8 \mathrm{in}$. |  |  | Io 00 | 75 00 |
| F $\quad 36 \times 12 \times 6$ in. |  |  | 700 | $5^{\circ} 00$ |



English Garden Baskets

## English Garden Baskets

Durable, light and handy for cutfowers or vegetables.
No. Length Width Each Doz.
$5161 / 2 \times 9$ in...... $\$ 200 \$ 2200$
$\begin{array}{llllll}6 & 181 / 2 \times 10 \text { in.... } & 2 & 25 & 25 & 00 \\ 7 & 21 \times I I \text { in....... } & 2 & 75 & 30 & 00\end{array}$

## Fibre Flower Vases

These combine beauty with durability. Moulded in one piece of tough fibre over $1 / 4$ inch thickrendered waterproof by a penetrating treatment-and artistically finished on the outside to resemble the bark of a tree.
Features: Moulded seamless in one piece with out rivets or joints.
Absolutely waterproof.
Non-conductor-protects flowers from sudden changes of temperature.
Cannot rust or corrode, scratch furniture or leave rust marks. Noiseless.
Will harmonize with the most luxurious surroundings.


| Azalea Pots |  |  |  |
| :---: | :---: | :---: | :---: |
| These pots differ from standard flower pots in that they resemble the bulb pans but are deeper. Excellent for growing bulbs for exhibition. |  |  |  |
| Diam. | Each | Doz. | 100 |
| 6 in. | \$0 I5 | \$1 45 | \$10 00 |
| 7 in | 30 | 250 | 1700 |
| 8 in | 40 | 360 | 25 оо |
| 9 in | 60 | 575 | 39 oo |
| Io in | 80 | 700 | 5000 |



Flower Pots, Standard
EAR'THENWARE. Best on the market $\begin{array}{lllll}\text { Diam. } & \text { Each } & \text { Doz. } \\ 2 \text { in. } . . . & \text { Ioo } & \text { I,000 } \\ & \$ 0 \quad 35 & \$ 1 & 60 & \$ 1400\end{array}$ $\begin{array}{lrrrrr}2 \mathrm{in} \ldots \ldots & \$ 0 & 35 & \$ 1 & 60 & \$ 14 \\ 21 / 2 \mathrm{in} \ldots . . & 40 & 2 & 00 & 18 & 00\end{array}$
 $\begin{array}{llllllll}4 \mathrm{in} . . . . . \text { \$o } & \text { Io } & \text { I } & \text { Oo } & 5 & 00 & 38 & 00 \\ 5 \mathrm{in} . . . . . & 15 & 1 & 60 & 8 & 00 & 70 & 00\end{array}$ 6 in...... $20 \quad 2 \quad 25$ 12 00 105 00 7 in...... $35 \quad 3 \quad 25 \quad 2000 \quad 175$ oo

On orders of 50 pots or more we make shipment direct from factory to customer.
Saucers of same material, to fit Pots, furnished extra

## Diam. <br> 4 in.

5 in..
6 in..
7 in..
8 in.
8 in.
9 in.
PRICES SUBJECT TO MARKET CHANGES


| Diam. Outside | Each | Doz. | Diam. Outside | Each | Doz. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | \$0 40 | \$4 00 | 4 | O |  |

## Bulb Pans. EARTHENWARE

 Diam.| at top | Each | Doz. | 100 |
| :---: | :---: | :---: | :---: |
| 8 in. | \$0 40 | \$3 25 | \$25 00 |
| 9 in . | 60 | 550 | 40 |
| Io in. | 70 | 650 | 50 |
| 12 in . | I 50 | 1300 | 102 |



Bulb Pan

## Square Seed Pans <br> EARTHENWARE

$\qquad$
\$I IO \$IO 20
I 40 I3 20
I 75 I7 oo
Square Seed Pans
$220 \quad 20 \quad 50$

## Paper Flower Pots, Neponset

Very economical; waterproof; can be nested closely for shipping.

## Diam.

$21 / 4 \mathrm{in}$.
$\$ 0$ I2 $\$ 0.100$
$21 / 2$ in..
3 in.....
3 in...
$3 \mathrm{t} / 2 \mathrm{in}$.
4 in..
Size
$\qquad$

## Flower-Pot Saucers

 fibreware. WaterproofLight and not readily broken; have a surface that will not scratch, like earthenware. Order saucer 2 inches larger than the bottom diameter of pot.

$8 \times 8$ in.
20


## Flower-Pot Brackets

Made of steel, artistic in design, finished in black. Saucers are absolutely secured by spring clasp.

Each
No. I. Length of arm, 7 in. Clasp will hold 5 -in. pot. ..... . \$o 65
No. 2. Length of arm, 8 in. Clasp will hold 6 -in. pot...... 75
No. 3. Length of arm, 10 in . Clasp will hold 7 -in. pot...... 90
Flower-Pot Handles and Hangers (Krick's Perfect)
No. I. Will fit from $3^{1 / 2-}$ to 5 -in. pots. . . . . . . . . . . . . . . . . . . . $\$ 0$ or 60
No. 2. Will fit from 5 - to 8 -in. pots.
No. 3. Will fit from 8 - to 12 -in. pots.
75

# Hanging-Baskets and Boxes, Thermometers and Plant-Tubs <br> PRICES SUBJECT TO MARKET CHANGES 



The S. \& W. Co.'s Irrigating Hanging-Basket
FOR BULBS. The S. \& W. Co.'s Irrigating Hang-ing-Baskets and Boxes are, without question, the most satisfactory device for growing bulbs ever devised. A beautiful and certain growth, with a minimum of care.

FOR FERNS. Nearly every home-lover is a lover of ferns, but few succeed with them. They never fail in S. \& W. Co.'s Irrigating Flower-Boxes, or Hanging-Baskets.


No. 5452, Self-Registering. (Siexe's Pattern.) Lacquered


598 I polished brass case, white figures. Maximum and Minimum. Io-inch, \$7. Magnet with each.
No. 5400 . Black japanned heavy tin case; brass scale, white figures. (Mercury.) Scale range, io to 40 degrees below zero to i20 above. Standard Grade. 8 -inch, $\$ 1.75$; 10 -inch, $\$ 2$.
No. 5420. Black japanned heavy tin case. For greenhouses. Black oxidized brass scale, white figures. (Spirit.) 8-in. \$I; io-in. \$I. 25. No. 5154S. Coppered tin case; distance reading. Black oxidized brass scale, white figures. (Spirit.) Scale range, I 20 degrees above to 40 degrees below zero. 8 -inch, 85 cts .
No. 5120. Distant reading. Wood-back Mission finish, brass scale, white figures and graduation. (Spirit.) Easy to read at distance. 8-inch, \$1. 25 .
No. 5981. Hotbed. Wood frame, 15 inches, with point. Brass oxidized scale, white figures and graduations. Best grade, mercury filled bulb-chamber giving good contact. Price, $\$ 3$.

You can put the S. \& W. Co.'s Flower-Boxes anywhere一on the piazza rail, at the edge of the piazza floor, the window - sill, and in many other places on the outside or inside of your home. They

The S. \& W. Co.'s Irrigating Hanging-Baskets

The S. \& W. Co.'s Irrigating Basket is a strongly made, watertight, galvanized square steel box, attractively finished with a baked-on enamel in dark green. Its neat design harmonizes with any surrounding. The top edges have a pleasing roll finish and the boxes are made entirely suitable for all locations. Four chains are furnished with which the basket may be suspended anywhere-indoors or out.

There is a water-pocket at the bottom, and, leading from it into the box, are tubes to convey water to the soil. Watering is made casy, the air circulation is perfect, and the soil is kept sweet and healthy. What is more important, the plants get the water at the roots, right where it does the most good.
Io inches square.
.$\$ 235$ | 16 inches square
275 I8 inches square
$\$ 400$
I2 inches square
275
325
475

## The S. \& W. Co.'s Irrigating Flower-Boxes

 are easy to put up and take down-a screw driver is the only tool you need. Brackets may be had for fastening the boxes in different positions. You can be absolutely certain that they will not drip. When cold weather comes, take the boxes and plants inside and have the all-winter cheer of growing flowers.

| Length | Width | Depth | Each | Length | Width | Depth | Each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 24 in . . | $81 / 2 \mathrm{in}$. | 61/4 in | \$I 95 | $42 \mathrm{in.}$. | . 8 1/2 in | 61/4 in | \$4 00 |
| 30 in . . | $81 / 2 \mathrm{in}$. | 61/4 in | 240 | 48 in . | . $81 / 2 \mathrm{in}$ | $61 / 4$ in | 450 |
| 36 in | $81 / 2 \mathrm{in}$. | $61 / 4$ in | 325 |  |  |  |  |

Brackets for Attaching the Above to Window Frame, Etc.
No. 1. Sits on window-sill. \$I. 25 per pair. No. 2. Sits below window-sill. \$1.50 per pr. No. 3. For porch-rails and wooden-sills.

75 cts . per pair.


Diagram shows the interior
The love of flowers is inherent in all of construction of the S. \& W.Co.'s us. Radiant with beauty and fragrance, the Irrigating Flower-Box bright blooms add charm to any home. Have you ever thought how much brighter and cheerier your windows and veranda would be with some pretty growing flowers along the rail? There is a rare enjoyment that comes from watching the progress of the tiny shoots as they grow and blossom into full grown flowers.

The S. \& W. Co.'s Flower-Boxes and Hanging-Baskets make it easy to have all the flowers you want. You can plant them yourself or have the florist fill the boxes with your favorite varieties already in bloom. All plants thrive in these unique receptacles.

## TUBS

Flant Tubs, New York Cedar. Made of the choicest seasoned cedar, highly finished with black hoops; wil. last twice as long as cypress. No. Diam. Height Price No. Diam. Height Price
 2....I3 in..I3 in.... 350 $3 \ldots$... $4^{1 / 2}$ in. I5 in


## GARDEN FURNITURE



PARK SETTEES. For use in the garden, on the lawn, tennis court, bowling green, golf tee, or on the porch. Strong, simple, yet graceful in design. Slats are of best hardwood, legs of channel steel: the whole painted green. 4 ft . long $\$ 4,5 \mathrm{ft}$. long $\$ 4 \cdot 50,6 \mathrm{ft}$. long $\$ 4.75$.


LAWN FAN, Seven Leaf. In two sizes. Wood is painted white. 70 in. high, 45 -in. spread, $\$ 2 ; 94$ in. high, 60-in. spread, $\$ 2.50$.



SEGMENT TOP PERGOLA. A very beautiful design that will be an acquisition to any garden. Well made of the most enduring woods, painted white. Fieight 7 ft ., width 94 inches. Price $\$ 30$. With two seats inside the Pergola \$37.50.


POPULAR GARDEN ENTRANCE. Use it to separate the garden from the rest of the property. On it you may grow climbing roses and honeysuckle with delightful effect. The legs enter the ground three feet and require no foundation. 7 ft . high, $4^{1 / 2} \mathrm{ft}$. wide. Price, $\$ 48$.


CHESTNUT FENCING. Makes a splendid background for plants and vines. Space between pickets $3 / 4 \mathrm{inch}$. In $16-\mathrm{ft}$. rolls; 46 in . high, 45 cts. per lineal foot; 58 in . high, 55 cts. per foot; 78 in., go cts. per foot.


ROSE BUSH FAN Five Leaf. Height 58 in., spread 30 in . white. \$1.75.

SUN-DIALS
Brass dial as illustrated 73/4-inch diameter .50
Pedestal, suitable for above, made of hard burnt clay and very decorative. \$7.50.

ARBOR SET. This set is built entirely of cypress and oak. The table is very strong and suitable for porch as well as arbor. Painted thoroughly with three coats of the best weather-resisting paint and finished white. Set, as illustrated $\$ 58$. Purchased separately, Table $\$ 28.50$, Chairs $\$ 17$ each.


FOLDING CHAIRS-AII MetaI. Collapsible, strongly made and painted a handsome shade of dark green. Suitable for use in the garden, taking on auto trips, etc. $\$ 2.25$ each.


THE SAWCO GARDEN ENTRANCE. These arches are strong enough to withstand rocking and will last for many years, being thoroughly mortised and tenoned and hand finished. Cypress, "the wood eternal," is used for all parts in contact with the earth. $61 / 2 \mathrm{ft}$. high, $4^{1 / 2} \mathrm{ft}$. wide. Price, $\$ 36$.

GAZING GLOBE WITH PEDESTAL. The Globe is 12 ins. in diameter, and the Pedestal is 24 ins. high. These are sold separately. Globe, $\$ 20$.; Pedestal, \$7.50.



ENGLISH TYPE HURDLE FENCE. Strong enough for any ordinary purpose, yet readily portable. Posts are 6 ft . high and extend 18 inches into the ground: when set, the fence is 4 ft . high. Four-bar hurdle $\$ 2.30$ each, 5-bar $\$ 2.45$ each, 6 -bar $\$ 2.60$ each.

## BASKETS AND GARDEN TOOLS

PRICES SUBJECT TO MARKET CHANGES

## THE'"OUT-U-KUM" WEED PULLER

## An Entirely New Principle

A slight Push and Pull thoroughly loosens the surrounding soil and removes not only the weed. but the entire root.

When pushed into the ground the two points guide the BRIDGE down alongside the weed, loosening the soil from that side. It then crosses under the root disengaging the latter. As the tool is withdrawn the BRIDGE slips up the opposite the BRLGE slips up the opposite
side of the weed, loosening the ground from that side and engages ground from that side and engages
the head of the weed above the the head of the weed above the
ground. The now thoroughly loosened weed is readily withdrawn


The "Out-U-Kum" Weed Puller
Made of refined malleable iron, highly polished. Black enameled ferrule and select waxed hardwood handle. \$I each. Stumpwall Weed Extractor for Lawns


Patent applied for. A 12 -inch hand tool designed to extract crab-grass, star-grass, chick-weed, self-heal and plantain from putting greens and fine lawns. \$1.50 each, \$16.50 per doz.

## Magic Weeder Hoes

Style A. 3-prong Weeder. 25 cts. each.
Style D. 4-prong Weeder and Hoe. 60 cts., postpaid.

## Sod Lifters

English Pattern. Heart-shaped, strong, and highly efficient. $\$ 8.50$ each.
American Pattern. Preferred by many on account of its light weight. $\$ 2.25$ each.

## English Sod Lifter Length 4 ft . <br> American Sod Lifter Length 4 ft . <br> 

## English Digging Forks

Four Tine "D"<br>Handle, \$2.50.



Flower and Fruit Basket
This basket is made light and especially for gathering cut-flowers, berries, grapes, asparagus, and small vegetables. A handy basket for carrying berry boxes while being filled. Handle has two galvanized braces. Light, strong and handy. Made in 3 sizes. Length Width Depth Small size...I 8 in . Io in. $3^{1 / 2} \mathrm{in}$. SI 00 Medium size. 20 in . 12 in . $3 \mathrm{~s} / 2 \mathrm{in}$. I 10 Large size... 22 in. I4 in. $3^{1 / 2}$ in. I 25

## Bamboo Basket



Better known as Long Island Potato Basket. Woven split rattan; handle opening under rim. Well made. Avery good basket for potatoes.

## Solid Steel Scrapers

Invaluable for all grading work, lawn construction, road making, etc. For use with horse or tractor.

| No. | Width | Capacity |  |
| :---: | :---: | :---: | :---: |
| I | 32 in. | 7 ft . | SI4 00 |
| 2 | 29 in. | 5 ft | 1350 |
| 3 | 26 in. | 3 ft | 1300 |



## S. \& W. Co.'s Reenforced Nursery Spade

A well-made Spade, being strongly and heavily strapped close up to the D-handle. For all-round garden work, and will last a lifetime. Price, $\$ 2$.

I/2-bus. size...... $\$ 200$
Bus. size. . . . . . . . $25^{\circ}$

## General-Purpose Baskets

Used for many purposes on the farm. Handy for carrying corn, coal, wood, vegetables, leaves and rubbish, etc. Best oak splint. Made strong and for long service.
I-bus. size......... . $\$ 2$ oo
I 1/2-bus. size........ . 250
2-bus. size......... . 300
3-bus, size. . . . ..... . 425
4-bus. size. . . . . . . . 5 oo


## 

Aprons, Gardeners'. English made.
Fine shalloon, 39 -in., with bib and pocket, $\$ 4$ each; 42 -in., with bib and pocket, $\$ 4.50$ each.
Heavy serge, $39-\mathrm{in}$., with bib and pocket, $\$ 3.75$ each; 42 -in., with bib and pocket, $\$ 4.25$ each.
Broom, Bamboo. Excellent for sweeping lawns, putting-greens, and walks. Made of bamboo. $\$ 1.50$ each, $\$ 15$ per doz.
Birch Brooms. Superior make. 75 cts. each, $\$ 7.50$ per doz.; with handle \$1. 25 each, $\$ 12.50$ per doz.
Carnation Supports. Model Extension, 2-ring, \$1.io per doz., $\$ 7.50$ per 1oo; 3 -ring, $\$$ I. 35 per doz., $\$ 8.50$ per 100 .
Carnation Bands, Rubber. Prevents splitting. 25 cts. per oz.
Clips, Eureka. For fastening rose and chrysanthemum wire stakes. $\$$ I. 50 per box of $500, \$ 2.50$ per box of 1,000.
Gloves. Made substantially of horse-hide; heat- and water-proof; made with gauntlets. Good Gloves for pruning and farm-work. No. 259. All leather. $\$ 2.50$ per pair.
No. 186. Ladies'. \$2 per pair.

## Glazing Materials

Putty Bulb, Scollay. A useful tool similar to the well-known Scollay Sprinkler, with a tube instead of spray for applying liquid putty in glazing greenhouses. \$1.50.
Glazing Points, Van Reyper's. No rights or lefts. No. 2, large, for single- and double-thick glass for greenhouses and skylights. Box of $\mathbf{1 , 0 0 0}, 75 \mathrm{cts}$.; 5 , 000 for $\$ 3.25$.
Pincers or pliers for same, 50 cts .
Red Devil Glass Cutter. 25 cts., 35 cts., and 50 cts.
Putty Knife. No. 1oo. A very good tool. 50 cts. each.
Grafting Wax. 1/41b. $25 \mathrm{cts} ., 1 / 21 \mathrm{~b} .35 \mathrm{cts}$. , lb. 65 cts.
Grafting Chisel. \$1.75.


## Planet Jr. Disc Edger FOR LAWNS

A very dependable implement; easy to handle. $\$ 2$ each.

## Knives, Turf-Edging, Budding and Pruning

Solid Welded - Steel Edging. Socket handle; made of the very best steel; imported English. 8 -inch, $\$ 2.50$; 9 -inch, $\$ 3$. Each Half-Moon. Solid steel, with a polished handle. . ............ \$1 40 Pruning KnivesNo.
I. Cocoa handle. I blade $\$$

Each
I
50
2. Stag. I blade.

Budding Knives-
2. Stag. I blade.

200
4. Cocoa. I blade........ 2 2 75
5. Cocoa. 2 blades...... 3 oo

## KUNDE KNIVES-

Budding and Pruning Knife. Two blades, brass lined;
polished wooden handle..........................................
A. Ivory handle. 2 blades 350
B. Bone, S. \& W. I blade. 250
C. Bone, S. \&W. 2 blades. $25_{0}$
D. Ivory. I blade........ 275
E. Bone. 2 blades........ 2 oo
F. Ebony. I blade...... I 5
handle......................................................... . .
200

## Hotbed Mats

For protecting coldframes and hotbeds. Warmly lined with waste wool and cotton, which are quilted in to hold position.
No. I. $40 \times 76 \mathrm{in}$. Burlap on both sides. \$2.75 each, $\$ 30$ per doz.
No. 2. $76 \times 76$ in. Burlap on both sides. $\$ 3.75$ each, $\$ 42$ per doz.

## Hotbed Sash and Frames

PACKING charged extra on crates containing 2 or 4 glazed sash, $\$ 1.50$ per crate. Crates containing 6 glazed sash, no charge.
Stumpp \& Walter Co.'s Standard Frames are made of selected Gulf Cypress, free from knots and sap. Frames are dressed and finished with two coats of gray paint. The four corners are securely held with angle irons and bolts. Easily taken apart when necessary
 to store or ship them. sash are rabbeted and grooved for drip, and dovetailed into the sides. The back depth of frame is 16 inches, front depth 8 inches. This provides the necessary pitch to carry away rain and snow. Frames are made for 2, 3, 4 and 5 sash.
No. 2 Frame. With two $3 \times 6 \mathrm{ft}$. sash $\$ 32$, without sash $\$ 16$.
No. 3 Frame. With three $3 \times 6 \mathrm{ft}$. sash $\$ 45$, uithout sash $\$ 2 \mathrm{I}$.
No. 4 Frame. With four $3 \times 6 \mathrm{ft}$. sash $\$ 58$, without sash $\$ 26$.
No. 5 Frame. With five $3 \times 6 \mathrm{ft}$. sash $\$ 72.50$, without sash $\$ 32.50$.
Single Light Sash. Stumpp \& Walter Co.'s Single Light are standard size, $3 \times 6$ feet. Made of selected cypress, $I_{\frac{1}{16}}$ inch thick, free from knots and sap. Mortised and leaded joints. Three rows of io x 12-inch double-thick glass, iron cross-bar across the center. Made extra strong and durable. Finished with two coats best white lead. $\$ 8$ each, $\$ 90$ per doz.
Double Light Sash. Stumpp \& Walter Co.'s Double Light or Double-Glazed Sash are made with two layers of glass, providing an air-chamber or insulator, which keeps the warmth in and the frost out. With the Double Light Sash it is not necessary to use mats or covering in severe cold weather. In locations where snow is frequent or stays long it does not interfere with the Double Light Sash, providing the snow is cleaned off. The plants receive the benefit of the sunlight and grow uninterruptedly. The sash are standard size, $3 \times 6$ feet, $17 / 8$ inches thick. Made of clean Gulf Cypress, free from knots and sap. Mortised and leaded joints. Three rows of $10 \times 12$-inch double-thick glass. Strengthened with a $3 / 4$-inch iron bar across the center and finished with two coats of best white lead. \$14.50 each, \$165 per doz.

## Simplex Waterproof Plant Labels

The writing is protected by the transparent cover and will last indefinitely if done with lead pencil.
No. 1. $3 \times 1 / 2$ in....................... $\$_{0}{ }_{30}{ }_{35} \$_{250}^{100}$
No. 2. $4 \times 3 / 4 \mathrm{in}$. $\begin{array}{r}70 \quad 450 \\ \hline\end{array}$
No. 3.5 x I in.

## S. \& W. Co.'s Permanent Label Holder

This Label Holder is finished with an index card covered with mica, making it absolutely rust-proof, finished in iron, galvanized and japanned green. Stake 24 inches high. No. Io card, $23 / 4 \times 11 / 2$ inches. 25 cts. each; No. II card, $3 \times 2$ inches, 30 cts. each.
Galvanized Metal Marker for flower-, vegetable-

| ds | Each | Doz. | 100 |
| :---: | :---: | :---: | :---: |
| 9-inch........ | 80 :o | \$1 00 |  |
| nc | 15 | 50 |  |
|  |  |  |  |

Indelible Ink for use on these markers, bottle 50 cts.

## Pot or Garden Labels

Wooden, Painted- roo 1,000 4-inch, Painted- $\$ 0 \begin{aligned} & \text { 100 } \\ & \text { 1,000 } \\ & \$ 0\end{aligned} \frac{100}{1,00}$ 4 -inch........\$0 35 \$2 25 8-inch.......... \$1 25 \$9 00
 -inch........... 45.30
Copper-wired

## $3^{1 / 2}$-inch

zinc Garden. These are unsurpassed, being neat and durable. For use with our Indelible Ink which makès a jet-black mark.

| No. | Doz. | 100 | No. | Doz. | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I. $4^{3 / 4} \times 3{ }^{1 / 2} \mathrm{in}$. | \$0 50 | \$3 50 | 6. $21 / 4 \times 2 \mathrm{in}$. | . \$0 30 | \$200 |
| 2. $4 \times 23 / 4 \mathrm{in}$. | 30 | 200 | 7. $23 / 4 \times 7 / 8 \mathrm{in}$. | 20 | I 25 |
| 3. 4 x 3 in | 30 | 200 | 13. $23 / 4 \times 11 / 4$ in | 20 | I 25 |
| 4. 5 xI i | 30 | 200 | 14. $11 / 2 \times 15 / 4$ in | 20 | 125 |
| 5. $3^{1 / 2} \times 21 / 2$ in | 30 | 200 | I5. $4^{1 / 4 \times 43 / 4 \mathrm{in} \text {. }}$ | 50 | 350 |

## Miscellaneous Garden Supplies

PRICES SUBJECT TO
MARKET CHANGES

Indelible Ink. For zinc labels. 50 cts . per bottle.
Label Pencils. Permanent writing on wooden labels. $I_{5}$ cts. each, \$1.50 per doz. X-L-All Pencil, 25 cts. each, $\$ 2.50$ per doz.
Netting. Bird-netting to protect all small fruits and vegetables. r-inch mesh only, in 20 and 30 -ft. widths. $\$ 2$ per 100 square feet.

## Paper-

Wax. $18 \times 24$ in. Ream. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 300$
$24 \times 36$ in. Ream................................................. . . . . 4 oo
Tissue. $24 \times 36$ in, Ream............................................ 250
Manila. $24 \times 36 \mathrm{in}$. Ream.
40

Wrapping. In rolls: Widths 24 in., 30 in. 36 in., 48 in. Weight approximately 50 lbs. Kraft or Manila, lb. 14 cts.
Plant Sprinkler, Scollay. Made of the best rubber. Straight neck, \$1.50.
Post-Hole Diggers, Samson. 56 inches, $\$ 6$.
Post-Hole Auger. 6-in., $\$ 2.50 ; 8$-in., $\$ 2.75$.
Raffia, Natural. For tying plants. Lb. 50 cts., 5 lbs. $\$ 2$. Colored. All standard shades, $1 / 2 \mathrm{lb} .50 \mathrm{cts} ., 1 \mathrm{~b} .90 \mathrm{cts}$.
Scythe Stones, Genuine English. Round, tapering. 75 cts. each. Unbreakable Radiac. 30 cts. each, $\$ 3$ per doz.
Scythe Rifles, Emery-coated. 25 cts . each, $\$ 2.50$ per doz.
Scissors, Grape-thinning, \$2; Flower-gathering, \$3.
Well Digger. 6-in., $\$ 4 ; 8$-in., $\$ 4.50$; Io-in., $\$ 4.75$.

## Plant Stakes and Supports

Adjusto Plant Supports. See page 157 .
Bean Poles. Excellent for staking Pole Lima Beans. 30 cts. each, $\$ 3.50$ per doz., $\$ 25$ per 100 .
Plant, Tapering, Green-

|  | Doz. | 100 |  | Doz. | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 2$ feet. | So 35 | \$2 25 | $3^{1 / 2}$ feet | \$1 50 | \$9 20 |
| 2 feet | 60 | 400 | 4 feet. | I 60 | 1100 |
| $21 / 2$ feet. | 80 | 520 | 5 feet. | 210 | 1450 |
| 3 feet. | 110 | 725 |  |  |  |

Carnation Supports. Model Extension, 2-ring, \$I.Io per doz., $\$ 7.50$ per ioo; 3 -ring, $\$ 1.35$ per doz., $\$ 8.50$ per 100 .
Chinese Tonkin Cane. These are Chinese canes, very strong and heavy.


Japanese Barmboo Canes. Dyed green.

| Ioo | 1,000 | 100 | 1,000 |
| :---: | :---: | :---: | :---: |
| II/2 feet........ So 45 | \$3 60 | 31/2 feet.......... \$1 40 | \$II 00 |
| 2 feet........... 85 | 680 | 4 feet............. I 50 | 1200 |
| $21 / 2$ feet........ I 00 | 800 | 5 feet............ I 80 | 1450 |
| 3 feet.......... I 20 | 1000 |  |  |

Japanese Cane. For staking plants and trees.

$$
\begin{aligned}
& 8 \text { feet......... } 4 \text { 50 } 4000
\end{aligned}
$$

Dahlia Poles, Tapering- Doz. 100


Special Dahlia Poles. Solid ash; $3 / 4$ inch thick; non-tapering; painted green.

Galvanized Wire-

| 100 | I,000 | 100 | 1,000 |
| :---: | :---: | :---: | :---: |
| 3 feet......... ${ }^{\text {S }} 50$ | \$2200 | $4^{1 / 2}$ feet.........\$3 50 | \$33 00 |
| $3^{1 / 2}$ feet....... 275 | 2600 | 5 feet........... 4 00 | 3700 |
| 4 feet......... 330 | 3000 | 6 feet........... . 500 | 4500 |

Tomato Supports, Wire. 32 inches high, I4 inches in diameter. made of heavy steel wire. 45 cts. each, $\$ 4.50$ per doz., $\$ 32$ per Ioo.

## Twines

S. \& W. Co.'s Smilax Thread. This Thread is very strong, green in color and warranted not to fade. Best Thread on the market. 35 cts. per spool, $\$ 2.25$ per 8 spools, $\$ 6$ per box of 24 spools.

TWINES, continued
Silkaline. Very largely used for tying. Three sizes, $F$, fine; $F F$, medium: and FFF, coarse. 40c. per spool, $\$ 3$ per box of 8 spools.
Bouquet Twine. White. $3-\mathrm{oz}$. balls 20 cts. each, $\$ \mathrm{I}$ per lb., $\$ 4.50$ for 5 lbs.
Sea Island Cotton. Green. Ball, 20 cts.; box of 8 balls, $\$ \mathrm{I} .50$
Twine, Soft. For tying vines, etc.; very strong, 2 and 3 -ply. Ball 25 cts., 3 balls 60 cts., I 2 balls $\$ 2.25$.
Tarred Yarn. Excellent, low-priced material for raspberries, shrubs, etc. Ball (I lb.) 50 cts., 5 balls $\$ 2.25$.
Wire, Bouquet, Florists' Annealed. Nos. 22 and 24. In coils of 12 lbs., $\$ 4$ per coil.
Florists' Bright. Cut in lengths. In boxes of 12 lbs . (one stonte).

## Watering Pots

Heavy galvanized iron, reinforced; made well and substantially. Each pot has a long spout, with one fine and one coarse rose.

## Round Pattern.




## All-Iron Hose Reel

The All-Iron Hose Reels are constructed entirely of iron, and are indestructible. They are light in weight, frictionless, and the wheels being high, they are easily manipulated. These Reels cannot tip over when unreeling and there is no weight on the handle.
No. Io, 2 I-in. wheel, holds 100 feet $3 / 4-\mathrm{in}$. hose, $\$ 5$ each.
No. 20, 24 -in. wheel, holds I 50 feet $3 / 4$-in. hose, $\$ 5.50$ each.
No. $30,30-\mathrm{in}$. wheel, holds 500 feet $3 / 4$-in.
 hose. \$9 each.


## Perfection Tomato Support

Is 36 inches high, 12 inches wide, made of wood, and will not burn the vines in hot weather or cut them off when wet and swayed by the wind. Can be unfolded without damage and stored away for following season's use. 35 cts. each, $\$ 3.50$ per doz.

## Eureka Shears

For pruning. Especially recommended for florists' use. nurserymen and large estates, where the low price would warrant the purchase of the Shears in half-dozen and dozen lots. American made, of the finest steel; sharp cutting and long wearing. Each, \$1 50, doz. \$i7.


Eureka Shears

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York



The Stumpp \& Walter Co. Ball-Bearing Lawn Mower is universally a family Mower. Most anybody-man, woman or child-can use it with little exertion. It is a high-grade standard machine, adopting only the best features in its construction. The cutting parts are made of oil-hardened crucible tool-steel. The knives and blade will hold a durable edge and will not dull as the softer cutting parts of other Mowers do. The lawn is shaved smooth and even and without corrugations. The simple adjustment sets the machine to shave the lawn to $1 / 2$ inch or up to $11 / 2$ inches as may be desired. See the illustration which is a photograph of actual results. The expense of mowing a lawn is reduced to a minimum with the S. \& W. Co. Lawn Mower. The durability of this Mower is unquestionable. It does not have to go to the repair shop each season as do frequently the lower-priced Lawn Mowers.

The construction of this Lawn Mower has overcome the bobbing up and down and gouging that is common to some hand Mowers. The axle revolves in extra-large balls placed in hardened tool-steel cones and cups, and is driven with three gears on each side, by two ro-inch traction wheels. These wheels are made durable and are not easily broken.
This Lawn Mower is made to give good and long service, and with ordinary good care will last years. We take the liberty to recommend the S. \& W. Co. Ball-Bearing Lawn Mower to be the best all-round Lawn Mower of its type manufactured. We guarantee it to give entire satisfaction. The S. \& W. Co. Lawn Mower is made in four sizes.

| Size | Gross weight Net weight | Price | Grass Cat |
| :---: | :---: | :---: | :---: |
| I4-inch cu | . $65 \mathrm{lbs} . . .40 \mathrm{lbs}$ | \$1700 | \$3 25 |
| I6-inch cut. | . 67 l lbs. . . . 42 lbs | 1850 | 350 |
| 18-inch cut. | . 71 lbs. . . 45 lbs | 2000 | 375 |
| 20-inch cut. | $76 \mathrm{lbs} . . .48 \mathrm{lbs}$. | 2200 | 425 |

## Pennsylvania Great American Lawn Mower <br> BALL-BEARING

The Great American is a double-gear machine with five knives made of crucible tool steel of the very highest quality, oil-tempered, and water-hardened. Its bottom knife is of the same quality and self-sharpening. The case-hardened tool steel cones and cups in which extra-large balls revolve in conjunction with the very high wheels (Io inches in diameter), make it one of the easiest running Lawn Mowers on the market.

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


Net weight
42 lbs.
Price
$\$ 1950$
2250 2250 48 lbs .

Grass Catcher .65 lbs. 67 lbs. .71 lbs .
$\begin{array}{lll}44 \text { lbs. } & 2250 & 3 \\ 48 \text { lbs. } & 2500 & 45 \\ 4 & & \end{array}$ 375
400

## Pennsylvania Ball-Bearing Lawn Trimmer

Made to meet the demand for a serviceable tool to take the place of grass shears and other devices for cutting grass left at the edge of lawns, around flower-beds, etc. Will cut to within $3 / 8$ of an inch of walls, fences, walks, etc., and will mow any border wide enough to run one wheel on. High 8 -inch wheel; runs easily; self-sharpening. Width of cut 6 inches; gross weight 26 lbs ; net weight 20 lbs , Price, $\$ 10.50$.

## Townsend Flyer Mower

The best low-priced Mower made with ball-bearings. Four revolving blades, flexible bottom knife, self-sharpening. Made of best materials. A very easy-running and light Mower for ladies and children to operate.


## STUMPP \& WALTER CO.'S GENERAL SUPPLIES

## Mowers for Golf Courses and Tennis Courts



The Aristocrat Golf Mower, Ball-Bearing
The Aristocrat is the acme of puttinggreen Mowers. Extreme tests have proved this machine superior to all other Mowers in keeping the greens in firstclass condition. The Aristocrat was specially designed for putting-greens. Consideration was exercised in the construction of this machine to give the longest service, ease of adjustment and operation, and the best possible satisfaction that can be obtained from a Golf Mower. The life of this Mower is long compared with the other styles of Golf Mowers. The seven revolving blades and the bottom knife are the best crucible tool-steel, oil-tempered and water-hard-
 ened. A double train of gears drives the revolving blades from two $91 / 2$-inch traction wheels. The greens are shaved to $\frac{3}{16}$ of an inch and left even and smooth. The Aristocrat is ball-bearing, runs easily, and does not jump when starting.

Considerable weight of the Mower is carried by the iron roller, which rolls the worm casts and assists in keeping the green true and even. Wherever the Aristocrat has been given a thorough test, it has been accepted and given the preference. The illustration with the Grass Box attached shows the Aristocrat complete, and the way it should be operated to obtain the best results.

The Aristocrat is used exclusively and highly recommended by many of the best golf, tennis and cricket clubs.



The New Pennsylvania High-speed Super-Mower is a high-geared, 7 -blade machine of the roller-drive type, the rollers being made of aluminum. Every moving part runs either on roller- or ball-bearings. The train of cut gears is enclosed in a grease-tight case, protected from rain, dust, and grass-clippings, so that they revolve in a bath of oil. Alemite lubrication throughout. A light wheel carriage facilitates transportation of the Mower from green to green.

The New Pennsylvania High-speed Super-Mower leaves a wonderful "finish" to the turf, without the slightest trace of ridging.
Obtainable in only 18 -inch size. \$50 each; Grass-Box, $\$ 8$; and light Wheel Carriage, $\$ 5$ additional. Complete outfit $\$ 63$, f.o. b. New York.

## Easy Border Mower

For borders, mounds and terraces


The only Mower made that will cut borders, mounds, terraces, close to walls and fences, and all kinds of uneven surfaces. Advantages: Front Cut. Steel Open Roller. Noiseless in operation. Detachable Handle. Lipped Edge Stationary Knife. Drawcut Wiper Blades. Self-Sharpening. Self-adjusting Ball-Bearings. Price, 12 -inch, $\$ 2 \mathrm{I}$; I4-inch, $\$ 24$; I6-inch, $\$ 27$.
$\underset{\text { Ball-Bearing }}{\text { Pennsy }}$


The perfection of Lawn Mowers. The Pennsylvania Junior has all the good features incorporated in a perfect Lawn Mower. The five revolving blades are driven by a triple set of gears and a ro-inch traction wheel from each side. The revolving blades and the bottom knife are the best crucible tool-steel, oil-tempered and water-hardened. The Pennsylvania Junior is particularly adapted for the cutting of tees and approaches.

| Size | Gross weight | Net weight | Price |
| :---: | :---: | :---: | ---: | Grass Catcher



Low wheel, plain bearings, for home greens
This Mower is especially adapted for small golf links, tennis courts, bowling greens, and cricket creases. Can be adjusted to cut $\frac{1}{10}$ of an inch, practically shaving the lawn. Size, 16-inch; gross weight 67 pounds; net weight 37 pounds; price, $\$ 25$; grass box $\$ 8$.

## Four-Acre Heavy Duty Power Lawn Mower



Four-Acre Heavy Duty Lawn Mower, 24-Inch Cut


## THE PINNACLE OF PERFECTION IN HEAVY DUTY POWER MOWERS

THE FOUR-ACRE HEAVY DUTY MOWER is a powerful grass-cutter, sturdy as a tractorthe handiest and most economical Power Mower on the market. Performance is the standard by which Power Mowers are judged, and in this respect the Four-Acre Heavy Duty is in a class of its own.
THE MOTOR is specially designed, air-cooled, has forced-draft and throttle control; starts easily, is powerful and reliable.
INDEPENDENT CONTRROL of power on cutting unit and traction allows it to travel over stony roadways, up and down curbings, etc., without revolving cutting unit. In case any sticks or stones become caught in the cutter blades, the reel clutch will slip, leaving knives uninjured.

Price $\$ 295$, f. o. b. New York. Grass Box, $\$ 6$ extra

## Heavy Duty Sulky

With the use of this attachment the driver is able to cover 6 to 7 acres per day instead of 4. Sulky only, $\$ 45$ extra. Mower, with Sulky, \$340.

## Two-Acre Junior Lawn Mower <br> 19-INCH CUT



Designed especially for moderate-sized lawns and lawns broken up with numerous obstructions. Cuts 2 acres a day on less than I gallon of gasoline at a speed which may be varied from 2 to $21 / 2$ miles per hour. Has a four-cycle $3 / 4 \mathrm{~h}$. p. motor. The cutter has five blades, is 19 inches in length, and may be adjusted to cut the grass from $1 / 2$ to $I 1 / 2$ inches. This is a durable and efficient machine, fully guaranteed. Price, $\$ 210$, f. o. b. New York. Grass Box, $\$ 4$ extra.

## The Little Wonder Lawn Clipper

The Little Wonder Lawn Clipper mows rapid-growth weeds in lawns. that spring up between regular mowing days. It does not replace the lawn mower, but does both quickly and easily what the lawn mower cannot dotops the tall growth so that the lawn mower makes a clean job. 40 -inch cut. Price $\$ 40$.

## Ideal Power Lawn Mowers

## Satisfactorily meet every grass-cutting requirement

They have been designed by mower experts-and all are built complete, from cutters to motors, in the Ideal factory. Every unusual condition which might be encountered is fully provided for in the design of Ideal Mowers. All Models work efficiently over irregular surfaces,
 through tough, coarse grass, and over hilly grounds.

Little Wonder Lawn Clipper

## Ideal, Model 30 the all-purpose

This is the most widely used model, because it is adaptable to the widest range of uses. The heavy traction roller smooths out the lawns as it cuts. Loosely suspended cutting unit tilts to cut over irregular ground, and convenient lever lifts cutting unit entirely off the ground for crossing walks, drives, etc. An all-purpose Mower that is simple, easy to operate, and cuts close up to trees, shrubbery, and flower-beds. 30 -inch cut. Price $\$ 385$, f.o.b. New York.

## Ideal Junior

Rolls as it cuts-freely suspended cutting unit which is raised or lowered at will. Especially valuable on small grounds, cemeteries, and as an auxiliary to the Model 30 . Unequaled for trimming in close quarters. Width of cut, 22 inches. Can also be supplied with an interchangeable, high-speed cutting unit which the green-keepers on many country clubs state gives splendid results on the putting-greens. Price $\$ \mathbf{2 6 0}$, f.o.b. New York.

## Lawn Cleaners, Golf Sweepers, and Lawn Rollers



## Stumpp \& Walter Co.'s Lawn and Golf Sweeper

Is equipped with Palmetto Brushes of the toughest fiber and unaffected by water. Sweeps and gathers fresh-cut and dead grass, leaves, stones, and other litter. A real necessity for the quick and economical sweeping of lawns and golf-courses. Labor-saving, efficient, and durable machine. This new Sweeper is practically an all-year-round machine, for wherever there is a plane surface to be swept, whether sidewalk or porch, the S. \& W. Co.'s Lawn and Golf Sweeper will do the work easier and quicker. Width, 28 inches. Net weight, 84 lbs.; gross weight, io6 lbs. Price $\$ 35$.
Extra Wheels without Rubber Tires $\$ 5$ each. Brush Reel, 28 -inch, complete with brushes $\$ 13$. Grass-Box, 28 -inch size, $\$ 10$.

## Pennsylvania Putting-Greens Lawn Sweeper

The PENNSYLVANIA Lawn Cleaner and Rake is quickly converted into an efficient Sweeper for removing worm-casts from puttinggreens without injury to the turf and in a tenth of the time consumed by usual methods. The three steel rakes are removed and the brushes substituted. The brushes are made of high-grade fiber, set in a hardwood head, and give long wear. Moisture will not injure the brushes, and owing to the construction of the machine, they are easily removed for cleaning or for interchanging with the raking cylinder. The machine is not taken apart during this operation. 24 -inch sweep, $\$ 30 ; 36$-inch sweep, $\$ 42.50$.

Brushes, per set of 3,24 -inch, $\$ 7 ; 36$-inch, $\$ 9$.


This Roller is manufactured to do hcavy work. Is used with excellent success on golf-courses and private estates, on roads and lawns. Has strong, plain bearings, pulls directly from the axle, and is equipped with a substantial weight box for additional weight. Each section is turned smooth on the surface with outer edges beveled.

Pole and whiffie-trees or shafts will be furnished instead of tractor hitch without extra charge.

| No. | Diameter | Length | Sections | Weight | Price |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 61 | 20 in. | 60 in . | 5 | I, 50 lbs | \$106 00 |
| 63 | 24 in. | 60 in. | 5 | I,450 lbs | 13350 |
| 73 | 24 in . | 72 in . | 6 | 1,700 lbs | 15300 |
| 76 | 28 in. | 72 in. | 6 | I,950 lbs. | 17550 |

## Spike Rollers

Invaluable for the greenkeeper, groundsman, and large lawn owner. The secret of fine turf is largely a matter
 dressings; these top-dressings are much more effective if their application is followed by a good spikerolling and then a brushing. This places the compost just where it is needed, namely, I and 2 inches down into the soil. An occasional spike-rolling will open "hidebound" turf, correct the results of excessive heavy rolling, and facilitate circulation of air and moisture in the soil. Hand Spike Roller for puttinggreens, tennis-courts, and small lawns, $\$ 120$.
Horse Spike Rollers. For golf fairways, pole-fields, and large lawns. 3 ft . I-horse ( $\mathrm{I}, 600 \mathrm{lbs}$.) $\$ 375 ; 5 \mathrm{ft}$. 2-horse ( $2,000 \mathrm{lbs}$.) $\$ 425$.


Fill it with Water or Sand

## Stumpp \& Walter Co.'s "Water-Ballast" Lawn Roller

The Stumpp \& Walter Co.'s Water-Ballast Roller is a most satisfactory Roller. The construction consists of three heavy steel plates, pressed together and electric-welded, forming one solid steel drum with no leaky joints; handles are securely attached as shown in the illustration. A scraper keeps the Roller clean. It is easy to pull. The drum has rounded edges to avoid tearing the turf. The Roller is filled with either water or sand, and by using more or less a weight is obtained which is most suitable for the conditions-light for moist lawns, medium for dry lawns, heavy for paths. The weight of each Roller empty and filled is given with the diamcter and length below.

| No. | Diam. | Length | $\underset{\text { tions }}{\text { Sec- }}$ | Weight empty lbs. | Filled with lbs. | Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 605 | 14. | 20. | . .1.. | 70 | 175 | 1500 |
| 606 | 18. | 24 | I. | . 85 | 265 | 18 |
| 603 | 24 | 24 | .I. | Ir10. | 420 | 23 |
| 604 | . 24 | 32 |  | 130 | 56 | 26 |

## Cast-Iron Hand Lawn Rollers

Made in one, two, and three sections. The face of each Roller is made smooth, with outer edges rounded to avoid cutting the lawn or garden. The Rollers of two or more sections are preferable, as they will not injure the grass when turning. The best one-man Rollers are those averaging from 300 lbs . to 450 lbs .

|  | Diam. | Length | Weight |  |  | Diam. | Length | Weight |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Sections in. | in. | lbs. | Price | No. | Sections in. | in. | lbs. | Price |
|  | . $2 . . .15$ | 15 | 150 | \$1500 |  | . 3 . . . 20 | 3 | .350 | \$34 00 |
| 2 | .3... 15 | 22 | 200 | 1900 | 10. | . 2 . . . 24 | 24 | 450 | 4200 |
| 7 | 2.... 20 | 24 | 300 | 2800 |  | 2.... 28 | 24 | 500 | 4800 |



Cast-Iron Hand Lawn Rollers

## STUMPP \＆WALTER CO．， 30 and 32 Barclay St．，New York

早（n）Celery－bleaching Tubes
Labor and money－savers．The brass Hand－ ler is placed around the celery plant，the tube is slipped in place and the Handler removed．Doz． 100 1，000 12 inches high．．．．．．．．．．．．\＄I oo $\$ 6$ oo $\$ 50$ 00 I3 inches high．．．．．．．．．．．．．I 10 Io 60 5500 I4 inches high．．．．．．．．．．．． $25 \quad 700 \quad 6000$ Handlers for use in placing tubes，brass，$\$ 5$ ．


## N゙ソ才い The Cahoon Improved Broadcast Seed Sower

It is well known as a practical and cheap broadcaster of wheat，rye，oats， barley，hemp，timothy，and millet，but not recommended for lawn or grass seed． The operator can sow from 4 to 8 acres per hour．$\$ 5$ each．

## $S_{\text {Sows sead }}^{\text {owrite }} \boldsymbol{N}$



A most practical instrument．It scatters seeds individually and prevents crowding and choking of the seedlings when coming up． Is of great assistance in sowing．Small size，for fine seeds，$\$ \mathrm{r}$ ；large size，for larger seeds，\＄1．50．

## HEDGE SHEARS

## Sheffield Hedge Shears，Finest English Steel

Solid steel blade，crucible tool－steel，tempered to hold an edge．Give good service．Shears with notch are the best for cutting heavy stems of hedge plants．


## S．\＆W．Co．＇s Grass Shears

A very simple but practical locking device holds the Shears together．Made of the best crucible tool－steel；polish finish．One size only， $61 / 2-\mathrm{in}$ ．blade，$\$ 2.50$ ．
Western Grass Shears．Made of good－quality tool－steel．A one－piece Shears． Plain finish， 6 －in．blade，\＄I．50．

## Grass Edging or Border Shears

Designed to trim the overhanging grass on borders around flower－beds and waiks． 9 －in．blades of high－grade tool－steel；polished handles and blades．Without wheel，$\$ 5.50$ ；with wheel，$\$ 6$ ．

## Lawn Shears

Designed to cut grass under hedges，fences，grape arbors，and flower－beds or shrubs． 9 －in．blades of high－grade tool－steel，polished handles，and blades．Without wheel， $\$ 6$ ；with wheel，$\$ 6.75$ ．Notice：When shipping the above Shears，unless stated on orders，we send Shears with wheel．

## Pruning Shears

Kunde．This pruning shears can now be obtained from abroad．It is very durable． Solid steel，$\$ 5$ ．Extra blades，$\$ 1.50$ each．
Wiss．Made in America．Crucible tool－steel；blades are detachable；tempered to hold an edge；will not break．Made in two sizes． 9 －in．$\$ 4$ ；10－in．$\$ 4.50$ ．Extra springs， 50 cts ．each；extra blades，$\$ \mathrm{I}$ ．io each．
S．\＆W．Co．＇s Solid Steel．Crucible tool－steel．Blade and handle are one piece of polished steel；a ratchet nut keeps the Shears properly tightened；will not break； excellent finish．Made in three sizes． 8 －in．$\$ 3 ; 9$－in．$\$ 3.25$ ；ro－in．$\$ 3.50$ ．
French．Made of good－quality tool－steel；flat roller spring；works easily and cuts well； detachable blades；plain finish．Made in two sizes． 8 －in．$\$ 2.25 ; 9-\mathrm{in} . \$ 2.75$ ．
California．Crucible tool－steel blade；malleable handle；Japan finish．A very good Shears for grape－vines and shrubbery．\＄I．
Ladies＇Nickel－plated．Light，practical，handy to use on roses and shrubbery． $61 / 2-\mathrm{in}$ ．\＄2．50．

# Pruning Tools and Orchard Supplies 



## Compound-Lever Pruner

Working parts, being made from forgings, are very strong, without being unnecessarily heavy, and the strength, durability, easy cutting qualities of this tool appeal to all who have occasion to use a strong and powerful Pruner. Io ft ., $\$ 5$; $12 \mathrm{ft} ., \$ 5.50$; 14 ft ., \$6.25; $16 \mathrm{ft} ., \$ 6.75$.

## Waters Tree Pruner

This Pruner has been before the public for over twenty-five years. It has numerous well-known advantages, and if a tool for ordinary pruning is required, the Waters will give entire satisfaction.
Compound-Lever Pruner

## $6-\mathrm{ft} . \ldots . . . . .{ }^{2}$.

8-ft............ . 225
10-ft.


12-ft........... . \$2 75 Extra Knives, each 30 cts.

## Telegraph

 Pole Pruner

## This Pruner is similar in ap-

 pearance to but of heavier construction than the Waters. This makes it very strong and durable. Plain, \$1.75; with handle, $\$ 2.00$. Extra knives, 40 cts. each; extra springs, 40 cts . each.Telegraph
Pole


## Rhodes' Double-Cut Pruner

A good and poweriul Pruner. Cuts from both sides of the limb, and does not bruise the bark. Long ferrules; handles do not pull out; blades are of the best forged steel. 30 -inch, $\$ 5 ; 36$-inch, $\$ 5.25$.

## PRUNING SAWS

 Paragon Pruning Saw. A very good double - edge Pruning Saw, with the draw cutting and thrust cutting edges. Will cut large limbs better than the lighter Saws. I8-inch, \$1.90; 20-inch, \$2.10.
No. 4 Pruning Saw. Without this Saw no pruning outfit is complete. The tapering blade permits of its use in close places. Used for other purposes. A


Saw. 20-in., \$2.25.
Two-Man Crosscut Saw. Has Tuttle (Lightning) teeth; cuts easily and rapidly; thin back, will not bind. $4^{1 / 2-\mathrm{ft}}$., $\$ 5.50$; $5-\mathrm{ft} ., \$ 7$; 5²/2-ft.. \$7.50.
Buck Saw. Quality kind. \$2.25.


Double-Edge Pruning Saw. Has fine teeth on one edge and "Lightning" teeth on the other. 16-in., \$1.50; 18-in., \$1.75; 20-in., \$2.

PRUNING SAWS, continued
One-Man Crosscut Saw. Can be used also as a Two-Man Saw. Has 'Lightning' teeth; cuts easily and rapidly.
 4-tt................. 575
Orchard Pruning Hook and Saw. Better adapted for pruning or sawing smaller branches than the Little Giant. Without pole, S3.

Little Giant Pruner and Saw Combined. The knife operates with a cord; a spring throws the knife back. Saw can be removed
Little Giant Pruner and Saw when desired; attaches to pole of any length. Without pole, $\$ 3$.


Combined Pruning Saw and Chisel. A handy tool; attaches to pole of any lengtl. With a thrust the
Combined Pruning Saw and Chisel chisel cuts off small branches. The saw is for larger Orchard Prunlimbs. Without pole, $\$ 2.50$.


Single-Edge Pruning Saw. Best spring-steel. I8 in., \$1.60; 20 in., \$1.75.

English Lopping Shears. The Shears are well known, and do good service.
No. 2, 24-in... $\$ 450$
English Lopping No. 3. 28-in... 550 Shears No. 4. 32-in... 625 Rhodes' Pole Pruning Saw. Attached to a light, io-foot pole. Is adjustable to any angle. The Saw is a Paragon hlade, made of the best spring-steel; has a draw and thrust cutting edge; saves a lot of climbing and risk of


California Bow shaped Prun ing Saw. Excellent to use Rhodes' wherever two Pole limbs are close together. Can be used in the forks without Pruning bruising the bark of other limbs. I2-in., §I.I5; I4-in., \$I.25. Swivel Pruning Saw. Very handy to use where the limbs are close together. The blade is adjustable to cut from any angle; it saves the trouble so often found when using ordinary Saws. $\$ 2.50$. Extra blades, 50 cts . each.

## Perfect Fruit-Picker

Made of steel wire, heavily galvanized; can be attached to any pole. 60 cts . each.


## Asbestos Torch

Attach the Torch to the end of a pole; saturate with kerosene oil, light and hold under the caterpillars' nests. and pass quickly along the branches and around the trunk of the tree. The heat instantly destroys the insects and will in no way injure the trees.
 Without pole, 60 cts .

## Step-Ladder

Strongest and best Ladder manufactured. Made of ash; fine finish. Each step is braced and bolted. Only safe ladder to use 10 feet or over.

|  | E |
| :---: | :---: |
|  | \$6 50 |
|  | 700 |
|  | 8 |
| 8 -ft | 9 |
|  |  |

## Rubber Hose, Menders, Nozzles, and Sprinklers

## PRICES SUBJECT TO MARKET CHANGES


S. \& W. Co.'s Special Brand (Wayahead). Surpasses all the cheaper grades of Hose. Its durability is not excelled by much of the higher-priced Hose. It is three-ply, seamless, and non-kinkable. Standard lengths, $3 / 4$-inch bore, $25 \mathrm{ft} ., \$ 4.50 ; 50 \mathrm{ft} ., \$ 8.50$.


Electric. Three-ply, non-kinkable, molded Hose. The strength and durability of this Hose place it with the very best grade of Hose manufactured.
Standard lengths, $3 / 4$-inch bore, $25 \mathrm{ft} ., \$ 6.25,50 \mathrm{ft} ., \$ \mathrm{I} 2$.
Standard lengths, $1 / 2$-inch bore, $25 \mathrm{ft} ., \$ 5.75,50 \mathrm{ft} ., \$ 10.50$.
5 lengths or more of 50 ft ., $3 / 4$-inch bore, cut and coupled, ft. 23 cts . 5 lengths or more of $50 \mathrm{ft} ., 1 / 2$-inch bore, cut and coupled, ft. 20 cts .
Golf-Course. Six-ply, heavy duck Hose, with exceptionally strong black tube and white cover. Especially adapted for use on golfcourses, tennis-courts, and cricket-creases. This is guaranteed for any pressure and hard work as usually found on golf-courses and private estates. Will stand up and give satisfaction under conditions where ordinary garden Hose has failed. Standard lengths, $3 / 4$-inch bore, 25 ft . $\$ 5.50 ; 50 \mathrm{ft}$. \$10. In lots of 250 ft . or more, in 50 ft . lengths, 18 cts . per ft., coupled. Standard lengths, I -inch bore, 25 ft . $\$ 10.50 ; 50 \mathrm{ft} . \$ 20$.

## HOSE NOZZLES

Stott's. A Nozzle that has become a favorite among rose-growers, etc., for exterminating red-spider. Splendid Nozzle for reaching under the foliage; gives a very fine, misty spray. Single, \$1.75; double, \$3.
Justrite Spray. A very popular adjustable Nozzle. It gives a copious spray or a well-defined, full stream. Has a positive shut-off, by turning the barrel of the nozzle. 90 cts.


Bordeaux Spray Nozzle. A good Nozzle for whitewash and all heavy spray materials. \$1.
Aquamatic Nozzle. Screws on to any lawn hose connection. The latest and best in garden hose Nozzles. Fits any $3 / 4$-inch garden hose connection. Gives a solid stream or spray. Has a positive automatic shut-off. Practical and durable in every way. \$2 each.
Hose Couplings. Regular. $1 / 2$-inch, 20 cts.; $3 / 4$-inch, 30 cts. each.

## HOSE MENDERS

Cooper's Brass. 1/2 and $3 / 4$-inch, 10 cts. each, $\$$ I per doz.; I-inch, 15 cts. each, \$I. 50 per doz.
Perfect Clincher. $1 / 2$ or $3 / 4$-inch, 15 cts. each, \$1.50 per doz.



## Water-Gun

The Water-Gun is the most convenient article of its kind ever offered and as a nozzle is much more adaptable than the old style.

As a sprinkler you can do things with it no one ever thought of trying before. Just stick the spike in the ground; put in at any angle. Price, \$I.50 each.

Majestic Revolving Sprinkler


## Majestic Revolving Sprinkler

The long-arm Majestic gives a fine spray. It is a slow-moving machine, and the water is warmed by the air before reaching the ground. Also, there being an appreciable period between each shower, the soil has time to absorb it before the next shower. Does not flood the turf, and may be left working for hours, if necessary, on one spot without the center becoming wetter than the outer areas. The Majestic is driven direct from the turbine blades at the base, without intermediate gearing whatever; wear and tear is thus reduced to a minimum. Will water thoroughly and evenly an area of from 800 to I,ooo square yards. Large size, $5-\mathrm{ft}$. arms, \$I5; medium size, $31 / 2-$ ft. arms, \$Io.

## Double Rotary Sprinkler, New Model

This Sprinkler has always had many friends among greenkeepers on account of the efficient manner in which it sprays, covering a circle up to 50 feet in diameter.

The new model which we offer includes many improvements, especially the skid base which holds it absolutely firm on the ground and the aluminum wheel which increases the distance of the spray. The gears of hardened steel and bronze are enclosed, and run in oil.
 They are so simple that it is very rarely necessary to make any adjustment, even after very long wear. \$I2.50 each.


## SPRAY POLE FOR TALL-TREE SPRAYING

## Bamboo Spray Pole

Bamboo Spray Poles are brass lined to resist the corroding effect caused by strong solutions. Each Spray Pole is equipped with a drip-shield at the top and brass shut-off at the bottom. Spray Poles over I2 feet are not entirely satisfactory, and we do not recommend them. $8 \mathrm{ft} . \$ 4.20$, io $\mathrm{ft} . \$ 4.60$.

Full description of BARREL and HAND SPRAYERS, page 174

## Test Your Soil with SOILTEX

Does your land need lime? If so, how much? Soiltex will answer this question quickly. Outfit, containing solution, sample papers, directions and indicator chart, \$1, post free.

## LAWN SPRINKLERS

PRICES SUBJECT TO MARKET CHANGES

## Rainstorm Sprinkler

The Rainstorm is so designed with two short center nozzles and two longer arms that it gives an even and thorough distribution of water from the very base of the Sprinkler to the extreme outer radius. For smaller lawns and gardens, the Rainstorm is an ideal solution of your sprinkling problem. Price, $\$ 2$.


Rainstorm Sprinkler



## The Rain King

This is strikingly different from any other Sprinkler ever made. A wonderful combination: Circular or stationary spray, coarse or fine, fast or slow, large or small lawn, trees, shrubs, flower-beds-takes care of them all. $\$ 3.50$.

## Ring Lawn Sprinkler

The S. \& W. Co.'s Ring Sprinkler is not to be compared with the cheaper Ring Sprinklers. It is made of brass, firmly constructed, and guaranteed to stand the waterpressure of any municipal waterworks in the United States. 90 cts.


## The Dayton Rotary and Oscillating Sprinkler

The Dayton is the most practical, durable, efficient Sprinkler devised for watering putting-greens and is now being used by thousands of lovers of a beautiful lawn or garden. It sprinkles in a circle. It sprinkles in a half-circle. It sprinkles from a 3foot radius to a 40 -foot radius. It sprinkles every inch of ground. It is better for your lawn or plants than sprinkling with a hose. It operates on any pressure from I 5 pounds up. The nozzle can be adjusted to any kind of a stream. It pays for itself in water saved and convenience. It is made of the best brass, aluminum, and German silver. \$9.

## Waterfan

The new Automatic Oscillating Irrigation Sprinkler.

The Waterfan will quickly and thoroughly soak a rectangular area with a generous, gentle, mist-like spray which cannot wash or pack the soil or injure the most deli-


## Waterfan in Operation

 cate seedlings. The plane of the spray oscillates back and forth, forming no puddles, but wetting the soil deeply without waste of a single drop of water. The wide fan-like shape (Waterfan) in which the water is projected from this small machine ( 22 inches long) to a width of 14 feet when it reaches the ground, is made possible by the diverging angles at which the outlet tubes are set in the distribution pipe. Price of the Waterfan, $\$ 18$.Is made with four arms. Arms and head are polished brass. Attached to a sled base, Io inches square. Can be readily drawn about the lawn and will not upset.

## California Lawn Sprinkler

 With 4 arms, \$2.50.

Maid-of-the-Mist


## Maid-of-the-Mist Sprinkler

An effective device for sprinkling lawns, gardens, or flower-beds. The water flows with unimpeded force, and is divided and deflected by the two lips of the swivel piece, which it causes to revolve rapidly, scattering the water in fine drops and evenly over a circular area of 25 feet. It works more satisfactorily with a very low pressure of water than any Sprinkler we know of. With sled $\$ 1.25$.

## Triple Spray Sprinkler

This has three waterheads, one throwing an upward spray and two (one on each end of the arm) which can be adjusted to any angle. When revolving, this type of Sprinkler will throw a spray covering a circular area of 60 feet diameter. \$Io each.


## The C. B. G. Sprinkler

Is made on the well-known principle of the tangential spray. Nothing to get out of order. Will last a lifetime. It is easily drawn about the lawn without shutting off the water. 60 cts. each, $\$ 6$ per doz.

## Rainbow Revolving Sprinkler



The ideal Sprinkler for a low water pressure. Operates on a hard fiber washer which absorbs 20 per cent of water,
 furnishing a leak-proof and frictionless joint. This efficient little apparatus has proven through actual tests to deliver the maximum amount of spray on a low pressure; no wear and tear. Will water a circle of 40 to 50 feet in diameter. $\$ 2.50$.

## STUMPP \& WALTER CO., 30 and 32 Barclay St., New York

## Sprayers for Applying Insecticides and Fungicides

## PRICES SUBJECT TO MARKET CHANGES



## AUTO-SPRAY

No. 100 Auto-Spray is made of extra-heavy metal to hold up under a pressure of soo pounds, the pump is of small bore, so that this pressure can be pumped with little exertion. Handles and collar are very heavy brass, and the strap is adjustable and of the best of material. It is double riveted and specially soldered and tested carefully. The large capacity, extrahigh pressure, extra strength, and beautiful appearance make it a super auto spray, and, as the name implies, is soo pe cent.

Tank made of galvanized steel or brass. High-grade hose. Castings for handle, etc., all malleable. No continuous pumping as in the case of the Knapsack Sprayer, nor continuous pumping or slopping as in the case of the bucket pump. A few strokes of plunger compresses enough air to cover a quarter acre of potatoes or similar crop. Extension pipes useful for spraying tall trees. Detailed descriptive circular on request.
Auto-Spray No. IooB.
Brass Tank, with "Auto-
Pop" and one $2-\mathrm{ft}$. extension rod
\$10 50
Auto-Spray No. IooD.
Galvanized Tank, with
"Auto-Pop" and one 2 foot Extension Rod.

725


## No. 50 Auto-Spray

This sturdy little machine is almost identical to Auto-Spray No. Ioo in construction and manipulation, but has one-half the capacity, holding about $21 / 2$ gallons. It is particularly recommended for spraying on a smaller scale, and for use where weight is a factor, as when the women folk or youngsters help out with the spraying.
No. 50B. Brass Tank with Auto-Pop Nozze
$\$ 800$
No. 50D. Galvanized Tank with Auto-Pop Nozzle.......... . . . 540
S. \& W. BUCKET SPRAY PUMP


The S. \& W. Spray Pump is a saving in the cost of small hand Sprayers. It is a quality Sprayer. This Pump is made of heavy seamless brass tubing, with a large brass air-chamber; it has brass ball valves; is double-acting and will produce a continuous spray or stream. A bordeaux nozzle, with 3 feet of $1 / 2$-inch spray hose is furnished. The nozzle can be regulated to throw a very fine, medium, or coarse spray. We recommend this Sprayer as the best cheap hand Sprayer for applying whitewash, coldwater paint and disinfectants. When ordering Sprayer to be sent by parcel post, allow lo lbs. for the packed weight of Sprayer. Price, $\$ 6.50$.

Extra $1 / 2$-inch hose, seven-ply, of good quality, is furnished at 30 cts . per foot.

Extra couplings, 50 cts. per set.

## S. \& W.CO.'S"FRUITALL" SPRAY PUMP

The "Fruitall" illustrated herewith has' been designed especially to meet the demand for a lowpriced Sprayer combining the necessary durability, efficiency, and strength.
Outfit C. Sprayer with agitator and one lead of $I_{5}$ feet $1 / 2$-inch discharge hose, with "'Mistry Jr." spray nozzle. Price, without barrel, $\$ 21.50$.

Outfit D. Sprayer with agitator and two leads, 15 feet each, $1 / 2$-inch discharge hose, with "Mistry Jr." spray nozzles. Price, without barrel, $\$ 28.50$.
We supply barrel ( 50 -gallon capacity), and mount sprayer on it, for $\$ 7.50$ extra, but the barrel is not furnished unless specially ordered.

## POMONA SPRAY PUMP The Best Barrel Spray Pump on the Market

It is of large capacity and powerful, with long adjustable leverage, so that it is easily operated by one person, when necessary, but is especially built for spraying from two leads of hose. The unusually large steel air-chamber gives sufficient pressure for a continuous and regular spray. All working parts are of brass, including plunger and valves, which are easily accessible; it has a paddle agitator. The bulk of the pump goes within the barrel it is not top-heavy, and does not catch low branches.

Pomona Outfit A. Sprayer with agitator and one lead of 15 feet of $3 / 8$-inch spray hose, with " Mistry Jr.' Spray Nozzle.
With barrel ( 50 gallons)..... \$45 65


Pomona Outfit B. Same as the above, except with two leads of hose and two nozzles. (See cut.)
With barrel (50 gallons)
Extra trunnions for barrel, \$I per pair.
S. \& W. Co.'s Truck is recommended to save time and labor.

## RUBBER SPRAY HOSE

High-pressure, $1 / 2$-inch bore, nine-ply Hose is best. 30 crs. per foot. Low pressure, $1 / 2$-inch bore, seven-ply, 20 cts. per foot. Couplings and clamps, 25 cts. extra.

## S. \& W. CO.'S TRUCK, LEAF-RACK AND WATERBARREL COMBINATION

When we consider the almost innumerable uses to which our combined Truck, Leaf-Rack, and Water-Barrel can be put, its handiness and the immense amount of time and hard labor saved by its use, it is not a matter of surprise that it is steadily growing in popular favor. It is one of those articles that causes the user to wonder how he ever did without it, as it really becomes indispensable when once used.

Prices: Truck, 3-inch steel wheel, $\$ 15$; truck and barrel, as in
 cut, with steel wheels, 3 -inch tires,
$\$ 20$; handy cart box, 38 in . long by 24 in . wide by 10 in . deep, $\$ 6$ extra; leaf-rack, 42 in. long by 28 in . wide by 21 in . deep, $\$ 7.25$ extra; complete with truck, with steel wheels, 3 -inch tread, water barrel, handy cart box, and leaf-rack, \$41. Sprinkler attachment, can easily be adjusted to barrel, extra, $\$ 10$.

## Sprayers for Applying Insecticides and Fungicides

## PRICES SUBJECT TO MARKET CHANGES

## Auto Spray No. 40 Hand Lever Pump COMPLETE OUTFIT



The demand for this portable Sprayer is rapidly increasing. The efficiency of this generalpurpose Sprayer is finding favor among hundreds of gardeners, florists, and poultrymen.
Uses.-For handling whitewash, cold - water paint, insecticides, fungicides, and all solutions in the garden, greenhouse, or poultry plant.
Tank.- Heavy galvanized steel.
Capacity.-I2 gals.
Pump. - Plunger style. Graphite packing, adjustable from the outside by tightening two bolts. No leather cup.
Plunger.-Brass; $1 \frac{1}{2}$ inches in diameter; 3 to $41 / 2$-inch stroke as desired. The plunger is hollow with a valve at the bottom and this, operating in connection with the air-chamber, ensures a greater reserve capacity than usual in this size of machine.

Valves.-Brass-ball valves; suction pipe fitted with brass strainer.
Agitacion.-Mechanical and effective; operated from the handle. The top casting on the tank has broad flange, which prevents the solution from slopping over.

Equipment.- 8 -foot-high pressure; 3 -inch hose; 8 -foot iron extension; lever shut-off; and latest Vermorel Nozzle, or Non-Clog, Jr., as specified.

Repair list, with formula for mixing whitewash and cold-water paint, with each machine.

Galvanized tank, capacity i2 gallons, with truck, 20 -inch wheel. Shipping weight, with truck, crated, 75 lios. (net 58 lbs .) $\$ 27$.


A simple device for applying dry powder insecticides and fungicides without waste and with the least possible effort. It blows the powder onto the plants. Insecticides which may be applied economically with the Carbola Dust Gun include hortex, tobacco dust, bug death, hellebore, Paris green, arsenate of lead, etc.; fungicides which may be used with it are Semesan, bordeaux powder, grape dust, powdered sulphur, etc. Price $\$ 1.25$.

## Double-Acting Pump Sprayer and Knapsack Tank

THE SAME SPRAY WITH HALF THE LABOR

Pump.-This Pump is the ideal all-purpose sprayer. Its field is practically unlimited, as it may be used for spraying trees, vines, garden truck, potatoes, and any field crops. Made entirely of brass, doing away with all danger of corrosion. This Pump is double-acting, which gives a continuous spray, a distinct advantage over single-acting Pumps in that the pump works on both the up and the down stroke. The Pump cylinder is small in diameter, and in a test a pressure of 180 pounds to the square inch was raised with very little labor.

Knapsack is made of heavy galvanized iron and fitted with strong web shoulder straps. Capacity about 5 gallons.

## PRICES

Knapsack only.
Pump only...
500

## Bellows, Woodason's

Powder, small size............ $\$ 35^{0}$
Powder, large size........... . 475
Liquid, small size.
425
Liquid, large size............ 475
Double-Cone Powder Bel-
lows. For dusting plant with dry powders for insects and fungus. $\$ 7.25$.


## S. \& W. Co.'s Compressed Air-Sprayer



The most perfect small hand Compressed Air-Sprayer made. Delivers a continuous fog-like spray. Is fitted with straight and adjustable nozzles making a perfect un-der-leaf sprayer. In fact, spray can be delivered at any angle or position desired. Holds i quart. Weight 2 lbs. Made in solid sheet brass, highly polished, \$2.25. Galvanized, $\$ \mathrm{I} .25$; tin, 85 cts.

## S. \& W. CO.'S BRASS SYRINGES

These Syringes are applicable for all horticultural purposes in the conservatory and garden. They are fitted with roses and jets for ejecting water in one stream or dispersing it in a fine or coarse spray, as required. Specially adapted for applying fluid insecticides.


No. A. Barrel, 12 in, long, diam. I in. One spray rose and one jet, $\$ 3 \cdot 50$. Weight, 3 lbs.


No. G. Barrel 16 inches long, diam. $\mathrm{I}^{1 / 2} \mathrm{in}$. One spray rose and one stream jet, side attachments and elbow joint for sprinkling under foliage, $\$ 6.50$. Weight, 4 lbs .

No. H. Sheet-brass Syringe, with fixed spray rose. Barrel 16 inches long, diam. $\mathrm{I}^{1 / 2}$ inches, $\$ 4.25$. Weight, 4 lbs .


No. 2. Barrel $13^{\frac{1}{2}}$ inches long, diam. $\frac{18}{18} \mathrm{in}$. One coarse and one fine spray rose and one jet, side attachment, $\$ 5.75$. Weight, 4 lbs.

No. 10. Barrel 18 inches long, diam, I $1 / 2$ inches. One coarse and one fine spray rose and one stream jet, with patent valves and elbow joint for sprinkling under the foliage, \$9. Weight, 5 lbs.


No. 11. Same as No. Io, without patent valves, $\$ 7.50$. Weight, 5 lbs .

# REMEDIES FOR INSECTS AND FUNGUS 

NOTE.-Insecticides marked * can be sent by Parcel Post at purchaser's expense. Consult your local post office for rate from New York ALL PRICES SUBJECT TO MARKET CHANGES

Ant Powder. An effective exterminator of ants and roaches. Sprinkle the powder wherever the insects travel and they will disappear. $1 / 2 \mathrm{lb}$. $50 \mathrm{cts} ., 1 \mathrm{lb} . \$ \mathrm{I}, 5 \mathrm{lbs} . \$ 4.75$, io lbs. $\$ 9,25 \mathrm{lbs}$. $\$ 2 \mathrm{I} .85$, ioo lbs. $\$ 80$.
Aphine. Effective against all soft-bodied and plant-sucking insects, such as green, black, and white fly, red spider, thrips, mealy bug, brown and white scale. An insecticide which can be used indoors and in the garden. An excellent cleanser for house plants. Gal. $\$ 3.75$, qt. $\$ \mathrm{I} .25$, pt. 65 cts ., $1 / 2 \mathrm{pt} .40 \mathrm{cts}$., $1 / 4 \mathrm{pt} .25 \mathrm{cts}$.
Aphis Punk. Fumigating paper for use in the greenhouse. I2 sheets \$1, I44 sheets \$9.50.
Arsenate of Lead, Powder. Better than Paris green, does not burn the foliage, goes twice as far, and is easier to handle. Dilute I pound to 50 gallons of water. $1 / 21 \mathrm{~b} .25 \mathrm{cts} ., \mathrm{lb} .50 \mathrm{cts} ., 5 \mathrm{lbs} . \$ 2$, Io lbs. $\$ 3.50,25$ lbs. $\$ 8$, IOO lbs. $\$ 24$.
Beetol Spra. Kills Japanese beetles, rose bugs, red spiders, mealy bugs, plant lice, white and green flies, black aster beetles. Full directions with each package. Pt. \$1.15, qt. \$1.95, 1/2gal. \$3.50, gal. $\$ 6,5$ gals. $\$ 25$, to gals. $\$ 40$.
Bentley's Mildew Specific No. 1. Non-poisonous. For use under glass. Recommended very highly for roses, chrysanthemums, cucumbers, melons, tomatoes, etc., affected by mildew and aphis. Free from disfiguring effects of sulphur; uninjurious to paint. I/2gal. \$6, gal. \$10.
Bichloride of Mercury (Corrosive sublimate). Poison. Occasionally recommended for killing earthworms in lawns. Lb. \$2. Special quotations on quantity.
Black-Leaf 40. A concentrated solution of nicotine sulphate; an excellent spray for aphis and sucking insects of all kinds. Dilute one part to 900 or 1,000 parts of water, according to treatment. Full directions on each package. I-oz. bottle 35 cts ., $1 / 2-\mathrm{lb}$. tin $\$ \mathrm{I} .25,2$ lbs. $\$ 3.50$, Io lbs. $\$ 13.50$.
Bordeaux Mixture, Dry Powder. The recognized fungicide for the control of most fungous diseases of fruits and ground crops. Dilute 4 to $41 / 2$ pounds to 50 gallons of water. $1 / 2 \mathrm{lb} .25 \mathrm{cts} ., \mathrm{lb} .40 \mathrm{cts} .$, 5 lbs . $\$ \mathrm{I} .5 \mathrm{O}$, Io lbs. $\$ 2.75,25 \mathrm{lbs} . \$ 5.75,50 \mathrm{lbs}$. $\$ \mathrm{IO}$, Ioo lbs. $\$ \mathrm{I} 8$.
Bordo-Lead, Dry Powder. Insecticide and fungicide consisting of arsenate of lead and bordeaux mixture in dry form. It has sufficient arsenate of lead to kill chewing insects and sufficient bordeaux mixture to control most fungous diseases, blight, rot, and mildew. $1 / 2 \mathrm{lb} .25 \mathrm{c} ., \mathrm{lb} .50 \mathrm{c} ., 5 \mathrm{lbs} . \$ 2$, $10 \mathrm{lbs} . \$ 3.5 \mathrm{o}, 25 \mathrm{lbs} . \$ 8$, $100 \mathrm{lbs} . \$ 24$. Bug Death. A powder for killing caterpillars, cutworms, slugs, etc. Very effective, but harmless to the user. Lb. $20 \mathrm{cts} ., 3 \mathrm{lbs} .45 \mathrm{cts}$., 5 lbs. 75 cts., $121 / 2$ lbs. $\$ \mathrm{I} .50$, Ioo lbs. $\$ 9$.
Calcium Arsenate. Known for its high arsenic content. It is probably the most effective arsenical insecticide on the market. Can be used for spraying potatoes, tobacco, and is the only remedy for cotton boll-weevil. $1 / 2 \mathrm{lb}$. $20 \mathrm{cts} ., \mathrm{lb} .35 \mathrm{cts} ., 5 \mathrm{lbs}$. $\$ \mathrm{I} .25$, Io lbs. $\$ 2,25 \mathrm{lbs} . \$ 4 \cdot 50,50 \mathrm{lbs} . \$ 7$, Ioo lbs. $\$ \mathrm{I} 4$.
Calcium Cyanide. Recommended for the destruction of large white grubs, crayfish, etc. in lawns. A teaspoonful of Calcium Cyanide is placed in each burrow; close the hole with soil and tamp solid. 25 lbs. \$10, 100 lbs. $\$ 30$.
Carbola. A combined disinfectant and paint or whitewash for stables, barns and kennels. Kills lice, mites, fly-eggs; etc., and is a preventive of contagious disease. One pound of Carbola is mixed with one gallon of water and will cover approximately 250 square feet of surface. 5 lbs .75 cts ., Io lbs. $\$ \mathrm{I} .25,20 \mathrm{lbs} . \$ 2.50,50 \mathrm{lbs} . \$ 5$. Carbolineum. For hen-houses and stables. Destroys insects and harmful bacteria; removes objectionable odors. Gal. \$I.50, 5 gals. $\$ 7$.
Carbon Bisulphide (Ant Destroyer). Poisonous and explosive. Keep away from all flames and your nose. For ants in walks, pour a little Bisulphide on each nest; in lawns and gardens, insert the Stumpp \& Walter Funnel and Skewer at intervals of 10 inches and pour a tablespoonful in each hole. Can 75 cts . Funnel and Skewer for using Carbon Bisulphide, $\$ \mathrm{I} .50$.
Copper Solution Ammoniated. A fungicide similar to Bordeaux Mixture; the essential ingredient, carbonate of copper, being dissolved in ammonia in this, while in bordeaux it is counteracted by lime. For late sprayings, when fruits are nearing maturity, or plants in bloom, copper solutions are usually used. Qt. \$1.25, gal. \$4.
Copper Sulphate (Bluestone). An ingredient in home-made Bordeaux Mixture. Also used alone for spraying. Lb. I5 cts., 5 lbs. 65 cts., Io lbs. $\$ \mathrm{I} .20,25 \mathrm{lbs} . \$ 2.75$, Ioo lbs. $\$$ ro
*Cutworm Killer. A coarse powder for sprinkling near the plants. It has an enticing odor, and the worms prefer it to vegetation Harmless to the user and to the birds. Lb. 40 cts., 5 lbs. \$I.50, 25 lbs. $\$ 5$
Cyanegg. Generates the deadly hydrocyanic acid gas, for killing white fly, etc. Lb. 75 cts ., $5 \mathrm{lbs} . \$ 3$.

Cyanogas (Cyanide of calcium). For fumigating the greenhouse and conservatory and killing thrips, scale, white fly, green fly, etc. Broadcast it on the floor of the greenhouse, then lock the doors. Lb. 70 cts., 5 lbs. $\$ 3,25$ lbs. $\$ \mathrm{Io}$, Ioo lbs. $\$ 30$.
Dy-sect. A concentrated, contact insecticide that kills the rose bug, aster beetle, mealy bug, red spider, aphis, and most plant pests. Dy-sect is diluted 150 to 1 for saturating the soil to kill insect larvæ, and at least 30 to 1 for spraying. 4 -oz. sample can $35 \mathrm{cts} ., \mathrm{pt}$. can 75 cts ., qt. can $\$ \mathrm{I} .25$, gal. can $\$ 4.5$.
Easy Dust Gun, S. \& W. Co.'s. A simple device for applying dry powder insecticides and fungicides without waste and with the least possible effort. Insecticides and fungicides which may be applied economically with the Easy Dust Gun include Hortex, Tobacco Dust, Bug Death, Hellebore, Paris Green, Arsenate of Lead, Semesan, Bordeaux Powder, Grape Dust, Powdered Sulphur, etc. Price \$1.25.
Fish-Oil Soap. For mild forms of scale; is an excellent summer spray, when something stronger cannot be used, where the San José scale exists. It is good for washing off lemon trees, oleanders and almost anything that would be infested with a soft-shelled or in fact almost any kind of insect. Lb. 25 cts., 5 lbs. $\$$ i.Io, Io lbs. \$2, 25 lbs. \$4, 100 lbs . $\$ 13$.
Formaldehyde. Used for destroying disease germs that affect animal and plant life; also as a preventive for potato scab, onion and grain smuts. A pound to 15 gallons of water. A gallon of solution to a bushel of seed is required for treatment. Sold in I-lb. (I pint) bottles, 50 cts. each; $60-1 \mathrm{~b}$. keg, $\$ \mathrm{I} 8$.
Fungicide (Zenke's). A remarkably effective remedy for mildews, blights, and other fungous diseases. $1 / 2 \mathrm{pt} .35 \mathrm{cts} ., \mathrm{pt} .50 \mathrm{cts} .$, qt. 90 cts. $1 / 2$ gal. $\$ 1.75$, gal. $\$ 3$.
Fungine. An infallible remedy for mildew, rust, wilt, bench-rot, and other blights affecting flowers, fruits, and vegetables. It is equally effective under glass and out-of-doors. Does not stain foliage. Gal. $\$ 3.75$, qt. $\$ \mathrm{I} .25$, pt. 65 cts., $1 / 2 \mathrm{pt} .40 \mathrm{cts}$.
*Grape Dust. For mold, mildew, or rust-mites, either in the greenhouses or open air. 5 lbs. 85 cts ., io lbs. $\$ \mathrm{I} .60,25 \mathrm{lbs} . \$ 3.75$.
Hellebore, Powdered. Good for exterminating currant worms. $1 / 2 \mathrm{lb} .30 \mathrm{cts} ., \mathrm{lb} .55 \mathrm{cts} ., 5 \mathrm{lbs} . \$ 2.50$.
Hortex. A superior sulphur-arsenate-nicotine dust testing 2 per cent pure nicotine. This all-in-one mixture is used for the control of many fungous diseases, chewing insects, and sucking insects. Used as a dust it cannot be surpassed for general garden use. Lb. can 50 cts., $5-1 \mathrm{lb}$. can $\$ 2$, Io-1b. can $\$ 3.50$.
Hor-Tobacco. A tobacco preparation that performs two servicesan effective insecticide and a valuable fertilizer. For mulching around plants, top-dressing lawns, etc. 5 lbs. 25 cts., Io lbs. 45 cts., 25 lbs. $\$ \mathrm{I}, 50 \mathrm{lbs} . \$ \mathrm{I} .75$, Ioo lbs. $\$ 3,500 \mathrm{lbs}$. $\$ \mathrm{I} 3$, ton $\$ 50$.
Kayso. A combined casein spreader and adhesive. Its use keeps spray from washing off and reduces arsenical injury. Kayso makes all spray solutions more effective. Use I tablespoonful Kayso to 5 gallons of solution or $I / 2$ pounds to 200 gallons. $8-o z$. can 30 cts ., 2 lbs. 80 cts., ioo lbs. $\$ 30$.
Kerosene Miscible Oil. Mixes easily, has great killing power, and is especially valuable against all soft-bodied insects. Can be used on practically all insects for which nicotine is employed. For woolly aphis on apple and thorn it is much more effective than nicotine. Conta ns 80 per cent kerosene. Dilute 1 part of Oil to 16 parts of water; tender plants I part to 36 parts of water. Pt. $50 \mathrm{cts}$. , qt. 90 cts., gal. $\$ 2,5$ gals. $\$ 9$, 50 gals. $\$ 55$.
Lemon Oil. Odorless and poisonless; dilute $I$ to 30 to 50 parts of water. Destroys mealy bug, scale, thrips, red spider, black and green fly, caterpillar, etc. $1 / 2 \mathrm{pt} .40 \mathrm{cts} ., \mathrm{pt} .60 \mathrm{cts} ., \mathrm{qt} . \$ \mathrm{I}, 1 / 2 \mathrm{gal}$. \$1.75, gal. \$3.
Lime-Sulphur, Bowker's Concentrated. For destroyiug San José scale. One gallon makes ten gallons of spray; dilute with cold water. Qt. 50 cts ., I-gal. can $\$ \mathrm{I} .25$, 5 -gal. can $\$ 4$, half-barrel (about 25 gals.) \$10.50, barrel (50 gals.) \$I5.
Mag-o-Tite. Insures a good crop of radishes, kale, cabbage, onions, turnips, cauliflower, etc. You can now sow any of these crops and be certain of protection against the destructive root maggot, earthworm and other pests. Quantity required: A 2-lb. package will cover about 300 feet of drill, mixed with the soil at planting time, with an occasional top dusting as a preventive during the growing period. For field culture the approximate quantity required is from 300 to 500 lbs . per acre. 2 -lb. pkg. 40 cts ., 4 -lb. pkg. 70 cts ., 8 -lb. pkg. \$1. 25
Mo Lo. Clears a lawn of moles and field-mice in a few nights. Punch a hole in the top of the run, drop in one pellet and cover lightly; repeat every 8 feet. Mo Lo is poisonous-wear gloves. Pkg. 25 cts. Mowrah Meal. The basic material of many dry powder earthworm eradicators. Ioo lbs. $\$ 4.50$, 500 lbs . $\$ 16$, ton $\$ 55$.

## REMEDIES FOR INSECTS AND FUNGUS

## NOTE.-Insecticides marked $*$ can be sent by Parcel Post at purchaser's expense. Consult your local post office for rates from New York

Nico-Fume Liquid. This preparation is a free nicotine preparation, and is used by many of the leading growers. $1 / 4-1 \mathrm{~b}$. can 75 cts ., I-1b. can $\$ 2.25,4$-lb. can ( $1 / 2 \mathrm{gal}$.) $\$ 8,8$ lbs. (I gal.) $\$ \mathrm{I} 5$.
*Nico-Fume Paper. This is a paper treated with nicotine, giving off dense fumes of strong nicotine when ignited. It is also used for tying near blooms of chrysanthemums in early fall to keep down insects. Preferred by many who do not wish to spray or vaporize. Box of 24 sheets, $\$ 1.25$, box of 144 sheets $\$ 5.50$, box of 288 sheets \$Io.
Nico-Fume Tobacco Powder. For fumigating the greenhouse and conservatory. Lb. $\$ \mathrm{I} .35,5 \mathrm{lbs} . \$ 5$, 10 lbs . $\$ 9$.
Para-Dichlorobenzene. Highly recommended for destroying the peach borers in trees four years and older. During September a ring of the crystals is placed on the soil around the trunk and covered by mounding the earth against the tree. One ounce is sufficient for each tree. Lb. 75 cts., 5 lbs. $\$ 2.75$, Io lbs. $\$ 5$.
Paris Green. $1 / 4 \mathrm{lb}$. $15 \mathrm{c} ., 1 / 2 \mathrm{lb} .30 \mathrm{c} ., \mathrm{lb} .55 \mathrm{c} ., 5 \mathrm{lbs} . \$ 2.5 \mathrm{o}, 14 \mathrm{lbs} . \$ 5$. Pyrox (Bowker's). The one best and safest all-round spray which kills all leaf-eating insects and prevents blight and all fungous troubles, without injury, on fruit trees, grape-vines,
currant bushes, potatoes, cantaloupes, cucumbers, and other garden currant bushes, potatoes, cantaloupes, cucumbers, and other garden vegetables, also on rose bushes, shrubbery, etc. It is a creamy paste which looks like paint and "sticks like paint." It needs only to be mixed with cold water and it is ready to apply. Lb. 50 cts., 5 lbs. $\$ \mathrm{r} .75$, Io lbs. $\$ 3.15,25 \mathrm{lbs}$. $\$ 6.50,50 \mathrm{lbs}$. $\$ \mathrm{II} .25$, 100 lbs . $\$ \mathrm{I} 8$, 300 lbs . $\$ 5 \mathrm{I}$.
Rasol Spray. For scale, tent caterpillar, etc. Use it during winter or early spring, before the buds open. Gal. \$1.50, 5 gals. \$6.25, Io gals. $\$$ II, 30 gals. $\$ 27,50$ gals. $\$ 39.50$.
Reade's Electric Worm Eradicator. (Liquid.) One gallon is diluted with from 200 to 250 parts of water, and the turf thoroughly drenched with the diluted liquid. Four gallons of concentrated material is the average allowance per putting-green. 5 gals. $\$ 17.50$, 10 gals. \$34, 50 gals. \$150.
New Sprinkling Cart, Reade's. Consists of a 50-gallon barrel, mounted on wheels and with a 6 -foot sprinkling boom, complete with glass measure and storage bottles. \$50.
Scalecide. Used for the destruction of the San José scale. Dilute at the rate of one gallon to twenty gallons of water. Scalecide does not clog nozzles, hose or pump, and is pleasant to use. Trees may be sprayed in winter and early spring before they start to come to bud. Qt. 75 cts., gal. $\$ 2,5$ gals. $\$ 6.25$, io gals. $\$ 10.60,30-\mathrm{gal}$. bbl. $\$ 26,50-\mathrm{gal}$. bbl. $\$ 38$.
Semesan. A Mercuric Disinfectant. ,As a remedy for the malignant grass disease called "Brown Patch," Semesan has been successful, spectacularly so, and is now used throughout the country, both to prevent and cure attacks of this parasite on golf-courses, turf tennis-courts, baseball diamonds, and estate lawns. 2 ozs. $50 \mathrm{cts} .$, $1 / 2 \mathrm{lb}$. $\$ \mathrm{r} .6 \mathrm{o}, \mathrm{lb} . \$ 2.75,5 \mathrm{lbs}$. $\$ \mathrm{I} 3,25 \mathrm{lbs}$. $\$ 62.50$.
Semesan, Jr. An equally effective form of Semesan for the dry dust disinfection of both field and sweet corn seeds against the ear, root, and stalk rots. I $1 \mathrm{~b} . \$ \mathrm{I} .75,5 \mathrm{lbs} . \$ 8, \$ 25 \mathrm{lbs} . \$ 37.50$.
Semesan Bel. Applied to whole or cut seed potatoes, either as a dry powder or a whitewash-like water mixture, Semesan Bel will prevent or control the common seed-borne potato diseases. I lb. $\$ \mathrm{x} 75,5$ lbs. $\$ 8,25$ lbs. $\$ 37 \cdot 50$.
Shoo Fly. Sprayed or swabbed onto horses and cattle in the morning, will keep flies off them during the day. Qt. 50 cts ., gal. \$1.35.
*Slug-Shot. The standard remedy for currant worms, rose slugs, cabbage worms, and almost any soft-shelled insects that infest the garden. Lb. 25 cts., 5 lbs. 75 cts., Io lbs. \$I.20, $125-1 \mathrm{~b}$. keg \$12.50.
Sodium Cyanide. (Powder). For small white grubs in lawns, 7 ounces dissolved in 50 gallons of water should be applied to each 200 square feet. This quantity will destroy most of the grubs without injuring the grass. Lb. 75 cts., Ioo lbs. $\$ 45$.
Solomia. A powerful insecticide and fungicide for spraying. A scientific preparation for the destruction of insect pests of all kinds. Is non-poisonous and harmless to all but insect life. It can be sprayed on crops, fruit, flowers or grass without causing them the slightest harm. Qt. \$I.50, gal. \$4.50.
Styptic. To prevent bleeding of vines after pruning. Bottle $\$ 2$.
Sulfocide. An efficient summer spray for the control of scab and black rot on fruit trees. Excellent for mildew and black rot of roses and for similar fungous troubles of other plants. For general use, dilute one gallon to 200 gallons of water. Pt. 70 cts., qt. can $\$ \mathrm{I}$, gal. can $\$ 2.75,5$-gal. can $\$ 8.75$, Io-gal. can $\$ 15,30-\mathrm{gal}$. bbl. $\$ 39,50-\mathrm{gal}$. bbl. \$60.
*Sulphur. Used principally in greenhouse for checking mildew. Lb. 25 cts., 5 lbs. \$I, Io lbs. \$I. 60 , Ioo lbs. \$I2.
Sulpho-Tobaceo Soap. A combination of tobacco extract and sulphur, excellent for washing and spraying plants; dissolve in warm water. 3 -oz. pkg. $15 \mathrm{cts} ., 8$-oz. pkg. 25 cts., Io-lb. pkg. $\$ 3$.
Sunoco Spray Oil. For shade and ornamental trees and shrubs, controlling scale insects and red spider. On apple trees for scale insects, aphis and red mite. I gal. \$I.25, 5 gals. $\$ 5$, 15 gals. $\$ 10.50$, 30 gals. $\$ 18,50$ gals. $\$ 25$.

Sulphur Candles. For fumigating the conservatory and greenhouse; also the sick-room. I5 cts. each, $\$ 1.50$ per doz.
Terogen. A combined fertilizer and insecticide. See page I79. Lb. $75 \mathrm{c} ., 2$ lbs. $\$ \mathrm{I} .25,5 \mathrm{lbs} . \$ 2.75$, Io lbs. $\$ 4.75,25 \mathrm{lbs} . \$ \mathrm{II}$, Ioo lbs. $\$ 40$. Thrip Juice (Hammond's). Very effective against aphis, red spider, mealy bug, etc. Pt. 85 cts., qt. $\$$ r. 40 , gal. $\$ 4.25$.
*Tobacco Dust (Kilmdead). The best of the Tobacco Dusts for dusting or fumigating. Lb. 25 cts ., 5 lbs .75 cts ., $25 \mathrm{lbs} . \$ 2,50 \mathrm{lbs}$. $\$ 3.50$, Ioo lbs. $\$ 6$.
Tobacco Stems. Used for fumigating and under benches in greenhouses. Bale of yoo lbs. \$4.
*Tree Tanglefoot. A paste preparation for painting around the trunks of trees, in the form of a band. Caterpillars and other crawling pests cannot get over it. Lb. 60 cts., $5-1 \mathrm{~b}$. can $\$ 2.75$, Io-lb. can $\$ 5.25,25$ lbs. \$II.
Tree Wound Paint. Prevents decay. A residuum, penetrating, antiseptic paint that is not affected by heat, cold or moisture. Does not peel, crack or get brittle. Stops tree bleeding. Pt. 60 cts., qt. \$1, gal. \$3, 5 gals. \$I2.
Vermine. A soil sterilizer and germicide for all soil vermin, such as cut-, eel-, wire-, and grub-worms, slugs, root-lice, maggots, and ants. Use one part of Vermine to four hundred parts of water, thoroughly soaking the ground. $1 / 4 \mathrm{pt} .30 \mathrm{cts} ., 1 / 2 \mathrm{pt} .50 \mathrm{cts} ., \mathrm{pt} .75$ cts., qt. \$1.25, I gal. \$3.75.
Vermol. Common earthworms or "angleworms" are a decided nuisance in lawns, turf courts, and putting-greens. The casts are unsightly, impair the playing qualities of greens and add greatly to the upkeep cost, as daily sweeping and rolling become necessary. To rid greens, courts or lawns of worms, apply Vermol evenly at the rate of one-half pound to the square yard, and flood the greens immediately. If possible, the application should be made on a warm, damp day, early in May. The worms will come to the surface and die. Sold in powder form. $25 \mathrm{lbs} . \$ 2.25,50 \mathrm{lbs} . \$ 4$, Ioo lbs. $\$ 6.50,500 \mathrm{lbs}$. $\$ 30$, $\mathrm{I}, 000 \mathrm{lbs}$. $\$ 57.50$, ton, $\$$ IIO.
Volck. A spray for scale insects, mealy bugs, white flies, red spiders, rust mites, and similar insects. $1 / 2 \mathrm{pt} .50 \mathrm{cts} ., \mathrm{pt} .75 \mathrm{cts} ., \mathrm{qt}$. $\$ \mathrm{I}$, gal. $\$ 3,5$ gals. $\$ 12,14$ gals. $\$ 20,28$ gals. $\$ 34$.
Wilson's O. K. Plant Spray. For roses, chrysanthemums, evergreens, and all plants affected with scale or insects, under glass or outside. Recommended for rose bugs. 1/2pt. $40 \mathrm{cts} ., \mathrm{qt}$. \$I, gal. \$3, 5 gals. \$1o. $1 / 2 \mathrm{bbl} . \$ 50$, bbl. \$90.
X-L-ALL Liquid Insecticide. Destroys mealy-bug, scale, thrip, red spider, green and black fly, caterpillars, blight and all insect pests in the garden; it is perfectly safe to use on tender plants. For the winter dressing of vines, figs, peaches and other fruit trees, it has been proved to be the safest and most valuable preparation in the market. Leaves the foliage bright and clean and much improved in appearance. Qt. $\$ 2,1 / 2 \mathrm{gal} . \$ 3.75, \mathrm{gal} . \$ 7$.
X-A-ALL Vaporizing Compound. Used very extensively abroad for vaporizing. No. I (sufficient for 40,000 cubic feet) $\$ 8$; No. 2 (sufficient for 20,000 cubic feet) $\$ 5$; No. 3 (sufficient for ro,000 cubic feet) $\$ 2.50$.
Zenoleum. A coal-tar product that is a powerful disinfectant, deodorant and germ destroyer. For use in stables, poultry-houses, dog-kennels, etc. $1 / 2 \mathrm{pt} .35$ cts., qt. 75 cts., $1 / 2 \mathrm{gal}$. \$1.25, gal. \$2, 5 gals. \$9.50.

## Weed Killers

Herbicide. There is nothing more annoying to the well-kept home grounds than weeds constantly coming up in the roadways, paths and gutters. This weed killer may be applied by means of a sprinkling apparatus of any kind from the small sprinkling can to the large street-sprinkling wagon. It is harmless to stone, woodwork or shoes and is perfectly odorless. One thorough application will kill all weeds as well as the roots of the same. One gallon diluted I part to 40 parts of water is sufficient to cover Ioo to I 50 square yards of space. Qt.-can, $70 \mathrm{cts} ., 1 / 2-\mathrm{gal} .-\mathrm{can} \$ 1.20$, gal.-can $\$ 2$, $5-\mathrm{gal}$. can $\$ 8$, $10-\mathrm{gal}$. can $\$ 15,30$-gal. drum $\$ 33,50-\mathrm{gal}$. bbl. $\$ 50$. Non-Poisonous Weed Killer. Kills weeds safely and economically. Harmless to humans and animals. Qt. $75 \mathrm{cts} ., 1 / 2 \mathrm{gal} . \$ 1.25$, gal. \$2, 5 gals. \$8, 50 gals. \$55.
*Climax Lawn Sand. A combination of carefully dried and finely ground chemicals. Destroys weeds in lawns. $31 / 2-1 \mathrm{~b}$. can 65 cts ., 7 -lb. can $\$ 1.25,14$-lb. can $\$ 2,28$-lb. pkg. $\$ 3.75,56$-lb. pkg. $\$ 7.25$.

## Vaporizers

Vaporizing Lamp, Defiance. Practical and indestructible; all metal; burns kerosene; used for dispensing fumes of nicotine preparations. 75 cts. each.
X-L-ALL Vaporizing Lamp. A lamp specially designed for vaporizing of X-L-All Compound. Small size, \$I; larger size, \$I. 25.

## Hydrometers

For testing the specific gravity of lime-sulphur and other sprays. Price $\$ 1.25$ (post paid $\$ 1.40$ ).

## FERTILIZERS, MANURES, SOIL INGREDIENTS

## When cash accompanies your order for fertliizers listed below, in lots of 100 pounds or over, we prepay freight to your station if

 within 100 miles of New York, except where otherwise notedThere are two secrets of soil fertility: The soil must be correct mechanically and right chemically. Correct mechanically means that It should possess the proper framework-enough clay to form a 'body,' sufficient grit to allow moisture to seep downward during rainy weather and to encourage it to work upward during dry weather by capillary action, and some remains of dead plants or humus to act as a sponge to hold moisture ready for the plant-roots to absorb it. Right chemically means that the soil contains the proper plant-foods in a condition easy for the plant to feed upon and in sufficient quantity to afford uninterrupted growth. You can make almost any soil mechanically correct and chemically right by the proper use of some of the materials listed on this and the following page.

## Stumpp \& Walter Co.'s Special Compounded Fertilizers

## S. \& W. Co.’s General Garden Fertilizer. For vege-

 flowers, and fruit. Recommended strongly as the best for allround work in the garden. Use it at the rate of 1,000 pounds to the acre, or 3 ounces to the square yard when preparing land for planting in the spring. Good practice, too, is to spread General Garden Fertilizer between the rows of plants when they are growing and then to hoe it into the soil; use about 3 pounds per Ioo running feet for this, repeating every month. When planting beans, cucumbers, etc. in hills, a handful worked into the soil under the hill will be a great belp, and the same thing may be done when planting tomatoes, cabbages, peppers, dahlias, peonies, etc. The soil immediately around roses, shrubs, and trees may be whitened with General Garden Fertilizer and then raked. Before sowing seeds in rows a little General Garden Fertilizer may be placed in the drill and the soil stirred to mix it thoroughly. 5 lbs. 50 cts., io lbs. 90 cts., 25 lbs. $\$ \mathrm{I} .75$, 50 lbs . $\$ 3.25$, Ioo lbs. $\$ 5.50,500$ lbs. $\$ 22$, ton $\$ 75$.
## S. \& W. Co.'s Potato Fertilizer. Unequaled for pota-

 all vegetables grown for their fleshy roots, such toes, and, in fact, as beets, carrots, etc. paring the land; some growers mix thoroughly a handful with presoil immediately under each tuber when planting. During growth some Potato Fertilizer may be scattered on the soil between the rows and hoed in. 5 lbs. 50 cts., 10 lbs. 90 cts., 25 lbs. $\$ \mathrm{I} .75,50$ lbs. $\$ 3$, ioo lbs. $\$ 5,500 \mathrm{lbs}$. $\$ 20$, ton $\$ 70$.S. © W. Co.'s Emerald Grass Fertilizer. For lawns putting-greens. A well-balanced formula, designed to feed only the finer grasses and to keep them in a healthy condition. When building a lawn, from $1 / 2$ ton to $I$ ton per acre ( 3 to 6 ounces to the square yard) should be harrowed or raked into the upper surface. Every spring and early autumn existing lawns may be given a dressing of 500 to 1,000 pounds per acre ( $11 / 2$ to 3 ounces to the square yard); when applied as a top-dressing to turf, it is best to mix the Emerald Grass Fertilizer with four times its bulk of fine soil or sand before broadcasting. 5 lbs. 50 cts ., Io lbs. 90 cts., $25 \mathrm{lbs} . \$ \mathrm{I} .75$, $50 \mathrm{lbs} . \$ 3.25$, Ioo lbs. $\$ 5.50,500 \mathrm{lbs} . \$ 22$, ton $\$ 75$.
S. $\mathcal{E} W$. Co.'s Fair-green Fertilizer. A splendid large lawns, golf fairways polo fields, football fields grass food for hay and pasture fields. When planting new fields, use $3 / 4$ ton to the acre, and when renovating existing fields use one-half this quantity. Ioo lbs. $\$ 3,500 \mathrm{lbs}$. $\$ \mathrm{I} 3.5 \mathrm{o}$, ton $\$ 50$.
S. \& W. Co.'s Corn Fertilizer. An excellent all-round with a well-balanced formula specially worked dressing for this crop, ments of corn. Apply $1 / 2$ ton per acre ( 3 ounces to the square yard) before seeding and harrow in. Dust Corn Fertilizer between the rows during the summer and then hoe it into the soil; 5 pounds per 100 running feet may be allowed for this. $5 \mathrm{lbs} .50 \mathrm{cts} .$, Io lbs. 90 cts ., 25 lbs. $\$ \mathrm{I} .75,50 \mathrm{lbs} . \$ 2.75$, $100 \mathrm{lbs} . \$ 4.50,500 \mathrm{lbs}$. $\$ 18$, ton $\$ 65$.

## GENERAL LIST OF FERTILIZERS

Adco. A culture of bacteria associated with the breaking down of organic materials. Add it to garden rubbish, leaves and grass clippings to hasten decay and quickly produce manure. $25 \mathrm{lbs} . \$ 2$, 150 lbs . $\$ 10.50$.
Aluminum Sulphate. Makes soil acid, and for this purpose is much used in the culture of rhododendrons and similar plants. 5 lbs. 75 cts ., 10 lbs . $\$ \mathrm{I} .25,25 \mathrm{lbs}$. $\$ 2.50$, 100 lbs . $\$ 7.50$.
Ammonium Sulphate. A nitrogenous plant stimulant, very quick in action, tending to make soil acid. Increases leafgrowth. Much used on lawns, which it not only feeds, but weeds are discouraged; when top-dressing lawns apply I ounce per square yard or 350 pounds to the acre, but first mix with several times its bulk of soil or sand. Between rows of spinach, lettuce, cabbage, etc. 2 pounds to the running foot may be broadcast and hoed in. As a liquid stimulant dissolve I ounce in a gallon of water and apply to the roots of plants. 5 lbs. 75 cts ., Io lbs. \$I.25, 25 lbs. $\$ 2.25$, 50 lbs. $\$ 3.75$, 1oo lbs. $\$ 6$, 500 bs. $\$ 27$, ton $\$ 85$.
Ammo-Phos (Phosphate of Ammonia). Applies nitrogen, and therefore stimulates leaf-growth; supplies also phosphoric acid. For lawns, vegetables, and flowers. Use from 250 to 750 pounds per acre or $3 / 4$ to $21 / 2$ ounces to the square yard. Employ only the smaller quantity on lawns, and then mix it with four times its bulk of soil or sand, otherwise it will scorch badly. Ioo lbs. $\$ 6.50,500 \mathrm{lbs}$. $\$ 27$, ton $\$ 100$.
Ashes, Canada Hardwood. These furnish potash. One to two tons per acre may be harrowed into land in winter, early spring, or fall. May be broadcast between rows of corn, potatoes, beets, carrots, etc., at the rate of 10 pounds per 100 running feet, Bbl. (about 200 lbs .) $\$ 5$, ton $\$ 40$.

Acid or Rock Phosphate. Adds phosphoric acid and a small quantity of lime. From 750 to 1,500 pounds may be applied to an acre of plowed land, or it may be used as a top-dressing for lawns, golf fairways, etc. Ioo lbs. $\$ 2$, ton $\$ 27.50$.
Basic Slag. A slow-acting fertilizer, the effect of which is spread over several seasons; contributes phosphoric acid and lime to the soil. As a winter and early spring dressing is excellent for hay and pasture fields, alfalfa, clovers, grain, etc., as well as lawns and golf fairways. Use 1,000 to 2,000 pounds per acre. 50 lbs. $\$ 2$, Ioo lbs. $\$ 3.75,500 \mathrm{lbs} . \$ 17$, ton $\$ 60$.
Blood, Dried. Adds nitrogen and a small amount of phosphoric acid and lime; much used for greenhouse plants, carnations, roses, and the like. Acts quickly. 5 lbs. 75 cts ., Io lbs. $\$ \mathrm{I} .25,25 \mathrm{lbs} . \$ 2.25$, 50 lbs . $\$ 3.75$, Ioo lbs. $\$ 6$, 500 lbs . $\$ 27.50$, ton \$100.
Blood and Bone (Tankage). Similar in general effect to bone-meal, yielding lime and phosphoric acid. Used largely by the greenhouse man, and is excellent for grapevines. Allow 3 ounces per square yard ( 1,000 pounds to the acre) and rake in. Ioo lbs. $\$ 4.50,500$ lbs. $\$ 22.50$, ton $\$ 80$.
Bone Fertilizer, Mixed Fine and Coarse. (For general use.) This grade is recommended for the garden and for lawns. It is quick to give results, yet the benefits are lasting. The standard food for roses; much used on hay and pasture fields. Use 1,500 pounds per acre or 5 ounces to the square yard, dug or raked into the soil; use one-haif this rate when top-dressing grass. 5 lbs. 50 cts., Io lbs. 90 cts., 25 lbs . $\$ \mathrm{I} .75,50 \mathrm{lbs} . \$ 3$, $100 \mathrm{lbs} . \$ 5,500$ lbs. $\$ \mathrm{I} 9$, ton $\$ 65$.
Bone, Coarse. These large particles of bone are much used for trees and vines. Ioo lbs. $\$ 5.50,500 \mathrm{lbs} . \$ 25$, ton $\$ 85$.

Bon Arbor. A soluble mixed fertilizer, complete in itself, for house plants, conservatory use, outdoor flowers and vegetables; also for lawns. May be applied in solution or dry, according to directions on the packages. $1 / 2 \mathrm{lb}$. 50 cts., lb. 75 cts ., $5 \mathrm{lbs} . \$ 2.50,50 \mathrm{lbs}$. \$17, $100 \mathrm{lbs} . \$ 30$.
Calcium Cyanamid (Lime Nitrogen). Similar in action to ammonium sulphate. For forcing vegetables, especially kinds grown for their leaves; flowers also, as well as grasses and clovers. In loo-pound bags, price on application.
Cattle or Cow Manure, Shredded. For all crops, especially those in hot, sandy soils. About 400 pounds of the concentrated material may be considered as equal in value to one ton of fresh cowmanure. Use from $I$ to 3 tons to the acre; 6 to 20 ounces per square yard. Ioo lbs. $\$ 4,500 \mathrm{lbs}$. $\$ \mathrm{I} 7$, ton $\$ 60$.
Charcoal. Sweetens and lightens sour and heavy soils; helps to dry out wet land. Frequently used for lawns on soils of this character. 50 lbs. $\$ 2.50$, Ioo lbs. $\$ 4.50$, $500 \mathrm{lbs} . \$ 20$, ton $\$ 65$.
Clay's Fertilizer. Has a splendid reputation for flowers, vegetables, and fruit. Generations of gardeners have used it successfully for exhibition growing. Two to 4 ounces to the square yard, raked into the soil around the plants. I4 lbs. \$2.25, 28 lbs. $\$ 4,56 \mathrm{lbs} . \$ 7$, II2 lbs. $\$ 12$.
Coe-Mortimer Fertilizers. Grade A, for putting-greens and fine lawns, $\$ 80$ per ton. Grade B , for golf fairways and large lawns, $\$ 80$ per ton. These two popular brands of fertilizers are much in demand by greenkeepers.
Cottonseed Meal. Rich in nitrogen and potash; suitable for grain crops, but most largely used on lawns. Use $3 / 4$ to $I^{1 / 2}$ tons per acre. Loo lbs. $\$ 4.50$, 500 lbs . $\$ 20$, ton $\$ 65$.

Cow Manure. From 25 to 40 tons per acre may be plowed under; or may be used with advantage in the compost for top-dressing turf. In car lots only, $\$ 7$ per ton.
Floranid (Urea). The most highly concentrated nitrogenous fertilizer in commerce, contains 46 per cent of a a ailable nitrogen, and leaves no harmful residue in the soil. A quick-acting stimulant for lawns, vegetables, fruits, and flowers. Allow 2 ounces per square yard in the garden, $1 / 2$ ounce per square yard on the lawn; in the latter case it must be mixed with four times its bulk of fine soil or sand. $1 / 2 \mathrm{lb}$. 50 cts., $1 \mathrm{lb} .75 \mathrm{cts},. 5 \mathrm{lbs}$. $\$ \mathrm{I} .75$, 10 lbs . $\$ 3,50 \mathrm{lbs}$. \$12.50, Ioo lbs. $\$ 24$.
Gypsum or Land Plaster. Widely used as a dusting for the manure pile to fix and hold nitrogen. When applied to land it furnishes lime without giving the soil an alkaline reaction. From one to three tons per acre may be given. In barrels only, eontaining about 300 lbs ., $\$$ Io.
Hog Manure, Pulverized. Has an exceedingly high analysis for a fertilizer of this character. Suitable for vegetables, flowers, and fruits. Use from $1 / 2$ to $\mathrm{I}^{1 / 2}$ tons per acre; 3 to io ounces to the square yard. $100 \mathrm{lbs} . \$ 4.50,500 \mathrm{lbs}$. $\$ 20$, ton $\$ 65$.
Horn Shavings. A little mixed with potting soil will help most plants, especially chrysanthemums. Also of value for grapevines. 100 lbs . $\$ 7$.
Horse-Manure. May be regarded almost as a necessity for all crops. We quote on car lots only (minimum car 40 tons) $\$ 7$ per ton, f.o.b. shipping point.
Humus. Furnishes but little plant-food; highly valuable, however, as a soil ingredient, improving its texture and increasing its water-holding properties. May be used freely. Shipped in bags, $\$ 25$ per ton, f.o.b. plant. In bulk in carload lots, minimum 20 tons, $\$ 8$ per ton, foob. plant. We stock Humus in our New York store in boxes only as follows: 1o-lb. box 75 cts . $50-\mathrm{lb}$. box $\$_{2}$, $100-\mathrm{lb}$. box $\$ 3.50,500 \mathrm{lbs}$. in boxes $\$ 15$, ton in boxes $\$ 45$.
Kainite. Adds potash to the soil. Valuable for potatoes, turnips, mangels, and elover, using from 750 to 1,500 pounds to the acre; $2^{1 / 2}$ to 5 ounces per square yard. $100 \mathrm{lbs} . \$ 2,500 \mathrm{lbs}$. $\$ 9$, ton $\$ 30$.
Lawn Sand, Climax. Imported. A concentrated fertilizer used for killing certain weeds in lawns, especially ehickweed and mouse-ear. Applied thickly to weed patches, or generally over the grass at the rate of 6 ounces to the square yard. $3^{1 / 2}$ lb. can 65 cts ., 7 - lb . can $\$ \mathrm{I} .25$, I 4-lb. can $\$ 2,28-\mathrm{lb}$. pkg. $\$ 3.75 .56-\mathrm{lb}$. keg $\$ 7.25$.
Leaf-Mould. Used tor preparing rhododendron beds and as an ingredient in potting soil. Bag $\$_{2.50}$.
Lime, Agricultural Hydrated. Corrects acid conditions of the soil, and at the same time is a plant-food; further, it liberates other foods in the soil. Binds loose soils and, curiously enough, opens heavy land. Quick acting. Use from I to 3 tons per acre; 6 to 18 ounces to the square yard. As a winter dressing to sweeten lawns, broadcast I ton to the acre or 6 ounces per square yard. 5 lbs . 35 cis ., io lbs . $60 \mathrm{cts} ., 25 \mathrm{lbs}$. $\$ \mathrm{I} .25$, Ioo lbs. $\$ 2.75,500 \mathrm{lbs}$. $\$ 9.50$, ton $\$ 30$.
Limestone, Pulverized. Slower to act than Hydrated Lime but the effect is felt over a longer period. Use from 2 to 4 tons per acre. 100 lbs . $\$ \mathrm{I} .50,500 \mathrm{lbs}$. $\$ 6$, ton. \$17.50. Specially favorable rates in carload lots.
L. S. P. (Luna Saltpater). Imported. A very strong nitrogenous fertilizer used at the rate of 250 pounds to the acre or $1 / 2$ ounce to the square yard for grass, first mixing it with several times its bulk of fine soil or sand. May also be worked into the soil surrounding shrubs, vegetables, etc. 100 lbs . $\$ 8,500 \mathrm{lbs}$. $\$ 32.50$, ton $\$ 110$.

Moss, Live Green Sphagnum. Freshly gathered in season. For orchid-growing, for mulching pots and greenhouse benches and for dozens of other uses. Bag, \$4.
Moss, Sheet, Natural Green. For covering pots or tubs, for decorating the conservatory, rock-garden, etc. Bags (io lbs.) $\$ 5$.
Moss, Dry Sphagnum. For wrapping around plant roots, orchid-growing, covering eonservatory soil, etc. Large bale, $\$ 4$.
Muriate of Potash. Excellent for potatoes. corn, grains, ete. Use from 350 to 750 pounds per acre. Ioo lbs. $\$ 4.50$, 500 lbs . \$20, ton $\$ 70$.
Mushroom Soil. Stable manure and fine 'oam, which together have produced a crop of mushrooms and are partly rotted. Offered in car lots at $\$ 5$ per ton, purchaser paying freight from shipping point. Minimum car, 30 tons.
Nitrate of Soda. A plant stimulant. Adds nitrogen in a form which is immediately available to the plants. Forces a heavy, succulent growth in lettuce and similar leaf vegetables. Gives a jump to lawns, and, in act, to all crops. Use it sparingly and with great care; not more than 1 I/2 ounces per square yard, or 500 pounds to the acre, raked or harrowed in. Give at one-half this rate to lawrs, but first mix with four times its bulk of fine soil or sand. As a liquid fertilizer one ounce may be dissolved in one gallon of water. 5 lbs . 65 cts ., 10 lbs . \$r, 25 lbs . \$2, 50 lbs . $\$ 3.75$. roo lbs. $\$ 6,500 \mathrm{lbs}$. $\$ 25$, ton $\$ 80$.
Oyama Plant Food. A Japanese fertilizer. For house plants, vegetables, and flowers. Consists of chemicals in crystal form which dissolve in water and are speedily available to the plant. Use in accordance with directions on the packages. House size 35 cts., postpaid 45 cts.; garden size $\$ 1.20$, postpaid \$1.35.
Peat Fiber. A vegetable product which remains in the soil for many years without decaying; in the meanwhile it absorbs moisture and holds it for the plants. Its presence in the top layer of a lawn adds materially to the resilient carpet-like feel of good turf. As a mulch around the roots of plants it is excellent. May be used freely. In $220-1 \mathrm{~b}$. bales only, $\$ 6$.
Peat, Osmundi. For orchid-growing. Bbl. \$5. Rotted Fibrous. Excellent for mixing with soil for heaths and other plants. Well decayed. Bag $\$ 2.50$
Potash Marl. A natural substance, high in potash content and odorless. May bc applied to lawns-will not burn the grassand generally in the garden. Use from $11 / 2$ to $21 / 2$ tons to the acre (Io to 16 ounces per square yard). Ioo lbs. $\$ 3,500 \mathrm{lbs}$. \$12.50, ton \$45.
Potting Soil. A fine mixture of loam, leafmold, and sand. Suitable for house plants, ferns, etc.; excellent for growing bulbs. Pk. §I, bus. $\$_{2.50}$
Pulverized Poultry Manure. An excellent fertilizer, rich in plant-food, for all garden crops, flowers, and lawns. Dig in 3 to 16 ounces per square yard, or $1 / 2$ to $21 / 2$ tons to the acre. Mix frecly with soil or sand when applying to lawns and then only use very little. Ioo lbs. $\$ 4.50$, 500 lbs . $\$ 17$, ton $\$ 60$.
Pulverized Sheep Manure. A convenient substitute for stable manure on small areas. Consists of sheep-droppings that have been heated to a high temperature, expelling moisture and destroying weed seeds. Highly recommended for vegetables, flowers and lawns. 5 lbs. $50 \mathrm{cts} .$, to lbs. 90 cts., 25 lbs . $\$ \mathrm{I} .75$, 50 lbs . $\$ 2.25$, Ioo lbs. \$4.50, 500 lbs . $\$ 18$, ton $\$ 65$.
Salt, Agricultural. Occasionally used as a top-dressing for asparagus. Also effective as a weed-killer on roadways, paths, etc. Ioo lbs. $\$ 2.25,500 \mathrm{lbs}$. $\$$ Io, ton $\$ 35$.

Scotch Soot. A valuable plant-food. On grass, or dusted around yegetables or on the plants themselves, it discourages eaterpillars, slugs, grubs, wireworms, cutworms and earthworms. Ioo lbs. $\$ 7$, 500 lbs . 30 , ton \$100.
Stim-U-Plant. Fertilizer in tablets. These may be placed in the soil around plants, in flower pots, or dissolved in water for a liquid fertilizer. 30 tablets 25 cts., postpaid 30 cts ; 100 tablets 75 cts ., postpaid 85 cts.; I,ooo tablets $\$ 3.50$, postpaid $\$ 3.65$
Terogen. Supplies plant-foods to the soil and discourages insects and fungous pests at the same time. Applied in late winter or early spring before growth commences Lb. 75 cts., 2 lbs. $\$ 1.25,5$ lbs. $\$_{2.75}$, to lbs. $\$_{4.75,25} \mathrm{lbs}$. Sil, ioo lbs. $\$ 4 \mathrm{o}$.
Tobacco Fertilizer. For lawns, vegetables, and farm crops. In addition to its value as a fertilizer, it discourages many soil-pests. such as beetles, ants, cutworms and snails. A slow-acting fertilizer, rich in potash. Use from $2^{1 / 2}$ to $31 / 2$ tons per acre, I to $\mathrm{I} / 2 \mathrm{lbs}$. to the square yard. Ioo lbs $\$ 4,500 \mathrm{lbs}$. $\$ 17$, ton $\$ 60$.
Tobaceo Stems. Placed around the roots of roses and other plants; occasionally recommended as a dressing for grass over winter. Feeds the plants, protects against cold, retains moisture, deters insects. Use from $2^{1 / 2}$ to $3^{1 / 2}$ tons per acre; I to I $1 / 2$ pounds to the square yard. Ioo lbs. $\$ 4,500 \mathrm{lbs}$. $\$_{16}$, ton $\$ 50$
Thomson's Chrysanthemum Manure. A mixed fertilizer for greenhouse and conservatory use, also for all plants outdoors. Widely used by professional gardeners. Imported. Use 6 ounces per square yard, raked into the soil. 7 lbs . $\$_{1.75}$, I4 lbs. $\$ 3,28 \mathrm{lbs} . \$ 5 \cdot 50,56 \mathrm{lbs}$. $\$ \mathrm{Io}$.
Thomson's Special Flower, Vegetable and Vine Manure. Imported. An excellent all-round fertilizer that is a great favorite with the private gardener. I 4 lbs. \$I. $75,28 \mathrm{lbs} . \$ 3,56 \mathrm{lbs} . \$ 5 \cdot 50$, 112 lbs . $\$_{10}$

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| Quantity | ANNUAL FLOWER SEED | Price | Quantity | ANNUAL FLOWER SEED | Price |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ANTIRRHINOM <br> (Snapdragon.) See page 65. |  |  | Sweet Sultans, continued |  |
|  | Carmine Queen...... |  |  | Purp |  |
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|  | Golden Queen |  |  | colors, 50 c .; 1/40z. each 6 colors, \$2.50. |  |
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|  | SWEET PEAS |  |  | White King. |  |
|  | (12 Distinct Colors.) See page 66. |  |  | Rose King . |  |
|  | Scarlet |  |  | Crimson King. |  |
|  | White |  |  | PRICES: Pkt. 15 cts., 1/4oz. \$1.25. |  |
|  | Bright Blue |  |  | COLLECTION OFFER: 1 pkt. each 6 Kings, 75 cts.; 1/4oz. each 6 Kings, $\$ 5$. |  |
|  | Carmine |  |  | THREE KING CALENDULAS |  |
|  | Cream |  |  | (Scotch Marigolds.) See page 77. |  |
|  | Lavender |  |  | Orange King |  |
|  | Navy Blue. |  |  | Golden King. |  |
|  | Light Pink. |  |  | Lemon King. |  |
|  | Cream-Pink. |  |  | PRICES: Prt. 25 c ., 1/4oz. 50c., oz. \$1.50. |  |
|  | Maroon |  |  | COLLECTION OFFER: 1 pkt. each 3 colors, 50 cts.; $1 / 40 \mathrm{z}$. each 3 colors, $\$ 1$. |  |
|  | Purple |  |  | CALLIOPSIS See page 78. |  |
|  | Salmon-Pink. |  |  | Golden Wave. |  |
|  | PRICES: Pikt. $15 \mathrm{cts} ., 0 \mathrm{oz} .50 \mathrm{cts}$. |  |  | Crimson King. |  |
|  | COLLECTION OFFER: 1 pkt. each 12 distinct colors, $\$ 1$; 1 oz. each 12 distinct colors, $\$ 5$. |  |  | Marmorata |  |
|  | SWEET SULTANS |  |  | Tiger Star. |  |
|  | (Centaurea imperialis.) See page 71. |  |  | Nigra Speciosa. |  |
|  | White. |  |  | Bicolor Nana. |  |
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| ....... | Lilac. |  |  | varieties, 50 cts ; $1 / 40 \mathrm{z}$. each 6 varieties, $\$ 2.50$. |  |


| Quantity | ANNUAL FLOWER SEED | Price | Quantity | ANNUAL FLOWER SEED | Price |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | CALIFORNIA POPPIES |  |  | SCABIOSA See page 108. |  |
|  | Carmine King. |  |  | Cherry-Red. |  |
|  | Golden West. |  |  | Flesh-Color. |  |
|  | Scarlet Beauty |  |  | Fiery Scarlet |  |
|  | Geisha. |  |  | King of the Blacks. |  |
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|  | HELICHRYSUM <br> (Straw Flower.) See page 88. |  |  | Giant Yellow. |  |
|  | Rose Queen. |  |  | Giant White. |  |
|  | Snowball. |  |  | Giant Crimson. |  |
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