## Historic, Archive Document

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


# INSTRUCTIONS TO PURCHASERS 

## AS TO POSTAGE, ETC.



LL SEEDS IN PACKETS, OUNCES and QUARTER POUNDS only, are sent free by Mail, at prices quoted; Half-pounds, Pounds, Pints, Quarts, and larger quantities, if to be sent by Mail, postage must be added to prices quoted at the rate of ten cents per pound, ten cents per pint and fifteen cents per quart.
Order Early.-It will greatly facilitate shipments if orders are sent early. We aim to send off all orders the day received. Will make special price to those who use seed in quantity-write for estimate.

Send the Money with the Order.-Postal Note, Post Office Order, Registered Letter, Express Money Order, or Draft on Cincinnati or New York.

In view of the fact that the express companies make a special low rate on small packages of Seeds, Plants and Bulbs, we would suggest that patrons remit by Express Money Orders, which can be obtained at nearly all the express offices. United States Postage Stamps will be received for small amounts; be exceedingly careful about the least moisture getting on them when remitting, as they sometimes reach us so stuck together as to be almost worthless.

We do not send C. O. D.-Everything being plainly priced, the return charges on money is an unnecessary expense.

Should you change your address, we will esteem it a favor if you will notify us, so we can forward our Catalogue with regularity; if you receive two Catalogues of the same kind, please hand one to some friend who has a garden.

Should an error occur, we desire to be promptly informed, and will take pleasure in making satisfactory corrections.

Write your Name and Address distinctly and in full; please use the Order Sheet and Envelope inserted in this Catalogue.

We shall always be pleased to reward customers who send us the name and post office address of their friends who will buy Seeds, Plants, Bulbs, etc.

About Warranting Seeds.-We have often been asked if we "guarantee or warrant our Seeds." We beg to state plainly we do not, for the reason that practical experience has assured us of the fact that crops may fail, no matter how fresh or pure the seed sown may be. We trust that our customers will fully realize that it is to our interest to send none but the very best quality of Seeds. It would be folly to do otherwise, unless we wanted to sacrifice our good reputation for selling Reliable Seeds, which we are constantly striving to extend.

To secure success, however, it is necessary that the customer should do his part well, or our good seeds will be ruined. With the best of management and with good seeds there will be an occasional unaccountable failure. The best of gardeners sometimes fail, and try again with the same seed with good results.

We test all our Seeds before sending them out, and while we exercise the greatest care to have all Seeds pure and reliable, we do not give any warranty, express or implied. If the purchaser does not accept Seeds on these terms and conditions, they must be returned at once, and the money that has been paid for same will be refunded.

With this issue of our annual Catalogue and Amateurs' Guide we enter upon the 75 th year since the founding of our business by the late Mr. J. M. McCullough.

# THE J. M. McCULLOUGH'S SONS CO. 



## Established 1838-Incorporated 1904

Salesrooms and Offices, No. 316 Walnut Street
Between Third and Fourth Streets
CINCINNATI, OHIO

## Warehouses and Track Depot:

328, 330 and 332 EAST FRONT STREET. 323 and 325 YEATMAN STREET
LONG DISTANCE TELEPHONE, MAIN 4598
More order blanks will be sent on request. Always write letters on a separate sheet from your order. POSTAGE - All Seeds offered in PACKETS, ounces and quarter pounds, are sent free by mail at prices quoted; half pounds, pounds,
pints, quarts and larger quantities add Ioc per pound or pint and $I_{5} \mathrm{C}$ per quart. When ordering CORN, PEAS or BEANS be sure to add 10c per pint and 15 c per quart for
" Express Office $\binom{$ If different }{ from P. O. } For further particulars and conditions of sale, see cover.

## Third and Fourth Streets.


ORDER
THE J. M. McCULLOUGH'S SONS CO., Cincinnati, O. 316 Walnut Street,
VERY IMPORTANT.-Write your name and address distinctly and in full.
Name of Person

## " County

## " State

Quantity


# SEED CATALOGUE 



## SPECIAL RATES ON VEGETABLE SEEDS IN PACKETS.

For 25 c select 6 five cent packages of Vegetable Seeds.
For 50 c select 13 five cent packages of Vegetable Seeds. For $\$ 1.00$ select Seeds in packages (no ounces, remember), to the amount of \$1.30.
For $\$ 2.00$ select Seeds in packages (no ounces, remember), to the amount of \$2.65.
For $\$ 3.00$ select Seeds in packages (no ounces, remember),
to the amount of $\$ 4.00$.
For $\$ 3.00$ select Seeds in packages (no ounces, remember),
to the amount of $\$ 4.00$.

These prices do not refer to Seeds offered by weight or measure, but to Seeds in packets only.
$\qquad$


#### Abstract

To induce our patrons to form clubs to purchase Seeds in quantity, we will offer the following liberal discounts on Vegetable Seeds in Packets. Mailed postage paid.




Norwood Stringless Green Pod.
Improved Refugee, or Thousand to One. Medium or late variety; grown for pick-
Iong Yellow, Six Weeks. Very early, productive, and a good shell bean. 15c pt.;

DWARE SHELI SEANS.
Horticultural Dwarf. Excellent quality as a shell bean either green or dry. 15 c White Kidney, or Royal Dwarf.................... kind for baking, and is also excellent when shelled green. 15c pt.; 25c qt.; $\$ 1.75 \mathrm{pk} . . . . . .$. Red Kidney. Similar to White Kidney, except in color. 15 c pt.; 25c qt.; $\$ 1.75$ pk.
White Marrowfat. Grown for sale as a dry bean for winter use; excellent shelled, either green or dry. 10c pt.; 20c qt.; \$1.25 pk...........................5c pkt.
Mexican or Prolific Tree. Grows 18 inches high, branching like a tree, bearing its pods so high that they do not touch the ground. $10 \mathrm{c} p \mathrm{t} . ; 20 \mathrm{cqt}$. ; $\$ 1.25 \mathrm{pk} . ; 5 \mathrm{c}$ pkt.
Navy. The old standard sort for winter use. 10c pt.; 20c qt.; \$1.25 pk........5c pkt.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

BEANS, DWARF OR BUSH.
Beans are somewhat tender, but it often pays to take some risks. Plant in warm, loamy soil at the beginning of settled, warm weather in spring, and at intervals for succession until August. Rows may be made 2 feet apart, and the Beans planted a few inches apart in the drills, or 3 or 4 Beans in hills 6 to 8 inches apart. Cultivate and hoe frequently, always, however, when the vines are perfectly dry. In hoeing draw the soil up towards the rows or plants. For String Beans, gather the pods clean as soon as fit for use. The plants will remain all the longer in bearing. One quart will plant 100 feet of drill.
Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

## GRFEN PODDED VARIFTIES.

Norwood Stringless Green Pod. This variety is superior to any other green-podded bean grown. It is positively stringless, and ripens a week earlier than the Valentine. The pods which are produced in abundance on the vines are long and fleshy; perfectly round, meaty and finest quality. 15c pt.; 25c qt.; \$1.75 pk
lough's Improved Round Pod Red Valentine. Our stock of this is extra choice. This variety is usually ready to pick in thirty-four days after planting. The pods are very thick and fleshy, of finest quality and unequaled in uniformity of ripening, which latter fact, combined with its earliness, makes it one of the most profitable sorts for the gardener. 15c pt.; 250 qt.; $\$ 1.75$ pk.....5c pkt. Bountiful. An improved Long Yellow Six Weeks. Pods grow to large size, are broad and fleshy, cooks tender. 15c pt.; 25c qt.; \$1.75 pk...........5c pkt. Burpee's Stringless Green Pod. This variety is stringless and remains tender and crisp. The pods are pale green, long and straight, perfectly round and meaty, maturing with the earliest of the green pod varieties. 15 c pt.; 25c qt.; \$1.75 pk....5c pkt. Black Valentine. This variety is very productive. Pods are extremely long, round and straight, and are quite attractive in appearance. The quality is also good, pods being decidedly tender. Suitable for both early and late planting, being extremely hardy. It will withstand early and late frosts 15c pt.; 25c qt.; $\$ 1.75$ pk....................5c pkt. Tennessee Green Pod. A very recent introduction, very meaty flat pods of large size and good flavor. Dwarf vine with heavy foliage. It is very hardy and an excellent cropper on poor soil or hillside. 15c pt.; 25c qt.; \$1.75 pk................................................... 5 pkt. qt.; \$1.75 pk.


## BEANS, DWARF OR BUSH-Continued.

## WAX OR YELIOW-PODDED VARIETIES.

Postage must be added if wanted by mail. See postal rates, second page of cover.
Round Pod Kidney Wax. The plant grows tall, strong and sturdy, with long, round, handsome, stringless pods of large size, very solid and full of meat, crisp, brittle and free from rust. The earliest and best Wax Bean for either the market or home garden. We recommend it very highly. Pint, 15c; qt., 25c; peck, $\$ 1.75 . . . . . . . .$.
Golden Wax, Improved. One of the best strains of Golden Wax. Prolific, of best quality; pods long, straight, thick and vines very erect. Pint, 15c;qt., 25c; peck, \$1.75; 5c pkt.
Davis White Kidney Wax. Very productive, white-seeded, rustless, string or snap variety; long, flat pods, which are very tender while young. Excellent flavor and very hard. The dry, white beans are good for cooking purposes. Pint, 15c; qt., 25c;
 Wardwell's Kidney Wax. One of the earliest, hardiest and most productive; is almost entirely free from rust and spots. The pods are long and showy, very tender,
Currie's Rustproof wi.
Black Wax Improved. Very early and prolific; pods round, full and stringless. Pint, 15c; qt., 25c; peck,


- ain Blac

Black Wax Pencil Pod. Pods long, pencil-like, very tender and brittle. Color rich dark yellow. It remains in good picking condition for a long season. Very prolific. Pint, 15c; qt., 25c; peck, \$1.75...................................5c pkt. Valentine wax. The earliest Wax Bean. The pods are round, very meaty, and with so very little string that they may justly be called stringless. Pint, 15c; qt., 25c;

Special prices given to Market Gardeners and others who use Seeds in large quantities.

## POLE BEANS.

The Pole or Running varieties are tender and should be sown two weeks later than Bush Beans. They succeed best in sandy loam, which should be liberally enriched with manure. Form hills 3 to 4 feet apart; plant 6 to 10 beans in a hill, 2 inches deep, leaving space in center for the pole. When well started, they should be thinned to from 4 to 6 plants in a hill. One quart will make 100 to 200 hills, according to size of the beans.

Postage must be added if wanted by mail. See postal rates, second page of cover.
Kentucky Wonder, or Old Homestead. An old favorite, with long, fleshy, deeply saddle-backed pods. Very prolific, producing an abundance of fine, stringless, crisp beans until late in the season. Of best quality. 15c pint; Cut Short, or Corn Hill. Used among corn; the best for this section. Pint, 15c; qut., 25c; peck, \$1.75.............5c pkt. Horticultural (Wren's Egg, or Speckled Cranberry). Productive and tender; is an excellent corn bean. Pint, 15c; qt., 25c;

Lazy Wife. An excellent late green podded pole bean. Pods of medium dark green color; broad, thick, very fleshy and entirely stringless. The pods remain green and tender until nearly ripe. Beans are white, and excellent as shell beans for winter use. Pint, i5c; qt., 25c; peck,
White Creaseback. A good grower and very productive. Pods 5 to 6 inches long, perfectly round, with a crease in the back. The pods are stringless, fleshy and of good quality. Pint, 15c; qt., 25c; peck, \$1.75...............5c pkt.
White Sickle. Somewhat like the Kentucky Wonder, but has a nice white bean when dry and makes an excellent shell bean for winter. Very popular in the South. Pint, 15c; qt., 25c. .
White Dutch Case-Knife. Grown for green or shell beans. Pint, 15c; qt., 25c; peck, \$1.75.........................5c pkt.
Ohio wax Pole. Large podded variety. The pods usually 7 inches or more in length, are meaty, entirely stringless and when cooked deliciously rich and buttery. Pint, 15c; qt., 25c; peck, \$1.75.................................. 5 p pkt.
Golden Cluster wax. The pods are from 6 to 8 inches long, stringless, very tender and of delicate flavor. Pint, 20c; qt., 35c..
Scarlet Runner. An ornamental climber. Bright scarlet flow-
 BUSH AND POLE IMMA BEANS. (See next page.)

## LIMA BEANS.

Postage must be added if wanted by mail; see postal rates, second page of cover.
Select land that is especially warm, rich, and well supplied with vegetable fibre or humus. Plant as soon as the soil has become warm in the spring. - Plant bush varieties in rows two feet apart and give to each plant six inches space in the row.

Plant pole varieties in hills about three feet apart, and one to two inches deep, using five or six seeds to each hill, and set a pole firmly in the centre. Manure liberally in the hill with well-composed fertilizer. Thin the plants, leaving three in each hill. Many cultivators consider it best, in planting Limas and other flat beans, to place the eye down, claiming in this way that they will germinate more quickly. Lima Beans for early use may be grown in frames and transplanted.

## DWARE OR BUSH IMMA.

Burpee's Bush Lima. The true bush form of the old, large Lima Pole Bean. It grows vigorously to a height of 18 to 20 inches, forming a circular bush, 2 or $21 / 2$ feet in diameter, requiring no poles or stakes, yielding from 50 to 100 fine pods, similar to those grown on the large white Lima Bean; pt., 20c; qt., 35c; .pk., \$2.00..........5c pkt.
सienderson's Bush Lima. For convenience and practical use in the home garden it is a really good thing. It grows without the aid of poles, in


## POLE LIMA.



Postage must be added if wanted by mail; see postal rates, second page of cover.


## Burpee's Bush Lima.

IMcCullough's Extra Iarge Lima. A choice selection of the Large Lima It produces pods and beans of large size and in great abundance. This variety is without doubt the best for private gardens. The quality is much better than any other variety, the Beans cooking rich and mealy; pt., 20c; qt., 35c; pk., $\$ 2.00$
Farly Teviathan Lima The earliest variety of Pole Lima, produces pods in Teviathan Lima. The earliest variety of short; pt., 20c; qt., 35c; ...5c pkt.
King of the Garden Lima. A vigorous grower, bearing profusely. The beans are large and of rich flavor; pt., 20c; qt., 35c; 5c pkt.
Seibert's Early Lima. The earliest of all the large Limas. Vine is hardy and vigorous, continues in bearing longer than any other, fine quality;

## BEETS-CATTLE AND SUGAR. MANGFE-WURZETSS.

All Seeds in Packets, Ounces and Quarter Pounds only, are sent free by mail, at prices quoted; HalfPounds and larger quantities, if to be sent by mail, postage must be added; see postal rates, second page of cover.

An ever increasing acreage is being planted for stock beets because of the wonderful results from feeding them. Fattening, breeding and milk cattle do equally well on them. About one-fourth of the daily rations should be of roots. Sow in rows of $21 / 2$ to 3 feet apart as soon as the ground can be thoroughly worked. Cover seed about $11 / 2$ inches, making ground firm over the seed. When 4 inches high, thin to 8 inches apart. Six pounds sow one acre.
Mammoth Tong Red. Roots of large size and excellent quality; $1 / 4 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 50 \mathrm{c} ; 10 \mathrm{lbs} .$, \$4.50.
Yellow Globe. Of large size and globular form; very productive; $1 / 4 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 50 \mathrm{c} ; 10 \mathrm{lbs} ., \$ 4.50$.
Red Globe. Large red, oval: keeps well; large crops on shallow soil; $1 / 4 \mathrm{lb}$., $15 \mathrm{c} ; 1 \mathrm{lb} ., 50 \mathrm{c} ; 10 \mathrm{lbs} ., \$ 4.50$. Golden Tankard. Bright yellow, large, handsome, heavy cropper, splendid quality; $1 / 4$ lb.,. 15c; 1 lb., 50c; 10 lbs., $\$ 4.50$.

## SUGAR BEETS FOR STOCK.

Sugar beats are not as heavy yielders as the Mangels, but are of superior quality, containing a large amount of sugar. They are excellent for feeding cows, imnroving wonderfully the quantity and quality of the milk. Five to six pounds of seed required per acre. Vilmorin's Improved. A medium sized white Sugar Beet brought by the most careful selection to the highest perfection, both in shape and color of roots. Greatly esteemed by sugar manufacturers. $1 / 4 \mathrm{lb} ., 15 \mathrm{c}$; lb., 40 c ; 10 lbs., $\$ 3.50$.
Lane's Imperial. One of the best for field culture; early, large and productive; $1 / 4 \mathrm{lb} ., 15 \mathrm{c} ; \mathrm{lb} ., 40 \mathrm{c}$; 10 lbs., \$3.50.
McCullough's Extra Large Iima.


Long Red Mangel.

BEET. $\underset{\substack{\text { (Rother. } \\ \text { Ger.) } \\ \text { Rabe, }}}{\text { ( }}$

## 

## SPECTAT PRICES GIVEN TO MARKET GARDENERS AND OTHERS USING IARGE QUANTITIES OE SEED. SEND IIST OF WANTS AND GET ESTIMATE.

The soil which is best suited is that which is rather light and thoroughly enriched with manure. For an early supply sow in spring as soon as the ground becomes fit to work, in drills about one foot apart, and one inch deep. For main crop, sow the frist week in May, and for winter use, sow in June. When the plants have attained three or four leaves, thin out so they may stand five or six inches apart. Keep free from weeds by hand-weeding or hoeing. In October roots may be taken up and stored in the cellar, or in pits outside, like potatoes, care being taken that they are not bruised or injured in the process. One ounce will sow 50 feet of drill; 5 to 6 pounds for an acre.

All Seeds in Packets, Ounces and Quarter Pounds are sent free by Mail, at prices quoted.
McCullough's Norwood. One of the most uniform of all Beets, with small tops of bronzy red. The bulbs are handsome and round, smooth, and of good marketable size. Skin, deep blood-red; the flesh dark. Oz., 10c; 1/4 lb., 30c; Arlington. A dark-leaved, early blood variety, closely following eclipse in maturing, but of much darker color and superior quality. An excellent Beet for market gardeners. Oz., 10c; $1 / 4$ lb., 35c....5c pkt. Bastians. Of quick, large growth; fine turnip form and bright red color. Oz., 10c; 1/4 1b., 30c.....5c pkt. Bassano. very sweet. Oz, 10c; $1 / 4 \mathrm{lb}$., 30c............... variety, tender, juicy; flesh white and rose-colored, Columbia. One of the finest main-crop Beets. Flesh deep blood-red, and of rich flavor. The roots can be
 tirely free from rootlets. Foliage rich bronzy purple. The flesh is blood-red, slightly zoned $\mathrm{Oz}_{\text {., }} 15 \mathrm{c} ; 1 / 4 \mathrm{lb} ., 50 \mathrm{c}$
Crosby's Improved Egyptian. An improved strain of the Egyptian Beet, especialy recommended as an extra early sort. It is much thicker than the original strain. Oz., 10c; 1/4 1b., 30c........5e pkt. Detroit. Color of skin dark blood-red; flesh bright-red, zoned
with a lighter shade, very crisp, tender and sweet. Oz.



McCullough's Norwood Beet,

Farly Blood. Flesh dark red color; a standard round variety Eclipe with small top. Oz., 10c; $1 / 4$ lb., 30c...................5c pkt. . One of the best early sorts, with a small tap root and small collar. Flesh dark red, zoned with a lighter shade, sweet, crisp and tender, especially when young, Oz ., Fdmand's Farly. Uniform smail top, bronzy red. Exceedingly tender זnd sweet; skin blood-red; flesh dark red. Oz.
 Egyptian Extra Farly. One of the earliest, of good quality and medium size; a fine forcer, small top. Oz., 10c; 1/14 1 b . Fireball. A distinct extra early variety of the finest table Lentz's Early Blood. It is fully as early as the Fo..5c pkt Half larger and of better quality. $\mathrm{O} 7.10 \mathrm{c} ; 1 / 4 \mathrm{lb}, \mathbf{3 0 c} . \mathbf{5 c} \mathbf{~ p k t}$ Half Long Blood. One of the best for winter use. Roots are only half as long as the Long Blood, but weigh as much on account of their thickness. Oz., 10c; $1 / 41 \mathrm{lb} ., 25 \mathrm{c} . .5 \mathrm{c}$ pkt.
Long Dark Blood. A good late variety for fall and winter use
Swiss Chard. The mid rib is stewed and served like asparagus and the leaves used same as spinach. Oz.; 10c; 1/4 1b.

## BROCCOLI.

(Spargle Kohl, Ger.)
Sow in beds middle of spring, transplant and cultivate the Same as cabbage. Early Iarge White. $\mathrm{Oz} ., 25 \mathrm{c}$. 5c pkt. Early Purple Cape. Oz., 25c 5c pkt.

## BRUSSELS SPROUTS.

## (Sprossen Kohl, Ger.)

Prodúces small heads, resembling miniature cabbages. Sow in May and manage as winter cabbage. Dwarf Improved. Oz ., 25c.

N O T E.-McCullough's "Louisville" Cabbage is so well known and so much sought after that many firms are offering cheap stocks. We have tested many of these and find some entirely untrue and others of inferior strains. Be sure to get our highly selected, genuine type direct from us.

## CABBAGE

CULTURE.-For plants of the earliest sorts, sow seed in January or February under glass, and prick out in flats or frames about 2 inches apart each way. Transplant to open ground as soon in spring as the land can be properly prepared. A rich, warm, fi-


## McCullough's Early Louisville Drumhead.

 brous loam is best.Have the plants in the rows 20 to 24 inches apart, and rows at least 2 feet apart. Give thorough cultivation and irrigate in dry weather if practicable. Protect the ravages of cutworm maggot and green worm. A little nitrate of soda applied around the plant is of great benefit. Potash application, such as wood ashes or muriate, may also do much good. For late Cabbage plants, sow seed in drills in open ground during April and May, and transplant in June and July, giving the plants more room than allowed for earliest Cabbages. Dusting with tobacco dust, insect powder, etc., or splashing with hot soapsuds, especially Fish Oil Soap solution, are good and safe remedies for some of the insect pests attacking plants of the Cabbage.

## Sow one ounce for 2000 to 2500 plants; 5 ounces for one acre.

McCullough's Early Iouisville Drumhead. Originated by us several years ago, and is still the peer of all other varieties for early market purposes throughout this section. It is highly esteemed by the market gardeners, and it will stand hot weather better than any other sort; will stand the entire summer without bursting; in fact, we produced heads that weighed 18 pounds on September 1, having been planted with Jersey Wakefield, which was long unfit for use. Our Louisville forms large, solid heads, and is the earliest large-heading variety, while, if planted later, it makes excellent sold heads, and is the earliest large-heading variety, whark, if planted for its certainty to head. For winter use, sow later in the season. We have received expressions of unanimous praise from all parts of the country, and could fill many pages of nur catalogue with testimonials.
20 c oz., 60c $1 / 41 \mathrm{~b}$..
Early Jersey Wakefield. A leading early variety, and one of the best for private or market gardener's use; conical shape and good quality. Oz., 20c; 1/4 lb., 60c...5c pkt.
The Charleston, or Large wakefield. Large, solid heads, of good quality, a few days later than Early Jersey Wakefield. Especially recommended for institutions and market gardeners. Oz., 20c; 1/4 lb., 60c....5c pkt.
Early Winnigstadt. Conical shape; quality very good. Oz., 20c; $1 / 4$ lb., 60c. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 c c pkt.
Early Spring. This variety is nearly as early as the Jersey Wakefield, but the heads are of the round, flat type.
Volga. This variety is early in maturing, being ready for use only a few days later than wakefield, and makes large, round heads, which are very solid. Oz., 20c;

Jarly Summer. A second early with large, solid, flattish heads, coming in a few days later than the Wakefield; a sure header. Oz., 20c; $1 / 4 \mathrm{lb} ., 60 c . .$. ..........5c pkt.
Glory of Enkhuizen. One of the earliest with large, solid heads; fine ribbed and first quality. The globe shaped outer leaves are very small, which admits of close planting. A money maker for market gardeners. Oz.,
Jarly Dwarf Flat Dutch. Large, solid heads, of fine flavor. An excellent variety. Oz., 15 c ; $1 / 4 \mathrm{lb}$., $50 \mathrm{c} . . . \mathrm{sc}$ pkt.



## McCullough's Early Market.

CABBAGE-(Continued.)
McCullough's Early Market. A new, early, round head Cabbage. Will produce double the crop of any other early variety; always extremely solid and fine ribbed. Once known, it will hold its own with the market gardeners and home growers alike. It is exceedingly tender, fine grained, and as a cropper no early Cabbage will approach it. Planted side by side with Early Jersey Wakefield, under the same conditions, the Early market produced heads of marketable size five to six days earlier and in size fully double that of the Early Jersey Wakefield; was more solid and better flavored and kept in fine condition much longer. It is very dwarf and compact, allowing of close planting. Heads fine, ball-shaped, and with few outside leaves. Size ideal for marketing. (Supply limited.)


All Head, Farly. The largest heading of the second early sorts; remarkably solid. Oz., 20c;


All-Seasons (Vandergaw). An early Drumhead Cabbage, yielding large heads. Oz., 20c; 1/4 1b., 60c.

McCullough's Premium Iate Flat Dutch. A variety for winter market; has no superior. Heads large, round, solid, broad and flat on top. They open white and crisp, are tender and well-flavored. The best variety for keeping. Our stock has been carefully selected for several years. No better strain on the market. Oz., 15c; 1/4 lb., 50c................5c pkt.
Danish Ballhead (Danish Grown). Heads of good marketable size, averaging about 8 pounds, nearly round, solid and superior quality. As a keeper it excels all others, the heads taken out in the spring being in every way in as good condition as when stored. Oz., 25c; $1 / 4 \mathrm{lb}$., 80 c .
Large Late Drumhead. A pkt. orite winter variety. The heads grow to very large size and heavy weight. They are solid, of good quality and texture, and have few loose leaves, allowing of planting closely in the field. Oz ., 15 c ; $1 / 4 \mathrm{lb}$., 50c.................. $5 c$ pkt. Surehead. This is a good strain of late Flat Dutch, having great reliability for heading. The heads grow large, and are of good texture. It is also a good keeping variety. $\mathrm{Oz}_{\text {. }}$, 20c; $1 / 4 \mathrm{lb}$., 60c..5c pkt.


MćCullough's Premium Flat Dutch.

Succession. A good second early round-headed sort. Tmproz., 20c; $1 / 4$ 1b., 60c............................. 5 c pkt. Improved Flat Brunswick. This variety can be grown either as a second early or late sort; short stems, large, solid heads. Oz.; 20c; Autumn King. A fine strain of late Cabbage. It produces regular, even heads of enormous size, with few outer leaves. Oz., 20c; $1 / 41 \mathrm{lb} .$, $60 c$.

## SAVOY CABBAGE.

They are particularly adapted to private use, where quality rather than quantity is desired, Grown in fall and allowed to be touched by frost, it is one of the most delicious of all vegetables.

Early Dwarf Ulm Savoy. One of the finest flavored sorts. Heads solid and with few outer leaves. Oz ., 25c; $1 / 4 \mathrm{lb}$., 80 c .

5c pkt.
American Drumhead Savoy. Heads large and very finely curled; short stalk and compact grower; an excellent keeper. Far superior to the ordinary imported Drumhead Savoy. Oz., 20c; $1 / 4$ lb., 60c.................5c pkt.

## RED CABBAGE.

Early Red Erfurt. Extremely early and valuable for pickling. Oz., 25c; $1 / 4$

Iate Giant Red Erfurt. A large heading, late variety, fine for pickling. Oz., 25c; $1 / 4$ lb., 80 c .

## 5c pkt.

Mammoth Rock Red. The largest and most solid of the red varieties; a sure heading sort and tender. Oz ., 25c; $1 / 4 \mathrm{c}$ pl.,
All Seeds in Packets. Ounces and Quarter Pounds only are sent free by mail, at prices quoted; HalfPounds and larger quantities if to be sent by mail, postage must be added to prices quoted at the rate of ten cents per pound.


McCullough's Earliest Dwarf Exfurt Cauliflower.

## CAULIFLOWER.

(Blumenkohl, Ger.)
One Ounce of Seed for 2000 Plants.
CULTURE. - For early use, sow in hotbeds in January and February. When plants are large enough, transplant three inches apart in boxes or other hotbeds until time to plant out. If hardened off they are seldom injured by planting out as early as the ground can be worked, $2: 1 / 2$ feet apart each way. When practicable, seed may be sown in rich soil from the middle of September to middle of October, and transplanted in frames, protect during severe weather and give light and air on mild days. The early varieties should be brought to maturity before summer heat sets in. The late sorts mature in the autumn and are cultivated same as winter Cabbages. McCullough's Earliest Dwarf Frfurt is beyond. question the best for all purposes. It heads where others fail. Year after year this has become more popular, until leading market gardeners now grow it entirely, having discarded all the older varieties, as they find our strain of Erfurt to be the surest-heading. On account of its dwarf and compact habit, the plants may be set out 20 to 22 inches each way, so that from 1200 to 1400 can be planted on an acre. For pickling it is the standard variety. The com${ }_{\$ 1.25}$ pact $1 / 4$ solid texture of the snow-white heads, combined with delicious flavor, surpass all others. Early Snowball (True) An extremely early dwarf variety, producing magnificent white heads, of fine

Early Paris. Heads large, white, compact and solid; tender and delicious.

Ienormand's. A large, late, short-stemmed variety, with well-formed white heads.

Danish Giant. A large heavy sort, maturing soon after Dwarf Erfurt. It is without exception the best and surest heading of all for summer use. $90 \mathrm{c} 1 / 4$ oz. $\ldots \ldots \ldots \ldots \ldots .$.


## CARROT.

## One Ounce Will Sow 100 Feet of Drill.

A light, sandy loam, well-tilled and manured the previous year. Best suits the Carrot. For early crop, sow as early as the ground can be worked, in drills 10 inches apart, and thin, 5 inches in the rows. The French Forcing, owing to its extreme earliness, is used for hotbed culture. The late sorts long and half-long varieties (main crop), sow from middle of May until first of July in drills 12 to 14 inches apart. Thin out to 6 and 7 inches in a row. Keep the hoe at work. Carrot seed is' slow to germinate.
McCullough's Intermediate. The roots grow very regular and smooth, productive, rich color, sweet and tender flesh. Excellent variety for either field or garden. Oz., 10c; $1 / 41 \mathrm{lb} ., 25 \mathrm{c} . . . . . .$.
Danvers. A cylindrical-shaped Carrot of good size and stumprooted, rich, dark orange color, grows to a large size, smooth and the flesh very close in texture, with little core. Oz,

Chantenay Half-Tong Scarlet. A stump-rooted variety, resembling the Nantes Carrot, but having a larger shoulder, and more productive. Oz., 15c; $1 / 4$ lb., 40c............................. $5 c$ pkt.
French Forcing. The earliest variety. It makes a small almost globe-shaped root, of an orange red color. Oz., 15c; 40 . $1 / 4$. $1 \mathrm{lb}_{.}$,
Early Scarlet Fiorn. The favorite early red summer variety; fine grained and good flavor. Oz., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c} . . . . . .5 \mathrm{c}$ pkt.
Improved Rubicon. A beautiful half-long Carrot. It grows about same length as the Danvers, but thicker and a rich, dark orange color. It is an enormous cropper and a splendid variety for the market gardener. Oz., 10c; $1 / 41 \mathrm{lb}$., 25c. .5c pkt. Ealf-Long Scarlet Nantes. A stump-rooted variety, having little Gueran no core. Flesh red of fine flavor. Oz., 15c; $1 / 4$ lb., 40c;5c pkt. nde, or Oxheart. A thick Carrot 5 inches long and blunt at the lower extremity. It grows rapidly. It is tender, of good flavor and of a deep red color. Oz., 15c; $1 / 4 \mathrm{lb}$., 40 c . Improved Long Orange. A standard late variety; deep orange color. It is of excellent table quality, and is highly nutri-
 Improved Giant Short White. The heaviest cropping Carrot grown. The flesh is white, solid, crisp and sweet, the roots are short and heavy at the shoulder, which allows them to be harvested easily. Grown for stock. Oz., 10c; $1 / 41 \mathrm{lb} ., 20 \mathrm{c} .5 \mathrm{c}$ pkt.
Iarge White Belgian. The lower part of the root is white; that growing and exposed above ground, green. It is exclusively grown for stock, Oz., 10 c ; $1 / 4 \mathrm{lb}$., $20 \mathrm{c} . . . . . .$.


## CELERY. (Selleric, Ger.)

## One Ounce Will Produce About 2,500 Plants.

To grow early Celery, sow the seed late in March in a hotbed or box and for later crops, in the open ground, as soon as the weather becomes warm, cover lightly, or better still, roll or press it in. Shade the young plants for a week or ten days, and do not let the soil dry out. The tops may be shorn off once or twice before planting, so as to insure "stocky" plants, which will suffer less on being transplanted. When from four to six inches high, transplant into broad, shallow trenches, or on the level ground, setting the dwarf sorts into rows three feet apart, and the tall varieties four feet apart and six inches apart in the rows. The soil should be light, highly manured, partially shaded and moist, or near water, as the plant must be freely watered in dry weather but it should not be put directly on them. Earthing up checks growth and should not begin until quite well grown, then earth up gradually, keeping the leaf stocks close together, so that the soil may not fall into the center of the plant, but never earth up in wet weather, nor when dew is on them. That intended for winter and spring use needs little banking; when stored for winter it will naturally bleach beautifully white.
McCullough's Paris Golden Yellow. The best Celery for early use. Its rich, golden, yellow color, close habit and compact growth, and the readiness with which it is bleached and rendered marketable makes it invaluable to the gardener and exceedingly popular with every planter. The entire stock is solid and crisp; oz.. 60c; $1 / 4$ lb., $\$ 2.25$.......................................... 5 c pkt.
Golden Self-Blanching. An early beautiful and desirable sort, requiring but little labor to blanch. The heart is a rich olden yellow with lioht yellowish-oreen

White Plume. We offer a choice strain of this valuable and popular variety. The White Plume is unsurpassed for fall and early winter use, requiring very little earth-

Boston Market. A great favorite around Boston. The stalks, when blanched, are nearly white. It is an excellent variety, solid, crisp and tender; oz., 25c; $1 / 41 \mathrm{~b} ., 90 \mathrm{c} ;$
Glant Pascal. A superior keeping sort. The stalks are very large thick, solid, crisp, and of rich nutty flavor; it blanches very easily and quickly, and retains its freshness a long time; oz., 20c; $1 / 4$ lb., 60c............5c pkt.
Giant White Solid. The best of the large growing sorts. It should never be planted closer than four feet between the rows. This variety is suitable for Southern sections of the country, as it grows freely in a hot or dry atmosphere; oz., 20c; $1 / 4 \mathrm{lb}$., 60c;......5c pkt.
Golden-Hearted Dwarf. A popular variety. HandSome color, medium size, fine flavor; oz.. 20c;

Snow White. A pure white, self-blanching variety, vigorous growth, ease of blanching, size, richness of flavor, crispness and purity, ${ }_{\$ 1.00}$ makes it an ideal celery; oz, 30c; ${ }^{1 / 4}$ lb.,
Triumph. The best late celery. A strong and vigorous grower, with very large but crisp. brittle, tender and fine flavored stalks. Will keep longer than any other sort; oz., 20c; $1 / 4$-1b., 60c................................... 5 c prt.

CFIFRIAC, TURNIP ROOTED CELERY.
Sow early in spring. Transplant in May into rich, mellow soil in rows eighteen inches apart and six inches in the row. Water in dry weather. One ounce will sow fifty feet of row.
Large Eirfurt. Roots, when sliced, and use with vinegar and oil, makes a delicious salad;

Special prices given to market gardeners and others who use large quantities of seed. Write for estimate.


Paris Golden Yellow.
CHICORY.
Iarge Rooted. Used to mix with, or as a substitute for coffee. Cultivation the same as for Carrots; oz., 10 c
Witloof Chicory. Esteemed as a salad plant. Springsown seeds produce long Parsnip-like roots by Fall, when they are taken up, the leaves cut off and the roots then trenched and covered with soil 8 inches over the crown; over this is placed a 2 or 3 foot layer of fresh manure which induces a new girowth of blanched leaves folded in the form of Cos Lettuce; these are removed as required during the Winter and eaten raw as salad. Oz., 20c.

5c pkt.

## COIIARDS. (Blatter Kohl, Ger.).

A species of Cabbage, very popular in the Southern States. Cultivate in the same manner as Cabbage.
Georgia Grown; oz., 10c; $1 / 4 \mathrm{lb}$., 30c...........5c pkt.

## CRESS.

Sow thickly in shallow drills, early in the spring, and at intervals throughout the season, for a succession, as it soon runs to seed. Water Cress requires a stream of running water, ditch, or pond, in which it will grow without care, except at first keeping weeds from interfering with it.


Extra Curled or Peppergrass. Fine flavor, and the best sort for dry Frfurt Water Cress A most desirable and appetizing salad thriving best in shallow water, on the edges of streams; oz., 35c..5c pkt.
CORN SALAD, OR FETTICUS.
(Ackersalat.
One Ounce will Sow 20 Square Feet. Six Pounds for an Acre.
Used as a salad Winter and Spring. Sow in Spring, in drills one foot apart; will mature in six to eight weeks. For Winter and early Spring use, sow in drills in August and September. Cover with straw on the approach of Winter, the same as Spinach.
Large Seeded. The most satisfactory to grow; oz., 10c; $1 / 4 \mathrm{Ib} ., 20 \mathrm{c}$;
5 c pkt.

## CORN, SWEET OR SUGAR.

## One Pound Will Plant 200 Eills. Twelve to Fifteen Pounds for an Acre in Fills.

The Sweet or Sugar varieties being liable to rot in cold or wet ground, should not be planted before May or until the ground has become warm, and for a succession continue planting every two weeks until the middle of July, in rich, well manured ground, in hills 3 feet apart each way, covering about half an inch, and then thin out 3 plants to a hill, or plant in rows 4 feet apart, and to stand 8 inches apart in the rows.


Market gardeners and others who buy Seeds in large quantities are requested to
write for Special Prices, naming quantity desired. While the prices quoted are very reasonable, yet
frequently we have orders for large quantities of certain Seeds, and the purchaser natbuy at a price lower than that charged for a sin-
gle peck or pound.
Postage must be added if wanted by mail. See postal rates, second page of cover.
Golden Rod. Produces an ear about 8 to 10 inches in length, mostly 10 rowed, ripens second early, is very prolific, and probably the sweetest corn grown for table use, having, all of the tender sweet qualities of the Golden Bantam and very much more productive. 20c pt.; 35c qt.............5c pkt.
Golden Cream. A. Golden Yellow Country Gentleman. The kernels are long and pointed and are borne on a very slender cob in irregular rows. The stalk grows from 4 to 5 feet high and bears from 2 to 4 good size ears of delicious quality. It is as early as the Golden Bantam; the ears average


Premo. The best extra early variely. It can be planted early, as the and vigorous, growing about 5 feet in height, bearing are strong fine ears to a stalk. The ears are large for so early a variety. The ears to a stalk. The ears are large for so early a variety. The grains are of medium size, well filled to each end of the
Early Sheffield. Very early variety. The stalks are strong and vigorous bearing one or two fine ears to a stalk. The ears are large and entirely free from smut. The grains are of medium size 10 or 12 rowed, well filled to each end of the ear; juicy, and of a fine
Golden Bantam. An extra early variety of vigorous growth and surpassing delicious flavor. The stalks grow about 4 feet high, and bear two and three good ears, averaging 6 inches in length. The broad, yellow grains extend to the extreme rounded tip. An excellent variety for market gardeners; as the distinct color and splendid flavor makes it one of the best sorts for successive

Kendai's Early Giant. Very early, fit for use 60 days from planting. Ears large, 8 to 10 inches in length, twelve rows to a cob. Kernels pure white, sweet and tender. 15c pt.; 25c qt.................5c pkt.
Mammoth White Cory. An extra early sweet corn. Ears, twelve-rowed; twice the size of the old Cory, white-cobbed and covered with large
Farly Minnesota. Very early, alike in the market or family garden. Ears of fair size and good quality. 15 c pt.; 25 c qt. .............. 5 c pkt.
Crosby's Early ${ }_{15 c}$ A great favorite; productive and of excellent quality.
Early Mammoth. A second early variety. The ears are of large size, tapering well toward the point; kernels large and very sweet.
Adams' Extra Early. The hardiest and earliest variety for table use, but not a Sugar Corn; can be planted earlier than any other corn.
Adams' Early. While not a Sugar Corn, is a tender white Corn for the table; can be planted earlier and will be ready in sixty days.
Country Gentleman. Will delight the most fastidious epicure, retaining its delicate tenderness and flavor even when a little old., The ears are of good size, are produced in abundance, averaging 3 good ears to the stalk. The cob is small, giving great depth to the kernels,
Stowell's Evergreen. Standard variety, both for home use and market, and is the general favorite. The ears are of a large size, grains deep, exceptionally tender and sugary, and has the advantage of remain-
White ing longer in the green state than any other. $15 c$ pt., $25 c$ qt.; $5 c$ pkt. orous grow. A . The ears very large and uniformly well filled to the tip with long, slender grains of the purest whiteness and most delicious sweet flavor. 15c pt.; 25 c qt........................................ Zig-Zag Evergreen. This is one of the sweetest and best late Sweet Corns. The ears are as large as those of the Evergreen, but the always an indication of great sweetness in any variety of Sugar Mammoth Sugar. A late variety, producing ears of very large size and
 to avoid a black appearance when cooked. 15c pt.; 25c qt...5c pkt. SEED POP CORN. Plant Two Quarts to the Acre.
White Rice. A handsome variety, kernels long and pointed, very prolific. 10 c per 1 b .
Queen's Golden. The stalks' grow 6 feet high, and the large ears are produced in abundance. It pops perfectly white. 10c per lb.
Early sheffield.

## CUCUMBER.

## One ounce will plant fifty hills; two pounds will plant one acre.

Culture.-For very early Cucumbers, sow April 1st, in a hotbed upon pieces of sod (grass side down), so that they can be readily transplanted to the open ground, in rich soil, when danger of frost is over,
or protect by hand-glasses. For early use, plant, if the weather has become settled and warm, in hills or protect by hand-glasses. For early use, plant, if the weather has become settled and warm, in hills insects is over. They succeed best in a warm, moist, rich, loamy soil. Continue planting at intervals for a succession. The Cucumbers should be gathered when large enough for use, whether required or not; if left to ripen, it destroys their productiveness. For pickles, plant from June until the middle of July. The yellow-striped cucumber or squash beetle is the most serious insect enemy of this crop. Bordeau Arsenate of Lead Mixture is by far the best remedy yet discovered. Dilute it with water, 3 ounces to the gallon, and spray it on the vines when in danger of the beetle or blight.

All seeds in Packets, Ounces and Quarter Pounds only, are sent free by mail, at prices quoted; HalfPounds and larger quantities if to be sent by mail, Postage must be added to prices quoted. See postal rates, second page of cover.
McCullough's Special. An excellent Cucumber for both forcing and outdoor use. The fruits grow 11 to 15 inches long, slim, slightly pointed, a dark glossy green color, which they keep int i ripe. In quality it is very tender, brittle and of fine flavor. A vigorous grower, withstanding blight better than other long sorts; oz., 15c;
Ohio

Ohio White Spine. This is the best strain of extra early white Spine for the market gardeners' out-door growing. It is hardy and an excellent shipper. It is extensively grown in the South for shipping North, early in the season. Fruit grows 7 to 10 inches long, of a deep green color, and full at both ends; oz., 10c;
 either under glass or in the garden. In color, a dark, glossy green; shape, slim and symmetrical, with an average length of 10 to 12 inches. They are as early as the earliest strain of White Spine; oz., 15c; $1 / 4 \mathrm{lb} ., 40 \mathrm{c} ; 1 \mathrm{lb} ., \$ 1.25$;
Early Boston Market. Largely used about Boston

by market gardeners. Very productive; oz., 10c; 1/4
 Early Cluster, A muchesteemed early variety, growing in clusters; is exin clusters; is extremely prodive; oz, $10 \mathrm{c} ; 1 / 4$
tive $1 \mathrm{boc} 25 \mathrm{c} ; \quad 1 \quad 1 \mathrm{l}$, Early Frame. ....sc pkt. variety for pickling and table. Of 10c; $1 / 4$ 1b., 25c; 1 lb., 80c..5c pkt.


Davis Perfect.

Frergreen. One of the best varieties for slicing, as it is crisp and of good quality; and as it produces fruit of medium size, it is good for pickling purposes; oz., 10 c ; $1 / 4$
80 c lb., $25 \mathrm{c} ; .5 \mathrm{c} 1 \mathrm{lb}$ pkt.

Green Prolific. One of the best pickling varieties; picking green, tender, crisp, very productive; good for table use; oz.,

Improved white Spine. The favorite market variety, largely used for forcing and extensively grown South for shipping North early in the Season. The fruit grows from 7 to 10 inches long, is quite smooth, of a deep green color, and full at both ends; oz., 10c;
 Pickle. As a pickling variety is unsurpassed. Its characteristics are its uniform growth and its immense productiveness; oz., 10c; $1 / 4 \mathrm{lb} ., 25 \mathrm{c} ; 11 \mathrm{lb}$, 80 c
Iondon or Long Green a standard iate sort ....5c pkt tender, very prolific, excellent for the table, and makes a hard, brittle pickle; oz., 10 c ; $1 / 4 \mathrm{lb} . . \mathrm{30c}$;
 Nichols' Medium Green. One of the best for pickling, and excellent for forcing or slicing. Always straight and smooth. In length it is between White Spine and Long Green; oz., 10c; $1 / 4 \mathrm{lb} ., 30 \mathrm{c} ; 1 \mathrm{lb} ., \$ 1.00$;
Japanese Climbing. It is suitable for growing either in frames or in the open air. It is very early and exceedingly productive. The fruit is excellent either for table or pickling; oz.. 15c; $1 / 41 \mathrm{~b} ., 50 \mathrm{c} . . .5 \mathrm{c}$ pkt. Gherkin. A very small, prickly variety, used exclusively for pickling, for which purpose they should be gathered while young and tender; oz., 25c; $1 / 4 \mathrm{lb} ., 75 \mathrm{c}$;

## ENGIISH FORCING CUCUMBER.

The best for forcing, attaining a length of twenty to thirty inches. They can be grown in hotbeds. where the temperature does not fall below 65 degrees at night.
Duke of Edinburg. Very large and long, dull green, quite smooth; packet of 10 seeds, 25 c .
Telegraph. Free bearing, long and extensively grown; packet of 10 seeds, 25 c .


## Black Beauty:

## EGG PLANT. (Eierpfanze, Ger.) <br> One Ounce Will Produce About 1,000 Plants.

CULTURE.-The seed requires a strong heat to germinate. Sow in a hotbed early in spring, when the plants are 2 inches high transplant Plant out when the weather becomes settled and warm. Give them a deep, rich soil; full exposure to the sun. When they germinate they are sensitive to damp and being chilled, consequently the amateur often fails to raise them.
Black Beauty. This beautiful Egg Plant is 10 days earlier than New
York Improved. The fruits are broad and thick, of most attractive form, as shown in the illustration. The skin is a rich lustrous, purplish black. This intensely brilliant coloring is uniform over the whole fruit and does not fade or change to a lighter color at the blossom end. The calyx, which attaches the fruit to the stem, is bright green, contrasting finely with the dark satin skin of the fruit, which is entirely free from spines or thorns. The fruits set most freely and are ready for market early, so that the entire crop can be gathered before there is any danger of frost. Our strain of seed is of superior quality, as we produced fruits this season that eclipsed all other varieties. 40 c oz.; $\$ 1.251 / 4 \mathrm{lb} . .$. New York Improved. A leading market variety. 40 c oz.; $\$ 1.25 \% 1 / 4 \mathrm{ib} .5 \mathrm{c}$ pkt. We will have a supply of strong potted plants from the middle of May to the first of July. See Vegetable Plants.

## HNDTVE. (Endivien, Ger.) <br> One Ounce of Seed to 150 Feet of Row

Sow in shallow drits in April for of the best and most wholesome salads for fall and winter use. transplant into good oround. or early use, or for late use in June or July. When 2 or 3 inches high, thin out to one foot apart. When nearly full grown, they must be blanched. This is done by gathering the leaves together, and tying with yarn or bass, to exclude the
Broad-Leaved Batavian. Leaves broad, light green, nearly plain, used in stews and soups. Oz., 15c;

 White Curled. Coarser than Green Curled, but the mid-rib is yellow and the ieaves frequentiy almost French Zndive (Witloof ${ }^{1 / 4}$ Chicory). " See Chicory.

## HERB SEEDS.

CULTURE.-Sow early; in April or May, in a sheltered, well-prepared spot in the open ground, either broadcast or in shallow drills about 7 inches apart. Thin out the plants thus raised, and keep clear from weeds.
Anise. Biennial. 10 c oz.
Balm, Sweet. Perennial, 1 foot 30 c.......................... pkt. Bazil, Sweet. Annual, 1 foot 20 c c oz.....5c pkt. Caraway. Perennial, 2 feet. 10 c oz...........5c pkt. Dill. Blennial, 3 feet. 10 c oz. 10 c oz...........5c pkt.
 Horehound. Perennial, 2 feet. 25 c oz.....55 pkt, Horehound. Perennial, 2 feet. ${ }^{25 c}$ oz........5c pkt.
Kyssop. Perennial, 3 feet. $25 c$ oz...........5c pkt.


One Ounce of seed for 1,500 Plants. the middle of June Early White Vienna. The flesh is white and tender, 20c oz.; $50 \mathrm{c} 1 / 4 \mathrm{lb}$ Early Purple Vienna. Differs from the above in color. 20 c oz.; $50 \mathrm{c} 1 / 4 \mathrm{lb}, \ldots . . . . . . . . . . .$.


The Kales are more hardy than Cabbage, and make excellent greens for winter and spring use, and are improved by frost. Sow from May to June, and cultivate the same as Cabbage. For early spring use, sow in September, and protect during the winter.

Special Prices Given on Kale Seed in Quantities.
All Seeds in Packets, Ounces and Quarter Pounds only are sent free by mail, at prices quoted; Half Pounds and larger quantities if to be sent by mail, postage must be added to prices quoted. See postal rates, second page of cover.
Norwood Dwarf Curled. A beautiful curled and crimped sort, of strong, vigorous habit, attractive appearance and a bright green color. It is superior to all other sorts, and is, undoubtedly, the best for private gardens. rarely exceeds 12 inches in height, but spreading out under good cultivation to 2 feet in diameter. 10c oz., $25 \mathrm{c} 1 / 4 \mathrm{lb}$., 85 c 1 b .
Dwarf Curled German or Siberian. Leaves yellowish-green finely curled. Sow in September for early winter and spring use, 10 c oz.; 20c $1 / 4 \mathrm{lb}$; 40 c lb.........5c pkt. Market Gardener's Special. A beautifully curled and crimped variety, of strons, vigorous habit. perfectly hardy, bright green color and very attractive in appearance, Tall Scotch. Leaves green, beautifully curled and wrinkled; grows about ${ }^{2}$ feet in heioht; hardy, being improved
by frost. $10 c$ oz.; $25 \mathrm{c} 1 / 4 \mathrm{lb}$; 85 c lb............5c plat.


Norwood Kale.

## HENE. (Lauch, Ger.)

Sow early in April, in drills one foot apart, one inch deep. When the plants are six to eight inches high, transplant in a deep, rich soil in rows twelve inches apart and six inches in the rows, as deep as possible, so that the neck may be covered and blanched. Draw the earth to them as they grow, The seed may also be sown in September, and the young plants transplanted in the spring. is wonderfully uni-

 Large musselburgh. of enormous size; leaves large and broad; very mild; pleasant flavor.

20c oz.; 60c $1 / 4 \mathrm{lb}$. ; 5c pkt.

## LETTUCE.

CULTURE.-Sow the seed in hotbeds or flats during February or early March, prick the young seedlings out in flats or cold frame 4 inches apart each way, and as soon as a nice, rich, warm spot can be prepared in open ground in spring, transplant the well hardened plants in rows a foot apart, allowing thin the plants to 5 or more inches apart. Sow for succession every few weeks until the fall.


## McCullough's Nonvareil Iettuce.

slow to seed. The leaves are curled and crimped; very crisp and ead of is Mammoth Black Seeded Eutter. Heads large solid, blanching to white nt center Leaves smooth, thick brittle, tender and extra fine flavored, Long standing. 15 c oz.; 40c 1/4 lb................... 5 c c plt. May King. A very early and extra fine variety for spring and fall use in the open garden; also for growing in cold frames during the winter months. The heads are 6 to 7 inches in diameter, with the light green outer leaves folding closely about the round, solid heads. The inner leaves are blanched to a golden yellow and have a fine, rich, buttery flavor. We recommend repeated plantings in the spring and fall. 15c oz.; 40

Eanson. Heads green, with white heart. Large size; crisp, tender. 15c oz.; 40c $1410 . .5 c$ pkt
Boston Market. This is an improved variety of the Tennis Ball, and attains a large size. It grows very compact, is white and crisp, and is one of the very best varieties for farcing.


Brown Dutch. A dark, brown-spotted variety, remarkable for its hardiness. The inner leaves are beautifully blanched, and very sweet and tender. 15c oz.; 40c $1 / 4 \mathrm{lb} . . . . .$.

Tennis Ball, Black Seeded. A favorite forcing variety, forming a large head. It makes but few outer leaves, and for this reason can be planted quite closely under glass. 15 c oz.

Tennis Ball, White Seeded. The sort so extensively grown for forcing and heading under glas; good size, firm heads, and very white and crisp. 15c oz.; 40c 1/4 lb.................5c pkt.
Yellow-Seeded Butter. A distinct sort, making a compact yellow head, of excellent flavor, withstands heat well and remains crisp and ton-


## HEAD VARIETIES

McCullough's Selected Nonpareil. The finest market variety Its beautiful yellowish-green color crimped curied and well formed heads, tender quality and sweet flavor, place it at the head of the list for the market gardener or for family use... It vithstands the heat of summer and.retains its sweetness for a long time. 15 c oz.; $40 \mathrm{c} \quad 1 / 4 \quad 1 \mathrm{~b}$;

All Seasons. Forms large and solid heads. The leaves are light green and the head being very large, there are a great many large, crisp, tender blanched inside leaves. It is hardy and stands extremes of climate better than other sorts. Is slow to seed and is suitable for both early and late sowing. 15 c oz.; $40 \mathrm{c} 1 / 4 \mathrm{lb} . . . . . . .5$. 5 c plet.
Big Boston. Resembles the popular Boston Market. but is nearly twice as large; desirable for forcing in frames and for spring and fall outdoor planting. 15 c oz .; $40 \mathrm{c} 1 / 4 \mathrm{lb}$.

Denver Market. This Lettuce is highly recommended either for forcing or ecom ground. forms farge. sor open ground; forms large, solid


## Paul Rose Musk Melon.

Bocky Ford. A variety extensively grown in Colorado. The reasons for the widespread popularity of these melons are their superb table and wonderful shipping qualities, which enables them to be carried great distances, and at arrive in first-class condition for market The fruit is of medium size oval shaped, The fruit is of medium size, oval shaped, heavily netted and very solid. The flesh is green, thick and juicy. It is early and wonderfully productive; oz., 10c; $1 / 4 \mathrm{lb}$., 25c; 5c pkt.
Tip-Top. A yellow-fleshed melon of handsome appearance and excellent quality. A medium sized Muskmelon, nearly round in shape, with shallow netting on skin. The flesh is deep yellow and has a rich flavor. It is a productive variety, suitable for growing in all sec-

Netted Gem. One of the earliest small melons. Globular shape, uniform in size; flesh light green tinged with yellow and of very fine


Osage, or Miller's Cream. A favorite salmonfleshed variety. Large, oval, slightly ribbed and netted; skin is very dark green. Flesh is very thick and sweet flavored, most delicious to the rind. The whole crop is very even and fruit extra heavy, owing to this thickness of the flesh. A great favorite for both market purposes, and the home garden oz., 15c; 1/4 1b., 45c........................5c pkt.
o use Melon seed in quantity. who use Melon seed in quantity.

Paul Rose. Cross between the old Netted Gem and Miller's Cream and combines the good qualities of both. The fruit grows uniform. It is a heavy cropper, the vines are healthy and robust. The flesh is salmon colored, very deep and of fine melting character, with thin tough rind and small seed cavity. The flavor is excellent, sweet and rich; oz., 10c; $1 / 41 \mathrm{lb}$. . 35 c ;

5c pkt.
Fmerald Gem. Ripens early; medium size; nearly round; flesh a delicate light salmon color, very thick, fine grained, and very few melons can compare with it in superb flavor. The rind is thin, dark green, ribbed, slightiy netted. One of the best for home use; oz., 15c; $1 / 4$ 1b., 50c.
Jenny Iind. The earliest variety; netted, of small, round size; excellent flavor. The vines do not grow as large as some of the other varieties, but are quite productive, and it is a favorite early variety; oz., $10 \mathrm{c} ; 1 / 4 \mathrm{lb} ., 35 \mathrm{c}$;
Improved Green Nutmeg. A large melon, nearly round, deeply ribbed, flesh, thick, light green delicious flavor; oz., 10c; $1 / 4 \mathrm{lb}$, 30c...5c pkt
Acme. Medium size, oval, slightly pointed at end, ribbed, covered when ripe with course netting. Flesh thick, green, very fine flavored and sweet; oz., 15c; $1 / 4$ lb., 45c......5c pkt.
Burrell Gem. A superior new orange-fleshed shipping melon. Of splendid flavor, sweet and aromatic; oblong in shape, smoothly rounded ends, closely netted and slightly ribbed, dark green skin. Rind thin, but very tough; flesh exceptionally deep rich salmon-orange color Fruits average 6 inches long by 4 inches deep. Very fine for marketing; oz., 15c; $1 / 4$

FIackensack. Melons grow to large size and attractive appearance. Flesh green, very sweet and sugary. Outer skin is heavily netted; oz., 10c; 1/4 1b., 35c........................5c pkt.
Extra Early Hackensack. A careful selection from Hackensack. Produces melons two weeks earlier than the well-known Hackensack; heavily netted, and has light green flesh of most delicious flavor; a splendid Cantaloupe melon. Its shape and solidity admit of its being packed very closely in crates for shipment, and it will keep in good condition for several days after picking, Large fine form; grown also for the home garden



Rocky Ford.


## WATERMELONS.

## One Ounce for Thirty Fills; Four to Five Pounds for an Acre.

CULTURE.- See directions given under Muskmelons. Watermelons, however, are slightly less subject to "bug" depredations and disease attacks than Muskmelons. At the same time they are more easily hurt by strong spray mixtures, and caution in the use of such mixtures is advisable

Special Price Given to Those Who Use Melon Seed in Quantity. Write for Estimate.
Tom Watson. A very popular, new Melon, early, fruit uniform in size, oblong in form. The skin is rich, dark green; flesh bright red, very sweet and tender, the seeds lie close to the rind, leaving a very large, solid, red core. 10c oz.; 30c $1 / 4 \mathrm{lb} . .$. ........................ pkt. Wonderful. Handsome appearance and fine quality. The fruits are oblong in form, averaging 20 inches in striping of light green on a dark ground. The flesh is of a pale pink color, very crisp and sweet. The fruits Black Diamond. Skin dark green, almost black. Fi........... prit. red; shape rather oval; large, productive and fine qualBlack Spanish. Fruit medium size, almost round; skin dark green; flesh red, sweet and delicious. 10 c oz.; $20 \mathrm{c} 1 / 4$
Blue Gem, or Iceberg. Grows large. Flesh a beautiful shade of pink, darker than Kolb's Gem, heart large and flesh extends close to the outer skin, sweet and delicious. 10c oz.; 20c $1 / 4$ lb.......................................... 5 c pkt.
Boss. Color dark green. fiesh deep scarlet; rind hard but thin. quality the best Cuban Queen. Flesh bright red, tender and melting, luscious, crisp. very sugary. 10c oz.; 20c $1 / 4 \mathrm{lb} . ; 5 \mathrm{c} \mathrm{pkt}$. Dark Icing, or Ice Rind. A very solid sort with a thin rind, and possesses most delicious flavor. 10c


Hoosier King. A large variety, oblong shape, with skin


Kolb Gem.

## MUSHROOM SPAWN.

Mushrooms can be successfully and profitably grown during the winter and spring months in frames under greenhouse benches, in the open fields, or in cellars or outhouses. To cultivate mushrooms successfully does not always require extensive experience. Some care is necessary, however, in the selection of materials, and in forming the beds; but the matter of securing and maintaining the proper temperature in the room and in the beds needs close attention, for success depends very much upon this point. Mushrooms may be grown in a great variety of situations-a dark room, cellar, stable or elsewhere. Any place in which an even tem-
 perature of about 50 to $60 \mathrm{de}-$ grees can be kept is suitable. For material for the bed, use fresh horse manure free from straw or chips, and good loamy soil. Some growers use the manure mixed with loam, after first having well fermented it by alternately piling it and mixing for a few weeks, but it is undoubtedly better not to allow the manure to heat much before forming a bed. Use one-fourth to one-third loam the rest manure. Mix very thoroughly and upon a dry firm bottom make the bed of this mixture, about four feet wide and of any desired length. Build it up evenly, press it down firmly, and leave it ahout a foot high. It will shortly begin to heat. Use a thermometer to thrust into the bed and note the temperature. When the heat has partially subsided, leaving a temperature of 80 degrees put in the spawn. Pieces from the size of walnuts to that of eggs are placed in the bed about a foot apart, deep enough to cover them well and the manure pressed down Let it remain thus ten or twelve days, then cover with two inches of fresh loam, and make this moderately firm. The ped is finished by covering all with four or
five inches of straw or other litter. Watering is not necessary, unless the surface of the bed gets very dry; in this event moisten freely with water at a temperature of about 90 degrees. In gathering the crop, do not cut, but twist them off carefully, filling up the holes carefully with loam to keep insects from the roots. In six or eight weeks from spawning the beds mushrooms should appear.

We supply many of the largest commercial growers in the United States and have on hand at all times in the season fresh spawn of the best manufacture.

One pound of Spawn is sufficient for a bed $2 \times 6$ feet. Postage must be added if wanted by mail; see postal rates, second page of cover.

How to Grow Mushrooms-A booklet of 14 pages with full and complete instructions to grow Mushrooms successfully, will be mailed $\$ 1.00$ worth of Spawn when requested.

Mushrooms: How to Grow Them. Fal coner. 169 pages. Cloth, Price, $\$ 1.00$.

## ENGIISF MILTTRACK MUSHROOM SPAWN.

Our celebrated English Milltrack brand (made by the best maker in England specially for our trade) has gained an enviable reputation among critical growers for its uniform good quality, and can be thoroughly relied upon to produce a good crop of the best Mushrooms. Commercially it is more planted than any other spawn. It comes in pressed bricks weighing about 20 ounces. They are broken into pieces the size of a walnut and pit sidewise in the beds 10 to 12 inches apart each way. Price, by express-customer to pay charges - 20 c per brick; 15c per 1b.; $\$ 1.00$ for 10 lbs.; $\$ 9.00$ for 100 lbs. By mail, 25c per lb.; 30c per brick, postpaid.
AMERICAN MADE PURE CULTURE MUSHROOM SPAWN.
A very superior article, made in this country from carefully selected spawn, which it is claimed is much more vigorous than the imported article, and will produce Mushrooms of a very superior quality and flavor. The popularity of Pure Culture Spawn is increasing rapidly and many of the large growers are now using it. They claim it is a surer crop. Amateurs have much the best results with this kind. By express-customer to pay chargesy mail, 35c per brick;


Okra or Gumbo.

## ONION SEED. (Swiebel, Ger.)

One Ounce for 150 Feet of Drill. Five to Six Pounds for One Acre. Onion Seed for Sets, 30 to 40 Pounds per Acre.
CULTURE-For sets, drill the seed thickly as early as possible in the spring. As sonn as the tops dry off in the summer, remove to a dry airy place. May also be grown to full size the first season by sowing thinly in drills one foot apart and one-quarter inch deep, in March or early April, thinning to three or four inches apart.

By sowing in frames in February or March and transplanting in April, onions of immense size can be obtained. For this purpose the Southport Globe varieties (white and yellow) and Prize Taker are usually preferred. Onions delight in a strong, rich, deep loamy soil, and succeed well if grown successive years on the same ground.

Special price given to those who use onion seed in quantity. Write for estimate.
Yellow Globe Danvers. A standard sort and one of the most desirable; an excellent keeper and very productive. Our strain of this variety is the true globe shape, and not of the flat type. Onion growers throughout the country prefer this type of onion to all others, and it is with this in view that the bulbs from which our seed is grown are specially and carefully selected as to shape. It is the best paying onion that is grown for general crop, and has been the leading variety for years; oz., $15 \mathrm{c} ; 11 / 4 \mathrm{lb}$. 50c ............................................................ 5 c pkt.


Yellow Danvers. Bulb of good size and flat, the standard yellow onion for market or home use, being both early and an enormous yielder as well as good keeper; oz, $\mathbf{1 5 c} ; 1 / 41 \mathrm{~b} ., 40 \mathrm{c} . \ldots . .$.
Mammoth Silver King. A large, flat variety. Specimens have been grown to weigh as high as 4 lbs . Skin pure white and flesh tender; oz, 20c; $1 / 41 \mathrm{lb}$., 60 c

Large Red Wethersfield. Grows to full size the first season from seed. The Onions
 are large, flat in shape, with skin of a purplish-red color and flesh of a pur-plish-white color, rather strong-flavored and an excellent keeper. Oz., 20c; 1/4 lb., 60c. . . . . . . . . . . . . . . . . . . . . . . . . . . 5 c pkt.
White Queen, A rapid-growing variety of mild flavor; pure white, and splendid for pickling. Oz., 20c; 1/4 1b., 60c.........5c pkt.

White Barletta. An extra early small, white


Southport Yellow Globe. A very large, handsome, globular-shaped yellow variety, very productive, of mild flavor. The outer skin is a beautiful pale yellow; the bulbs are of a beautiful globe shape and good keepers. Oz., 20c; $1 / 4$ 1b.. 60c.
Southport White Globe. Pure white color, mild flavor. A good keeper and very productive. It is best to dry these Onions in a shady place, where they will get plenty of air. Oz., 20c; $1 / 4 \mathrm{lb} ., 60 \mathrm{c} . . . \mathrm{C} .5 \mathrm{c}$ pkt.

## Mammoth Silver King.

Southport Bed Globe: Beautiful globe shape; of medium size and a good keeper and of superior quality. This variety is very popular in some sections.

Oz., 20c; 1/4
Yellow Dutch, or Strasburg. A good keeper and well flavored; bright straw-colored skin and somewhat flattened shape. The Onions grow to a good size and are very mild. This variety is largely size and are very mild. This variety is largely
grown for sets on account of its excellent keeping qualities. Oz., $15 \mathrm{c} ; 1 / 4 \mathrm{lb} ., 50 \mathrm{c} . . . \mathrm{I}^{2} .5 \mathrm{c}$ pkt.
White Portugal, or Silver Skin. This variety is one of the leading white sorts. The bulbs are flat in shape and mature early. Largely used for growing sets. Oz., 20c; $1 / 4$ lb., 60c............... 5 c pkt.
Prize Taker. This is the large, pale, yellow Onion that is offered for sale in the fruit stores and markets in the fall. Flesh white, of mild and delicate flavor. The large Onions are raised first year from seed, and produce enormous crops. Oz., 20c;

## ONION SETS.

## Prices Subject to Market Changes.

Onion Sets should be planted out as early in the spring as the ground is dry enough to work; plant them in rows 12 inches apart, with sets 2 inches apart in the row. Yellow Onion Sets, 250 per quart by mail postpaid. White Onion Sets, 25c per quart by mail postpaid. Chives. (See Vegetable Plants.)

When larger quantities of Onion Sets' are desired, write for prices.


Prize Taker.


## GARDEN PEAS:

## One Quart Will Plant About 100 Feet of Drill. One and One-Half to Two Bushels for an Acre.

CULTURE.-Peas succeed best in light, dry, loamy soil. Early and Dwarf sorts require richer soil than the late varieties. If manure is used, let it be old and well rotted, or there will be a rank growth of vines with few pods. Sow the early, smooth, round sorts as early in spring as the ground can be worked. Seeds of wrinkled varieties are more liable to rot if the ground is cold, and must be planted later. From the first sowing, sow every two weeks until June for a succession. After that there is danger of mildew Discontinue then until August, when a planting of extra early or early sorts will often produce a good crop. Sow the seed in single drills, three feet apart for dwarf sorts and four for tall sorts, or in double drills six or eight inches apart, one inch apart in the drill, and not less than four inches deep, since deep planting prevents mildew and prolongs the season Cultivate well, and draw the earth twice to the vines during growth. Stake the tall varieties when they begin to vine. Pick the pods as soon as fit, and allow none to ripen on the vines, as they will then cease bearing. All kinds of Peas do best when supported with brush or wire.
Special Price Given to Those Who Use Peas and Other Seed in Quantity. Write for Fstimate.
Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

## EARIX VARIETIES.

McCullough's "Ohio Chief." This new Pea is of the extra early type and from our trials and observation, it promises to prove the earliest Pea in the market. It grows about two feet high, stem strong, very vigorous and bears well-filled, round pods about three and a half inches long. It is a white seeded variety. All growers of Peas should give it a trial. 20c $1 / 2 \mathrm{pt}$. ; 35c pt. (Supply limited.)...................................... $10 c$ pkt
Maud S. The earliest and most prolific Pea known The pod is of a dark green color, of a full round shape, and of strong texture which es pecially fits it for shipping long distances. For a late fall crop it has few equals, and is the market gardener's favorite for all seasons. The far northern point at which our Peas are grown renders them almost proof against cold, and the best for early spring or late fall crop. Thousands of market gardeners have pronounced this Pea unequaled in earliness, yield and regularity of growth. Make first planting as early in the spring as the ground will permit and cover well. 20c pt.; 35c qt.; 60c 2 qts...................... $5 c$ pkt.
Gradus, or Prosperity. The most popular high quality, extra early wrinkled Pea. This remarkable Pea is not only large and of the best quality, but is within two or three days as early as the small, round, extra early sorts. Gradus is a wrinkled Pea, growing about 30 inches high; the pods are of a bright green color, measuring 4 inches or more in length, as large as Telephone, well The peas are of the highest table quality and re filled with luscious peas, 8 to 10 or more in a pod. The peas tain in a remarkable manner their color and attractive appearance after cooking. Make the earliest sowing in the warmest spot in the garden.

Thomas Iaxton. A cross between Gradus and one of the extra early sorts. It ripens within a day or two of the earliest round varieties, and is extremely productive. The pods are very large and contain 7 or 8 large-sized wrinkled peas of the finest flavor. It is darker colored than the Gradus and hardier in constitution; height, three feet. 25c pt.; 45 c qt.; Prolific Early Market. ' The Mongest podded, more peas in pod, and larger number of pods to the vine than any other extra early. It blooms two days later than Maud S., and in the development of pods suitable for picking about three or four days later; it will yield 30 to 50 percent more than any other strain of Extra Earlies. A desirable Pea for the market gardeners, as their larger size and the fine quality will make them a general favorite. (Supply limited. Price on application.)
Alaska. A wonderful early, smooth, blue Pea; vines slender; pods very dark green, about three inches long, well filled with small, smoooth, blue-green peas. The earliness, uniformity in ripening and deep color render it a desirable market and canning pea; height, two feet. 20c pt.; 35c qt.; 60c 2 qts............. 5 c pkt. Ameer (Claudit). An early dwarf Pea; is exceedingly productive. We recommend it to those who have been using Alaska. The seed resembles this variety, but is larger and more reliable. 20c pt.; 35c qt.; 60c 2 qts....5c pkt.

Nott's Excelsior. A dwarf wrinkled Pea of the highest excellence. The pods average three inches in length and are well filled with peas of large size and unusually sweet flavor; one and one-fourth feet. 20c pt.; 35c qt.; 60c 2 qts................................................ $5 c$ pkt.
Extra Early Premium Gem. An improved Little Gem Dwarf, green wrinkled, very prolific, fine flavored, large pods, excellent either for marflavored, large pods, excellent home use; one and one-half feet. $20 c$ pt.; 35c qt.; 60c 2 qts.....................5c pkt.
American Wonder. This variety stands unrivaled in point of flavor and quality. It is dwarf and robust in habit, growing from 10 to 15 inches in height, according to the soil. 20 c pt.; 35c qt.; 60c 2 qts.......................5c pkt.
Philadelphia Extra Early. A slightly later strain of the white seeded extra early pea, Maud S. Sold also as first and best Rural New Yorker, Daniel O'Rourke. Best extra early, etc., etc. 20c pt.; 35c qt.; 60c 2 qts................5c pkt.

WE FANDTE PEAS BY THE CARIOAD. Write for Special Prices if You Use Them in Quantity.

## GARDEN PEAS - Continued.

## Second Early and Main Crop.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.
Abundance. Pods containing 6 to 8 large wrinkled Peas. It ripens about one week after the earliest kinds. A feature of this variety is its remarkable tendency to branch out at the roots, and for this reason the seed should be planted thinly; height, $11 / 2$ feet. 20c pt.; 35c qt.; 60c
McIean's Advancer. The leading Pea for second-early, excellent flavor, very productive. This Pea is used very extensively by market gardeners on account of its productiveness, the fine appearance of its pods and its exceedingly fine flavor. It is a wrinkled variety, grows about two feet in height, but needs no brushing, as it stands up very strong itself. Has broad, long pods, which are abundantly produced and well filled to the end. Ripens so uniformly that the vines can be picked clean in two pickings. 20c pt.; 35c qt.; 60c 2 qts....................5c pkt.
Alderman. It is one of the finest of the large-podded summer varieties. The haulm grows five feet in height and is of a rich, dark-green coloring, as are also the large pods. Pods frequently measure nearly six inches in length and contain from ten to twelve very large peas of superior flavor. 20c pt.; 35c qt.; 60c 2 qts....................... $5 c$ pkt.
Admiral Dewey. The largest podded Pea yet introduced. Height, $31 / 2$ feet; pods a rich, dark-green color, frequently 6 inches long, beautifully shaped. Peas large, tender and of fine flavor. 20c pt.; 35c qt.; 60c 2 qts......................5c pkt.
Duke of Albany (American Champion). A strong, vigorous grower; pods extra large, dark-green, closely filled with Peas of excellent flavor. Three and one-half feet. 20 c pt.; 35c qt.; 60c 2 qts..................................... 5 c pkt.
Telephone. The favorite late variety; extra large pods. This Pea has proved to be a most valuable introduction. Vine large, coarse leaves, height about 4 feet. The pods are very large and filled with immense peas, which are largest of any. Tender, sweet and of splendid quality and flavor. The stock we offer has been selected with every care, and will give satisfaction to the most exacting grower. 20c pt.; 35c qt.; 60c 2 qts....................................5c pkt.
stratagem. A favorite with market gardeners and for the kitchen garden. Strong vines, immense pods, large peas, heavy cropper. The vines are strong, vigorous and covered with immense pods, many of which measure $51 / 2$ inches in length and containing as high as 10 large, richly flavored, wrinkled peas. Vines very strong and needing but slight support. Height 2 to $21 / 2$ feet. 20c pt.; 35c qt.; 60c 2 qts................................................ 5 c pkt. sverbearing. A prolific and continuous-bearing pea, giving it special value for both summer and autumn use; pods 3 to 4 inches long, containing 6 to 8 large, wrinkled peas, of rich flavor, sweet and tender. Three feet. 20c pt.; 35c qt.; 60c 2 .qts................................................... $5 c$ pkt.
Improved Champion of England. One of the best known of the older varieties'; a tall-growing, green, wrinkled marrow; quality unsurpassed; pods medium; peas large. Five feet. 20c pt.; 35c qt.; 60c 2 qts..........................5c pkt.
Iong Island Mammoth. A strong grower, producing mammoth pods containing 10 to 12 large peas. When cooked they are a deep, dark-green color and fine flavor; 31/2 ft. 20c pt.; 35c qt.; 60c 2 qts...5c pkt.
Pride of the Market. A medium early dwarf pea of vigorous habit, very productive; pods are large, of a medium green color; contains 7 to 9 peas of fine quality; 2 ft .20 c pt.; 35c qt.; 60c 2 qts:; 5c pkt.
Telegraph. A second early variety, very robust in habit, bearing immense pods. The peas when cooked are of a deep green color. A great bearer and of fine flavor; $31 / 2 \mathrm{ft}$. 20c pt.; 35c qt.....5c pkt.
Black-myed Marrowfat. This and the White Marrowfat are extensively grown as field peas, as they are hardy, productive and bear well-filled pods; 4 feet. 15c pt.; 25c qt.; 45c 2 qts............... 5 c . pkt.


Norwood Parsley.

## Large White Marrowfat. A favorite variety; large well-filled

pods. Five feet. 15c pt.; 25c qt.; 45c 2 qts....5c pkt.
CANADA FIFLD PEAS. (See Field Seeds.)
Write for Special Prices on Large Quantities of Peas.
PARSTET. (Petersilie, Ger.)

## One Ounce to 150 Feet of Drill.

Sow thickly early in April, in rows one foot apart and one-half inch deep; thin out the plants to stand six inches apart in the rows. The seed is of slow germination, taking from three to four weeks to make its appearance, and orten failing to come up in dry weather. To assist its coming up quicker, soak the seed a few hours in warm water or sprout in damp earth, and sow when it swells or bursts. For winter use protect in frame or light cellar.
Extra Double Curled. Beautifully crimped and curled. 10c oz.; 20c 1/4 lb......................................................
Moss Curled. Fine for garnishing. 10c oz.; 20c $1 / 4$ lb...5c pkt. Norwood. Fine curled leaves of rich dark green, compact growth, finest quality. 15c oz.; 40c $1 / 4 \mathrm{lb} . . . .$.
Elamburg Turnip Rooted. The fleshy root resembles a parsnip and is used for flavoring soup, stews, etc. 10c oz.;
POTATOES. (See Field Seeds, etc.)


Long, Smooth, Hollow Crown.
Neapolitan. The earliest large Pepper, and most productive. The skin and flesh bright red, thick meated, sweet and mild. $\quad 30 \mathrm{c}$ oz.; $\$ 1.000^{1 / 4} 1 \mathrm{lb}, \ldots . .5 \mathrm{c}$ pkt. Ruby Ting. Large size, ruby red pods; flesh
 Spanish monstrous. Eariy and productive; flesh very sweet and Sweet Mountain oz; $75 \mathrm{c} \mathrm{c}^{1 / 4}$ lb................................... pkt. rind thick, tender and fleshy. 25 coz .; 75c $1 / 4 \mathrm{l}$ lb....5c pikt.

## PUMMMMN. (Kuerbis, Ger.)

One Ounce for Fifteen Eills.
They are generally planted in cornfields, but they can not grow as large or fine as if the vines were not shaded. A good plan would be to plant a few seeds in the potato patch, as they are less apt to injure the crop of potatoes than the corn.
Calhoun. The outside is a creamy brown; the inside flesh is a deep salmon yellow; thick and fine-grained, and the seed cavity very small. It cooks very yellow, and makes pies of high, rich color. 10c oz; $20 \mathrm{c} 1 / 4 \mathrm{lb} . ; 60 \mathrm{c} 1 \mathrm{~b} . \ldots . . . .5 \mathrm{c}$ pkt. Cashaw Crook-Neck. Grows to a medium size; flesh light yellow, and is the best variety for table use. 10c. oz.; ${ }^{25 c}$ Golden Cashaw. Crook-neck. Beautiful golden-orange color; an improvement on the old Cashaw. 10c oz; ; 20c $1 / 4 \mathrm{lb}$. ; 60 c lb. Tennessee sweet potato. Medium size, pear-shaped, a little ribbed, color creamy white, sometimes lightly striped with green. 10c oz.; 20c 1/4 lb.; 60c lb....................... 5 c pkt. Japanese Pie. Is very productive, ripens early, of medium size, good keeper, and weigh 15 to 20 pounds each. The flesh Mammoth Tours. A productive French variety, which grows to Large Cheese. An excellent keeper, color bright orange... ${ }^{\text {an }}$ inc pist.
 Kentucky Field. Good for cooking purposes and for feeding
 Cover.

## RHUBARB. (Rhabarber, Ger.)

One Ounce Will Produce 600 Plants. For Rhubarb Roots, see Vegetable Plants.
CULTURE, Sow in April in drills 18 inches apart, and cover the seed with fine soil, pressing it down firmly. When the plants are strong enough, thin out to 6 inches.


Tennessee Sweet Potato Pumpkin.

CULTURE. Sow early in the spring in hotbeds, if possible, and transplant to the open ground when the weather is favorable, or sow in drills in warm, mellow soil, late in the spring and then thin out so as to stand 18 inches apart. For the convenience of those who only desire a few plants, and do not wish the trouble of starting them, we will have a
supply of strong, healthy plants ready by the middle of May.


Celestial. Fruit conical in shape, one to two inches long; green from the blossom, turning alternately to lemon, golden and scarlet. 25c
 Chinese Giant. Flesh is thick, mild and very sweet. Largest Pepper grown. 35c oz.; $\$ 1.25$ 1/4 lb.; 5 c pkt.
Golden Dawn. Of same shape and size of Large Bell, but of more delicate flavor color yellow more delicate flavor; color yellow. 25c Large Bell, or Buil Nose. Large and early, rind very thick; color glossy red; flavor mild and pleasant. 25c oz.; 75c $1 / 4 \mathrm{lb} . . . . . . . . . . .5 \mathrm{sc}$. pkt. Iong Red Cayenne. From 3 to 4 in. long, bright-red color, very productive and hot. 25 cozoz ;
$75 c$ 11/4 lb.; 5c pkt.

## One Ounce for 200 Feet of Drill; 5 to 6 Pounds for an Acre.

Sow seed early in spring, in deep, rich soil in drills. Scatter the seeds thinly and cover evenly with the rake. After the appearance of the plant the soil must be stirred frequently until the leaves cover the ground. The seed is slow to germinate, and is frequently a long time in coming up; will vegetate sooner by steeping 6 to 12 hours in a liquid manure, diluted with water, and mixed with sand before sowing. When well up thin out to 5 or 6 inches apart in the rows. Unlike Carrots, they are improved by frost, and it is usual to take up in fall a certain quantity for winter use, leaving the rest in the ground until spring, to be dug as All Seeds in Packets, Ounces and Quarter Pounds only are Sent Free by Mail, at Prices Quoted; Half-Pounds and Iarger Quantities if to be Sent by Mail, Postage Must be Added to Prices Quoted. See Postal Rates, Second Page of
ery smooth, flavor roots roots growing to an ideal shape and having the disStudent, or Guernsey. A good half-long variety. smooth. sweet and of delicate Havor. 10 c oz.; 20c $1 / 4 \mathrm{lb} . ; 60 \mathrm{c} 1 \mathrm{lb}$.

## PEPPER. (Pfeffer, Ger.)

5c pkt.

## ne Ounce of seed for 1,500 Plants.

## RADISH. (Rettig, Ger.)

One Ounce to 100 Feet of Drill. 8 to 10 Pounds for an Acre. When ordered at pound rates postage must be added if wanted by mail; see postal rates, second page of cover.
CULTURE.-Sow: for very early use in hotbeds during the winter or early spring, or later on in sheltered borders, in well-manured, deeply dug and finely raked soil; if. not well stimulated into a rapid growth they become fibrous and tough. Sow in drills ten inches apart, and thin to two inches in the rows. Sow at intervals of two or three weeks until September for succession. The winter varieties should be sown in July and August, and mūst be taken up before severe frost and stored away in a cold cellar in sand.
McCullough's Cincinnati Market. Largely grown by the Cincinnati market gardeners. The tops are so small that the radishes may stand touching each other in the rows. They grow perfectly straight and smooth and from six to seven inches in length. Their attract ondorsy, scarlet skin is very thin and the flesh is the finest Long Red Radish for forcing and outsells any other that is put in competition with it on the market. Being long standing, it is also an extra fine sort for the home garden, entirely exempt from any tendency to become pithy or hollow; oz., $10 c ;{ }_{5} 1 / 4$ Crimson Giant Eorcing. This giant radish develops roots over añ ounce in weight more than double the size of other forcing varieties, without getting pithy and hollow, their pure white flesh remaining firm and crisp and of the mildest flavor. It is very early notwithstanding its size. It is equadly well adapted to outside culture; oz. 10 c ; $1 / 4.1 \mathrm{~b} ., 25 \mathrm{c}$; 1 lb ., $75 \mathrm{c} . . . .5 \mathrm{c}$ pkt. Earliest White Globe Forcing. Oval shape; small root, small top, flesh white, tender and crisp; oz., 10c; $1 / 41 \mathrm{~b} ., 30 \mathrm{c}$;
Non Plus Ultra. The smailest topped and earliest forcing radish. Roots small, round; deep rich scarlet; very crisp, tender white flesh; oz., 10c; $1 / 4 \mathrm{lb}$., 20c; 11 lb . 60c
Farly Scarlet Globe. One of the earliest and best sorts for forcing; flavor mild; crisp and juicy; also good for garden culture; oz., 10c; $1 / 4 \mathrm{lb}$., 20c; 1 lb ., 60c. . $5 \mathrm{5c}$ pkt.
Farly Scarlet Turnip. A small top variety, of quick growth, mild and crisp. It is a standard sort for early planting in the open ground. Oz., 10c; $1 / 1 \mathrm{lb}$., 20c; $1 \mathrm{lb} ., 60 \mathrm{c}$.
White Tipped Scarlet Turnip. Bright scarlet color, gradually fading off to pure white at the base, tender ( Oz., 10c; $1 / 4 \mathrm{lb}$., 20c; 1b. 50c
 French Breakfast. A variety of quick growth miland tender, and one of the best for forcing. 5 oval
 and continue to grow for a 10 mild flavor Iong Scarlet, Short Top. Long, of a deep scarlet color; flesh white, crisp and of good flavor. Oz, loc; Golden Dresden. Valuable and quick growing; the tops are scant and admit of closest planting pkt.
 fectly round, smooth and light golden-brown
 Oz. 10c; 1/4 1b., 20c; 1b., $50 \mathrm{c} .1 . .1 .$. White Olive-shaped. Olive-shaped, pure white, crisp
 ough's Norwooa
 Delicious White, Half-1ong in form, tapering at the lower end, particularly crisp, mild flavor. It is solid and crisp to the center. Oz., 10c; 1/4 1b., 25 ; lb. 75c ...................................5c plit.
Giant White Stuttgart. Quick growing and therefore early, of the largest size, and both flesh and skin are pure white. Oz., 10c; $1 / 41 \mathrm{~b} ., 20 \mathrm{c}$; 1b., 50 c .
Large Rose, White Tipped. An extra large Turnipshared Radish, but notwithstanding its immense size, does not get pithy. Oz., 10c; $1 / 4 \mathrm{lb}$,
 White Strasburg. obiong, tapering shape, skin and flesh pure white, firm and brittle, fine for winter
 above and gradually blending into a pure waxy
 White Summer Turnip. Large Turnip-shaped, white, crisp, tender. Oz ., $10 \mathrm{c} ; 1 / 4 \mathrm{lb} ., 20 \mathrm{c} ; 1 \mathrm{lb}$., $50 \mathrm{c} ; 5 \mathrm{c}$ pkt. WINTER RADISEES.
Black Spanish, Oval Shape. A black valuable winter sort. Oz., 10c; 1/4 1b., 20c; 1b., 50c. Black Spanish, Iong. Differs from the above only in Celestial. An all-season white Radish. Oz., ioc; $1 / 41 \mathrm{lb}$., 25 c ; $1 \mathrm{~b}, 75 \mathrm{c}$
Chinese Scarlet. Half-long, fine winter sort, keeps Mammoell. Wz., 10c, 44 1b., 20c; 1b., 50c........5c pkt. Mammoth White winter, A giant white-fleshed fall Radish. Oz., 10c; 1/4 1b., 20c; lb., 50c....5.5c pkt.

## SALSIFY. (Hafer-Wurzel, Ger.)

## One Ounce Will Sow 50 Feet of Drill.

Commonly called Vegetable Oyster. The cultivation is precisely the same as directed for Parsnips, and it will keep over winter, in the ground where grown, in the same way as Parsnips.工ong white French. Roots of medium size, white and smooth. 10c oz.; 25c 1/4 lb................5c pkt. Mammoth Sandwich Island. This variety will average nearly double the size of the White French, and is of excellent quality. The best variety for market gardeners' use. $\quad 15 c$ oz.; $40 c \quad 1 / 4 \quad 1 \mathrm{~b} . . .5 \mathrm{sc}$ pkt.

## SPINACH. (Spinat, Ger.)

## One Ounce for 100 Feet of Drill, 10 to 12 Pounds for an Acre. Special Prices

 Given on Spinach in Quantities.CULTURE.-For spring and summer use, sow either broadcast or in drills as early as the ground can be worked. The fall sowing is the main one with our market gardeners, which is done from August to October, and by careful attention they have it in marketable condition throughout the entire winter and spring. If the land is dry the seed should always be rolled or trampled in, for if the soil is loose the hot air shrivels the seed, so that it will not germinate.
Norwood Savoy. One of the best for either the market or kitchen garden. A quick-growing, roundseeded variety, producing thick,
dark green, slightly crimpled leaves; in large demand for either spring or fall sowing. 10c oz.; Bloomsdale Savoy. The hardiest large Savoy leaved, curled and crimpled with thick, fleshy leaves, good for family and market purposes. 10c


Norwood Savoy Spinach.

Iongest season. A distinct hardy variety, with large, thick, fleshy, dark green leaves, which are produced in great abundance in any season. It is slower in running to seed than any other variety Victoria. A variety with heavy, broad, dark green leaves. Two or three weeks later than other sorts in going to seed. Valuable for spring sowing. 10c oz.; 15c $1 / 4$ lb................................... 5 . pkt Prickly Seeded, or Fall. The hardiest variety, having smaller leaves; is not so productive as the above New Zealand, Yields an abundance of the tenderest Spinach during the hottest months of the year, or in dry arid localities where the ordinary Spinach runs to seed. The seed is sown where the plants are to stand, in May, or earlier in a hotbed and transplanted, and the plants will continue to yield a supply of good leaves of excellent quality during the entire summer, requiring scarcely Special Prices Given to Market Gardeners and others who Use spinach seed in Quantity.

## SQUASH. (Eurhiss, Ger.)



Erubbard Squash.
to 18 inches long.

One Ounce of the Bush Varieties for 40 Hills, or of the Large-Seeded Kinds, 15 Hills. Two or Three Pounds
CULTURE.-It is useless to sow until the weather has become settled and warm. Light soils are best suited for its growth. Prepare hills for the seeds by incorporating 2 or 3 shovelfuls of well-rotted manure with the soil for each hill. For the bush varieties, from 3 to 4 feet each way, and for the running sorts from 6 to 8 feet. Eight or ten seeds should be sown in each hill, thinning out after they have attained their rough leaves, leaving 3 or 4 of the strongest plants, after which cultivate same as Cucumbers. SUMMER VARIETIES.
Mammoth White Bush. The best early variety for market or shipping. It grows to a large size; scalloped like a pattypan. 10c oz.; 25c $1 / 4 \mathrm{lb}$; 75c lb.........................5c pkt.
Early Yellow Bush. An early, flat, scallop-shaped variety; color yellow; flesh pale yellow, and well flavored. 10c oz.; 25c Straight-Neck Summer. Similar in appearance to the Summer Crook-Neck, but with straight neck. 10 c oz.; 25c $1 / 4 \mathrm{lb}$. ; 75c lb................................................................. Summer Crook-Neck. Covered with warty excrescences; color bright yellow; shell very hard when ripe. 10c oz.; 25c $1 / 4$ lb.; 75c lb. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $5 c$ pkt. Vegetable Marrow. Skin a greenish-yellow, flesh white, grows

Warted Hubbard. This strain, without doubt, grows the finest Hubbard in existence. The wartiness indicates a very hard shell, which is one of the features in a long-keeping Squash; it also denotes extra choice quality-the harder and more warty the shell of a Hubbard Squash is the more deli-
 Marblehead. Resembling the Hubbard, but of a lighter color, and is remarkable for its sweetness, dryness and delicious flavor, as well as its keeping qualities. 10c oz; ; 25c $1 / 4$ lb.; 75c lb..........5c pkt. Mammoth Chili. Rich orange-yellow; flesh thick and of good quality for making pies; grows to an enormous size; a valuable sort for feeding stock. 15 c oz.; $45 \mathrm{c} 1 / 4 \mathrm{lb}$.; $\$ 1.251 \mathrm{lb} . .$. Boston Marrow. A popular winter variety; quality unexcelles. 10 c oz. ; 25c $1 / 4$ ib.; 75c 1b. ......5c pkt. Delicious. Resembles the old Hubbard, having a dark olive-green hard shell, weight from 5 to 10 lbs. For table use it can not be excelled, the flesh being remarkably thick, fine grained, sweet and of
 Fssex Hyb winter Squash of great merit. Of a handsome bright yellow color outside and strawFordhook. A winter squash of great merit. Of a handsome bright yellow color outside and strawEubbard. Standard winter Squash; grown more extensively than any other late variety; color dark green; shell extremely hard; flesh dry, fine grained and sweet; excellent keeper. 10c oz.; $25 \mathrm{c} 1 / 4 \mathrm{lb}$. ; 75 c 1 b.

## TOMATO (Liebesapfel, Ger.)

## One Ounce of Seed Will Produce about 2,000 Plants; $1 / 4$ Pound to the Acre.

CULTURE.-Sow in a hotbed, green-house or window in a sitting room. Where night temperature is not less than sixty degrees, about the first week in March, in drills five inches apart and half an inch deep. When the plants are about two inches high they should be set out in boxes three inches deep, four or five inches apart; in same temperature, or removed into small pots, allowing a single plant to a pot. They are sometimes transplanted a second time into larger pots, by which process the plants are reridered more sturdy and branching. About the middle of May, the plants may be set in the open ground. They are planted for early crops on light, sandy soil, at a distance of three feet apart, in hills in which a good shovelful of rotted manure has been mixed. On heavy soils, which are not suited for an early crop, they should be planted four feet apart. Water freely at the time of transplanting and shelter from the sun a few days until the plants are established. For late use, sow in a sheltered border in May, and set out the plants in July; the green fruit can be picked off before frost, and ripened under glass. By training the tomato vines or trellises or tying to stakes, they will increase in productiveness, the fruit will ripen better, and be of finer quality.
Seed in Packets, Ounces and Quarter Pounds are sent free by mail, at prices quoted.
Special Prices Given to Market Gardeners and Truckers. Acme. Very early and productive; fruit medium sized, and of a dark, rich red, slightly tinged with purple; very
 Earliana. The earliest smooth tomato, of good size and flavor. The plants are hardy, with rather slender open branches and moderate growth, well set with fruits, nearly all of which ripen extremely early in
the season. Tomatoes are deep scarlet, and grow the season. Tomatoes are deep scarlet, and grow closely together in clusters of five to eight, all of medium size, averaging $21 / 2$ inches in diameter; they are smooth and solid, quite thick through and free from rough ribs or cracks. The flesh is deep red, with solid center and small seed cells, slightly acid
 Norwood. The first large tomato to ripen. The plants are strong and vigorous, bearing an abundance of large smooth fruit of a beautiful purplish crimson color. The flesh is remarkably thick, firm and solid, and of the finest quality, with few seeds. It is an excellent shipper. Does not crack or rot; oz, 30c; $1 / 4 \mathrm{lb}$,
Beauty, Rich, glossy crimson, with a slight purple tinge. The fruit grows in clusters of four to five, is of large size, very smooth, and retains its character till late in the season; oz, $25 \mathrm{c} 1 / 4 \mathrm{lb}$., 60c.


Buckeye State. The tomatoes are born in immense clusters of four to eight large fruits. In solidity and meatiness it has no equal, while in luscious quality none surpass it. Color, rich glossy crimson, with a slight purple tinge; oz., 25c; 1/4 lb., 75c..............5c plit.
Cincinnati Purple. A valuable variety, especially adapted for canning and shipping. It is very large, color, a dark purplish-red. Very prolactive and of rich flavor; oz., 25c; $1 / 4 / 4$ plo,
doct.................................$~$
Dwarf Champion. Of dwarf, stiff, distinct, upright growth, scarcely needing support; early and prolific; smooth, medium-sized fruits of pinkish purple color; oz., 30c; $1 / 4 \mathrm{lb}$., 80c...5c pkt.
Dwarf Stone. Foliage heavy and a rich dark green. The fruits are produced in clusters of 3 to 5 , averaging 4 inches in diameter and $21 / 2$ inches in depth, bright scarlet color, smooth and regular, firm and solid, with no hard core. The quality is of the finest; oz. 30c;
Perfection. Almost round fruits; smooth, tough skin of brilliant scarlet; ripens thoroughly; solid and of rich flavor; $O z, 20 c ; 1 / 4 \mathrm{lb} ., 50 \mathrm{c}$. 5c pkt.
Ponderosa. One of the largest fruited tomatoes. The handsomest and finest quality; nearly seedless, with firm, meaty, rich red flesh; unequaled and delicious either sliced, cooked or canned; a healthy, luxuriant grower, and continuous yielder from early in the season until frost; oz., 30c; $1 / 4 \mathrm{lb} ., 90 \mathrm{c} . . . \mathrm{C} . .5 \mathrm{sc}$ pkt.
Stone. Large, almost round, scarlet fruits, solid and of fine quality; firm and meaty for slicing, and one of the best for cooking or canning; very prolific; oz., 25c; $1 / 4$ lb., 60c; 5c pkt.
Trucker's Favorite. One of the finest large-fruited purple sort. The plants are of strong growth and productive. The tomatoes are of large size, deep through, very smooth and regular, free from cracks, solid, meaty with small seed-cells and fine flavor. Though such a productive variety it ripens a large number of fruits early in the season; oz., 30c; $1 / 4 \mathrm{lb}$., 80c; .............................................. $5 c$ pkt
Favorite. $\dot{A}$ large handsome and uniform-shaped tomato; solid, smooth and bright scarlet; ripens early; oz, 20c; $1 / 4$ lb., 50c.......5c plkt.
Globe. A beautiful globe-shaped variety. Large size, smooth, firm, fleshed, few seeds, ripens evenly; color, a beautiful glossy rose, tinged purple. Flavor delicate and agreeable, splen-


Golden Queen. Large, smooth fruits, of a beautiful golden color: quality, excellent: attractive for slicing and mixing with sliced red sorts; oz., 25c; $1 / 4 \mathrm{lb}$., 60c...............5c plkt.
Matchless. A standard main crop, bright red variety producing enormous crops of finest scarlet fruits. Very large, perfectly smooth, with few seeds; oz., 25c; $1 / 4$ 1b., 60c........5c pkt.
Coreless. A perfect shaped canning variety, large size, globe shaped, full at stem end, bright red, a strong grower and a big cropper. In shape it is almost round. It is immensely productive, clusters of four to seven fruits are produced at six to eight inches apart


## PRESERVING TOMATOES.

The following small-fruited varieties are used for making preserves, and are also quite ornamental while growing in the garden:
Pear-shaped. A small preserving tomato, of pearshape, and bright red color; oz., 25c...5c pkt. Red Cherry. Small, round fruit, resembling cherries; used for preserves; oz., 25c......5c pkt Yellow Plum. Bright lemon-colored; oval; small size 1 ; used for preserves; oz., 25c....5c pkt. Strawberry, Winter Cherry or Husk. Low, spreading plants, bearing yellow fruits $1 / 2$-inch in ing; oz., 25c................................... 5 c pkt. TOMATO PLANTS are a specialty of ours. See vegetable plants.

## TOBACCO.

The seed should be sown as early as possible after danger of frost is over. A good plan is to burn a quantity of brush and rubbish in the spring, on the ground intended for the seed bed, then dis and thoroughly pulverize the earth and mix with the ashes, after which the seed may be sown and covered very lightly.
Connecticut Seed Ieaf. A long leaf, fine in texture oz., 30c . ....................................... 5 c pkt. Conquerer. It ripens early, and is easily cured to the brightest color; oz., 30c............5c pkt. Havana. A medium leaf, fine texture. Commands a high price; oz., 40c.................... 5 c pkt. White Burley. Extra stock, grown larsely for the Zimmanufacture of ine-cut; oz., 25c. er's Spanish one of the most popular and

## TURNIP. (Ruben, Ger.)

## One Ounce Will Sow 150 Feet of Drill; 1 to $11 / 2$ Pounds to the Acre.

The soil for Turnips should be rich and mellow. For an early crop, sow early in the spring, in drills, about a foot apart or broadcast and thin out. For a general crop, sow from the first of July to the last of August, in drills 18 to 20 inches apart, and thin out the plants to 8 or 10 inches. To destroy the fly, which is' very destructive to the Turnip crop, use "Hammond's Slug Shot." Sow an abundance All Seeds in Packets, Ounces and Ouarter Pounds Only are Sent Free by Mail, at Prices Quoted; FalfPounds and Iarger Quantities if to be Sent by Mail, Postage Must be Added to Prices Quoted. See Postal Rates, Second Page of Cover.

Special Prices Given on Turnip Seed in Larger Quantities.


White Flat Dutch.
Purple Top, Strap-Ieaf.

Purple Top White Globe. A variety of decided merit. Of globular shape, very handsome and of superior quality, either for the table or stock. It is a heavy producer, early, of rapid growth and an excellent keeper. 10c oz.; $25 \mathrm{c} 1 / 4 \mathrm{lb}$.; 60c 1b........5.5c pkt. Large White Globe, Strap-Ieaf. Flesh white, firm and crisp; a very desirable early variety. 10 c oz.; $20 \mathrm{c} 1 / 4 \mathrm{lb}$.; 50c 1b..................................... pkt. Snowball. Extra early, A variety of sterling merit, perfectly round, early, pure white, very solid, sweet, short top. 10 c oz.; $25 \mathrm{c} 1 / 41 \mathrm{~b} . ; 60 \mathrm{c} 1 \mathrm{~b} . ; 5 \mathrm{c}$ pkt. Extra Jarly Purple Top Milan. This variety is at least two weeks earlier than any other. It is of a handsome appearance, somewhat flattened, white, with purple top; flesh snow-white, fine grained and delicate flavor. 10c oz.; 25c $1 / 4 \mathrm{lb} . ; 75 \mathrm{c} 1 \mathrm{~b} . . . . . . .5 \mathrm{c}$ pkt. Red or Purple Top, Strap-Ieaf. This is the most popular variety grown for table purposes, an early, flat, white Turnip, with purple top, of excellent quality. The best variety for general use. 10 c oz.; $25 \mathrm{c} 1 / 4 \mathrm{lb}$.; 60c lb.; 5 c pkt. Early White Flat Dutch. An early, white-fleshed variety, of quick growth, mild flavor and excellent quality. 10c oz.; 20c $1 / 4 \mathrm{lb}$.; 50c lb.........5c plst. Amber Globe. A beautiful formed variety, quite productive, solid flesh and attractive colori it keeps Golden Ball, or Orange Jelly. A rapid grower, of excellent flavor, globe-shaped, bright yellow color, White Egod keeper and a superior table variety, or for stock. 10c oz.; 20c 1/4 1b.; 50c lb.......5c pkt. (10c oz 20c $1 / 4 \mathrm{lb}$. 50 c for spring or fall sowing; flesh white, firm, fine grained, mild and Long White, or Cow Horn. Grows quickly, partly above ground; very productive; flesh white, fine grained sweet, excellent quality for family and market gardeners' use. 10 c 0 oz ; 25c $1 / 4 \mathrm{lb}$.; $60 \mathrm{c} 1 \mathrm{lb} . .5 \mathrm{sc}$ - pkt Seven Top. Cultivated extensively in the South for the tops, which are used for greens. It is very hardy Purple Top Yellow Aberdeen. A large, globe-shaped Turnip, with yellow flesh of fine quality, a good keeper, popular for table or stock. 10 c oz.; $20 \mathrm{c} 1 / 4 \mathrm{lb}$, ; $40 \mathrm{c} 1 \mathrm{~b} . . . \ldots . .$.

## RUTA BAGA.

American Purple Top. Very hardy and productive; flesh yellow, solid, sweet, good for stock or table skirving's Purple top. An important variety of large size and strong growth, a heavy cropper and pkt. of the best for field culture 10 c oz. $20 \mathrm{c} 1 / 1 \mathrm{lb}$. 50 c 1 lb strong 8 ln , a heavy cropper and 5 c Budlong's Improved. White, very sweet, much milder flavor than any of the other sorts, globe-shaped, Iong Island Improved Purple Top. A uniform large rooted, quick growing, yellow fleshed sort. IOc pl.


## VEGETABLE PLANTS AND ROOTS.

Prices do not include prepayment by mail or express. If wanted by mail, add for postage, $5 c$ per doz., 25 c per 100 on Cabbage, Cauliflower, Celery and Sweet Potato. Plants; 10c per doz. on Egg Plants, Pepper and Tomato Plants.

## ASPARAGUS ROOTS.

Two-year-old Roots.
Argenteuil....Per 100, \$1.00; 250, \$2.00; 1000, \$7.00 Barr's Mammoth, $100, \$ 1.00 ; 250, \$ 2.00 ; 1000, \$ 7.00$ Columbia Mammoth White,

Per 100, \$1.00; 250, \$2.00; 1000, \$7.00 Palmetto......Per 100, \$1.00; 250, \$2.00; 1000. \$7.00 Conover's Colossal, $100, \$ 1.00 ; 250, \$ 1.75 ; 1000, \$ 6.00$ Special Prices Quoted on Larger Quantities.

## CABBAGE PIANTS.

Early Jersey Wakefield....Per 100, 50c; 1000, \$4.00 Iouisville Drumhead........Per 100, 50c; 1000, \$4.00 Premium Inate Flat Dutch..Per 100, 40c; 1000, \$3.00

## CAULTFLOWER PLANTS.

Earliest Dwarf Erfurt. Per doz., 25c; per 100, \$1.50 Early Snowball..........Per doz., 25c; per 100, \$1.50

## CELERY PLANTS.

Ieading Sorts.........Per $100,50 \mathrm{c}$; per 1000 , $\$ 3.50$ CHIVES-Good clumps....10c each; $\$ 1.00$ per doz.
We are Iarge Growers of Vegetable Plants. Have Them Fresh Every Day in Season. Special Prices on Irarge Quantities.

EGG PLANTS. . . . . . . . . Per doz., 40c; per 100, \$3.00 HORSERADISFI SETS.....15c per doz.; 65c per 100 (By mail, 25c per dozi; 90c per 100, postpaid.)

## PEPPER PLANTS.

Iarge Bell, or Bull Nose, Per doz., 30c; per 100, \$1.50 Ruby King...................er doz., 30 c ; per 100, \$1.50 SWEET POTATO PLANTS.
 Red Bermuda. Southern Queen. Per 100, 35c TOMATO PLANTS.
Transplanted Plants.
Leading sorts.
Per doz., 25c; per 100, \$1.75
RHUBARB ROOTS.
Single Eye (by mail, 75c doz.) ; each, 5c; doz.; 50c Small Clumps (by express or freight only),

Each, 10c; per doz., \$1.00 Large Clumps (by express or freight only), Each, 25c ; per doz., \$2.50 Large Clumps (by expren, 25c; per doz., \$2.50 POTATOES. (See Field Seed, etc.)


## McCULLOUGH'S "SUBURBAN" LAWN GRASS SEED. (Trade Mark

IS a mixture of the finest Dwarf Evergreen Grasses that grow and flourish during different months of the year so that a rich, deep, green, velvety lawn is constantly maintained. Our mixture is the for making a new lawn is four bushels ( 64 lbs .) per acre, or for renovating old lawns, two bushels ( 32 for making a new lawn is four bushels ( 64 lbs.) per acre, or for renovating old lawns, two bushels ( 32 one-half pound for renovating.

A lawn seed mixture is very much to be preferred to any single grass; if it is honestly made, the several varieties of grass which compose it, mature at different seasons of the vear, thus keeping the green sward in good color and condition during the hot weather, not losing its color, as the single variety is liable to do.

Prices: $1 / 2 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 25 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.00 ; 8 \mathrm{lbs.} \$ ,1.50 ; 1 \mathrm{bu}$. of $16 \mathrm{lbs} ., \$ 3.00$. By mail 10 c per 1b. extra.

How to Make a Iawn.-A fine lawn is an unfailing mark of intelligence and taste, to obtain which the main point is to start right. Seed will make a better lawn than turf or sod. The best soil is a good medium texture; the surface should be thoroughly pulverized and smoothed to the desired grade; remove all large stones, roots and hardened pieces of earth that can not be readily broken; ample time being allowed for the thorough settling of the soil, which is greatly aided by a few heavy showers of rain. When the soil is firm, level and suitably moist, sow "Suburban" Lawn Grass Seed at the rate of four bushels ( 64 lbs ) per acre. It is unwise to be too economical in the quantity of seed used, if the best results are desired. The seed should be sown broadcast and as evenly as possible, then give a thorough rolling or pat well with the back of a spade. The seed must be well firmed in the soil. When the young grass attains a height of 4 or 5 inches, carefully mow with a sharp scythe. After this, according to the season, it should be mown with a lawn mower every week or ten days.

General Surface Renovating. - When your lawn has already been established, you will find it to your advantage to lightly re-seed each season. As early as possible, carefully rake, off all dead leaves, etc. and give the lawn a dressing of our pulverized EL PASO SHEEP MANURE, or our PURE BONE MEAL at the rate of at least 500 pounds per acre, and rake in, after which sow our "Suburban" Iawn Grass seed at the rate of two bushels ( 32 lbs.) to the acre; roll thoroughly or pat with the back of a spade.

Renovating in Spots or Patches.-Everyone is aware that even in the best-kept lawns unsightly spots devoid of grass will appear, which are caused by root-destroying insects; and as these spots are not protected by a covering of turf during the winter, as a natural consequence the chemical elements in the soil are leached out by the action of the weather, causing these spots to "cake" or become hard early in the spring. It is useless and a waste of seed to sow these spots unless they are carefully prepared to receive the seed. For this purpose it is our practice to cover these spots with either of the fertilizers mentioned above at the rate of 13 lbs . for each 300 square feet, then dig these spots up, and after raking until no trace of the fertilizers can be seen, sow our "Suburban" Inawn Grass Seed at the rate of 1 lb . to each 300 square feet. Roll thoroughly or pat with the back of a spade.

How to Weed a Iawn.-Many persons suppose that whenever they pull a weed out of their lawn, that they have accomplished all that is necessary. Our practice for years has been to always have a supply of our "Suburban" Lawn Grass Seed at hand, and whenerer any weeding is done on the lawn to immediately drop a few grains of seed wherever a weed is removed, and while the soil is disturbed to pat (or rather coax) the seed into the soil. In a season or two your efforts will be repaid by having a beautiful lawn, entirely free from weeds,

MCCUITOUGE'S "EL PASO" SEFEP MANURE IS TEE BEST FERTIIIZER FOR LAWNS. (SEe FEXtilizers.)

## GRASS SEEDS.

For many years Grass Seeds have been one of our most important specialties, and our improved and perfected facilities for handling same (at a minimum cost), either in small or car lots, enables us to offer our customers the best possible service, both as to quality and promptness in executing orders.

We would call attention to the fact that Cincinnati is an important Grass Seed center. Wr EXPORT MANY CARLOADS OF GRASS SEED-THE WORDS "MCCUITOUGF" AND "BLUE GEASS" BEING VERY FAMIIIAR TO THE PRINCIPAI SEED DEAIERS OF THE WORID.

While we expect to adhere closely to prices quoted in this list, owing to market fluctuations, it is impossible to guarantee prices, but all orders will be filled at lowest market price on day of receipt.

We have four or five different grades of Grass Seed, especially of the kinds most in demand, such as Clovers, Timothy, Blue Grass, Red Top, etc.

We will be pleased to quote lowest market price on application.
For best results, we advise the use of our highest grades, "XXXX" and "Buckeye."
We are the largest buyers in this section, and will always pay the highest market price. Submit samples and name quantity to offer.

Postage Must be Adjed if Wanted by Mail. See Postal Rates, Second Page of Cover.

# Special Mixtures For <br> Lawns, Terraces, Golf Links and Putting Greens. 

"SUBURBAN" IIAWN GRASS. This special mixture produces beautiful and permanent lawns. It is made from our own formula, and composed of grasses which are adapted for the purpose of producing turf which retains its rich, green color and velvety appearance throughout the entire summer and fall. See also page 25 . $1 / 2 \mathrm{lb} ., 15 \mathrm{c} ; 1 \mathrm{lb} ., 25 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.00$; 1 bu. of 16 lbs., \$3.00.
Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.
SHADY PLACE MIXTURE. On nearly all lawns there are shaded, bare and unsightly spots on which the owners have difficulty in getting a stand of grass; for such places this mixture is adapted. It is composed of dwarf-growing grasses which are found naturally growing in such places. Should the ground have become "sour" or drainage defective, it is apt to be covered with moss. If such is the case, apply some lime or land plaster to sweeten it, but the moss should first be removed by the use of a sharp rake, then sow the seed at the rate of four bushels ( 64 lbs.) per acre. $1 \mathrm{lb} ., 35 \mathrm{c} ; 5 \mathrm{lbs} ., \$ 1.50$; 1 bu . of $16 \mathrm{lbs} ., \$ 4.00$.
TERRACE MTXTURE. There is nothing more annoying than to have ground washed out. In this mixture we have put quick-growing and deeprooted grasses. Of course, it depends a great deal on this being well started before very deal on this being well started before very heavy rains.
of 16 lbs., $\$ 3.50$.
F1 Paso Sheep Manure and Pure Bone Meal are

GOLF IINXS MIXTURE. We have given much attention to grasses for golf links. The mixture we offer below is composed of such varieties as will thrive here, and are the result of experiments conducted on our grounds, as well as careful watching for several years of the practical results obtained on the golf links. We have always on hand all the natural grasses of Europe and America, and we are familiar with the habits and merits of each. We shall be glad to prescribe for whatever the requirements of the links may be; for poor lands or rich, high and dry, or low and wet. Per 1 b ., $20 \mathrm{c} ; \mathrm{r}^{2} \mathrm{lbs}$., 85 c ; 8 lbs., $\$ 1.50$; 1 bu . of 16 lbs ., \$2.50.
PUTIING GREEN MIXTURE. A careful study of the requirements for making the most substantial turf for Putting Greens developed the mixture herewith offered by us for this purpose. It has given thorough satisfaction wherever used, and produces a thick, tough, beautiful green turf. The varieties comprising this mixture are all the finest-bladed, low-growing and most hardy kinds, and will maintain their rich, velvety green color throughout the season. Lb., 30c; $5 \mathrm{lbs} ., \$ 1.40$; 1 bu . of $16 \mathrm{lbs} .$, $\$ 4.00$.

QUANTITY OF SEED TO SOW.
One pound of these mixtures will sow $15 \times 20$ feet, or 300 square feet. Four bushels should be sown to the acre. For renovating use one-half of this quantity. Special directions for making a lawn are given on preceding page.

## MIXED GRASSES FOR MEADOWS AND PASTURES.

After years of experimenting we have aided largely in establishing the fact that a thicker and more prolonged growth is produced by a mixture of several varieties than when only one or two are used. There are always certain grasses that are especially adapted to certain kinds of soils, and these are so carefully combined in our mixtures that in our Mixture for Permanent Pastures grasses will be found that mature at intervals during the season, thereby insuring continuous pasturage, while our Mixture for Permanent Meadow will furnish excellent hay as well as late pasturage.

We are prepared to furnish seeds adapted to all soils and all situations, and for all purposes, composed of grasses for light, medium or heavy soils; by light soils we mean that which is more or less of a sandy or gravelly nature; the heavy clay and heavy loams; while the medium is an intermediate between these two. A light, wet soil, with respect to the grasses suited to it, may be considered same as to the heavy soils, and a dry, heavy soil, more as to light soils.

Our best mixture is made entirely with our choice recleaned seeds, while in our second quality we use the same seeds, but without recleaning, and will be equal to the qualities usually to be had on the market. Our mixtures will all have a uniform weight of 16 pounds to the bushel. Quantity to be ised per acre, one and one-half to two bushels, and half this quantity for renovating. In ordering, always state the soil and position on which you wish to use it.

## FIRST QUALITY MIXTURES.

For meadows..25c lb.; \$1.50 8 lbs.; $\$ 2.50$ bu., 16 lbs. For permanent pasture

20c lb.; \$1.20 8 lbs.; \$2.25 bu., 16 lbs.
For pasture and hay in orchard and other shady places..20c lb.; $\$ 1.508$ lbs.; $\$ 2.50$ bu., 16 lbs. For marshy grounds,

20c lb. ; \$1.35 8 lbs.; $\$ 2.50$ bu., 16 lbs. For sandy and rocky grounds, 20c lb.; $\$ 1.358$ lbs.; $\$ 2.50$ bu., 16 lbs.

## SECOND QUALITY MIXTURES.

For meadows. .20c lb.; \$1.25 8 lbs.; $\$ 2.25$ bu., 16 lbs. For permanent pasture

20c lb.; $\$ 1.258$ lbs.; $\$ 2.00$ bu., 16 lbs. For pasture and hay in orchard and other shady places..20c lb.; $\$ 1.258$ lbs.; $\$ 2.00$ bu., 16 lbs . For marshy grounds,

20c lb.; $\$ 1.258$ lbs.; $\$ 2.25$ bu., 16 lbs. For sandy and rocky grounds, 20 c lb.; \$1.25 8 lbs.; $\$ 2.25 \mathrm{bu}$.; 16 lbs .

## GENERAL LIST OF GRASS SEED.

Our prices on light Grass Seeds include burlap bags and delivery to freight or express depots here, purchaser paying transportation charges. Seamless cotton bags holding two bushels, 20c each extra.

The number of pounds to the bushel, in brackets, is the old way of offering Grasses, and is mentioned merely for reference.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.
Kentucky Blue Grass, Fancy Cleaned (Poa Pratensis). Also known as June Grass, Green Grass, etc. This is rated as the finest permanent pasture Grass. Especially suited to meadows and rich lands. It is the Grass of the famous the Northern States. A perfect lawn Grass. Sow 3 to 4 bushels per acre for lawn; 2 bushels to the acre for pasture ( 14 lbs . per bushel). Fancy clean seed. 20 c 1 lb .; 80 c for 5 lbs ; $\$ 1.00$ for 7 lbs .; $\$ 1.75$ per bu. of 14 lbs . Other Grades. Price Will be Quoted on Application.
Red Top Grass (Agrostis Vulgaris, Herd's Grass, Quick Grass). Perennial; height 1 to 2 feet. Valuable either for lawn mixtures, mixing in hay, or permanent pasture Grasses; succeeds almost everywhere, but reaches its highest state of perfection in a moist, rich soil, in which it attains a height of 2 to $21 / 2$ feet. Sow, if alone, 45 lbs. per acre. Weight, 14 lbs. per bushel. Choice Seed in Chaff........15c ib.; $\$ 1.25$ for $10 \mathrm{bs} . ; \$ 10.00$ per 100 lbs . Fancy Pure Seed. Weight about 32 lbs. per bu. Sow 10 to 12 lbs. per acre. 20c lb.; $\$ 1.75$ for 10 lbs.; $\$ 15.00$ per 100 lbs .
Perennial, or English Rye Grass (Lolium Perenne, Imported English Blue Grass). Height, 15 to 24 inches. Considered invaluable for permanent pastures. It produces an abundance of remarkably fine foliage, tillers out close to the ground, and soon forms a compact sward. After being cut it grows up in a very short time, and remains bright and green throughout the season, consequently is well adapted for lawn mixtures. Valuable for shady places. Also a good variety for hay, if cut when in blossom, as it is then most nutritious. Sow, if alone, 65 lbs per acre. Weight; 24 lbs per bushel.
Cana $15 \mathrm{c} 1 \mathrm{lb} . ; \$ 1.25$ for $10 \mathrm{lbs}$. ; $\$ 8.00$ per 100 lbs . Meadow Grass. Grows a cows and sheep. Thrives well on clay. Sow 30 lbs. per acre. for horses,
Orchard Grass (Dactylis Glomerata, or Rough Corksfoot). Perennial. Height 3 feet. It blossoms about the same time as Red Clover, making it, on that account, a desirable mixture with that plant. It is exceedingly palatable to stock of all kinds, and its powers of enduring the cropping of cattle commend it as one of the very best pasture Grasses. Sow 35 lbs . to the acre. Weight, 14 lbs. to the bushel.
20 c ib.; $\$ 1.75$ for 10 lbs.; $\$ 15.00$ per 100 lbs . Lower qualities at their value.
Awnless Brome Grass (Bromus Inermis). A hardy perennial, standing extreme of heat and cold and drought. In the South it remains green all winter. It will grow well on all kinds of soil. The seed should be sown as early in the spring as the ground can be worked. ( 10 lbs . per bushel.) Sow 35 to

Orchard Grass.
Bermuda Grass (Cynodon Dactyion). A valuo for 10 los.; $\$ 13.00$ per 100 lbs. Creeping Bent (Agrostis Stolonifera). Valuable in mixture with other Grasses for lawn, etc. Suitable
 d Dogstail (Cynosurus Crystatus). Perennial. Height, 1 to $11 / 2$ feet. An excellent Grass for hard, dry soils; valuable for pastures and lawns, as it is very hardy, tender, nutritious, and relished by

Eard Fescue (Festuca Duriuscula). Perennial. Height, 12 to 24 inches. Thrives well in dry situations. The herbage is decidedly tender, but the flower heads, when ripe, become hard. but the fower heads, when ripe, become hard. Sow, if alone, 30 lbs. per acre. Weight, 12
lbs. per bushel.......25c $1 \mathrm{~b} . ; \$ 2.00$ for 10 lbs .
Meadow Fescue (Festuca Pratensis). (Erroneously called English Blue Grass.) Highly valuable for permanent grass land. Does not, however, attain its full productive power till the second or third year. Relished by live stock, both in hay and pasture, and is one of the most desirable permanent Grasses for general culture; 40 lbs. to the acre ( 24 lbs. per bu.). $20 \mathrm{c} 1 \mathrm{~b} . ; \$ 1.50$ for $10 \mathrm{lbs}$. ; $\$ 12.50$ per 100 lbs .
Sheep's Fescue (Festuca Ovina). Perennial. Height varies from 6 to 20 inches. Grows naturally on light, dry, sandy soils. Sheep are very fond of it. Weight, about 14 lbs. per bushel. Sow 30 lbs. per acre.. 25 c lb.; $\$ 2.00$ for 10 lbs .
Fine-Leaved Sheep's Fescue (Festuca Ovina Tenufolia). Ierennial. Height varies from 8 to 24 inches. Similar to the Sheep's Fescue mentioned above, except that the leaves are much finer. Sow, if alone, 40 lbs. per acre. Weight about 14 lbs. per bu..45c lb.; $\$ 4.00$ for 10 lbs.
Various Leaved Fescue (Festuca Heterophylla). A very early hardy perennial, 2 to 3 feet high, thriving best in cold, moist soils. Yields heavily, and is valuable in grass mixtures for permanent meadows. It grows very well in the shade, and is highly recommended for shaded lawns and woodland parks; 40 lbs. to the acre............35c 1b.; $\$ 3.25$ for 10 lbs.
Italian zye Grass (Lolium Italicum). Biennial. Height, 18 to 30 inches. As it is not perennial, it is not adapted for permanent pastures, but for one or two years hay it is unsurpassed. Sow, if alone, 55 lbs. per acre (18 lbs. per bu.)..15c lb.; $\$ 1.0010 \mathrm{lbs} . ; \$ 8.50100 \mathrm{lbs}$.

Johnson Grass (Sorghum Halapense). A perennial; rapid grower; cane-like. Sow at the rate of one bushel per acre, and should be sown in August or September to secure a good crop the following year...25c lb.; $\$ 2.00$ for 10 lbs.
Rhode Island Bent (Agrostis Canina). A fine Grass, chiefly used for pastures and lawns, for which it is one of the best; 12 lbs . per bushel. Sow 40 lbs. per acre.
30c lb.; $\$ 2.50$ for 10 lbs ; $\$ 22.00$ per 100 lbs.
Sweet Vernal Grass, True Perennial (Anthoxanthum Odoratum). For a mixture with pasture Grasses it is valuable on account of its vernal growth, and also for continuing to throw up root foliage until late in the autumn. Its chief merit is its fragrant odor, which the leaves emit when partially dry, thus sweetening hay. Sow 3 to 5 lbs. per acre with other Grasses........75c lb.; $\$ 6.50$ for 10 lbs.
Sweet Vernal Grass, Annual (Anthoxanthum Odoratum Puelli). Much smaller than the perennial..................20c lb.; $\$ 1.65$ for 10 lbs . Tall Meadow Oat Grass (Avena Elatoir). A perennial. Has broad, flat leaves, and grows about 3 feet high; has an abundance of long, fibrous roots, penetrating deeply in the soil, enabling roots, penetrating deeply in the soil, enabling it to withstand drought and cold. Sow 25 to
30 lbs . per acre....25c lb.; $\$ 2.00$ for 10 lbs.
wood Meadow Grass (Poa Nemoralis). No Grass is better adapted for pleasure grounds, particularly under trees, as it will not only grow in such places, but forms a fine sward where few other Grasses can exist. Sow 25 lbs. to the acre...........50c lb.; $\$ 4.50$ for 10 lbs. Timothy (Phleum Pratense, Herd's Grass, Cat's-tail Grass). This Grass stands at the head for meadows. Never use less than a peck to
the acre, then up to one-half bushel, as to circumstances.......................Market Price.

[^0]

Red Clover (Trifolium Pratense). In ordering, always state quality desired, otherwise will
send the best. Sow :8 to 10 lbs. per acre. Bokhara Clover (Melilotus Alba. Sweet Clover). A rapid-growing, white-flowered sort; a good bee food. Sow 10 to 15 pounds per acre.
$20 \mathrm{c} 1 \mathrm{~b} . ; \$ 1.35$ for $10 \mathrm{lbs} . ; \$ 12.00$ per 100 lbs .
Bokhara Clover, Yellow Flowered. The Yellow Flowered Sweet Clover has been grown in Kentucky for a number of years. It makes firstclass hay and excellent pasture for cattle and sheep; stock will leave everything else and hunt out the Sweet Clover. It will grow in any kind of soil, and being deep rooted, remains green in the driest season, making good pasture when everything else is burned brown. As a fertilizer or soil enricher it has
Japan Clover (Lespedeza Striata). It thrives on poor land and produces continual herbage. Not adapted to northern latitudes, as it is only half-hardy. Sow 10 to 12 lbs . per acre.
30 c 1 b .

## CLOVERS.

PRICES. Clover prices often vary from week to week, according to market. The prices below represent fair market values when this book is printed and are subject to change. Purchasers of large quantities should write for latest prices. Grain bags, holding two bushels, 20c each extra.
Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.
Alfalfa, or Tucerne (Medicago Sativa). Alfalfa once established is such a profitable crop that every farmer can afford to take great pains to obtain a stand. It requires cutting at least twice the first season, even if not large enough to make hay. Cutting destroys any weeds that may come up in it and gives the Alfalfa a chance. Must be sown at the rate of 20 to 25 lbs . per acre when sewn broadcast. Roots from 3 to 15 feet deep, and when established lasts for years. Do not sow on wet, acid or poor soils. We offer Amercan grown seed, raised in the Northwest and West on nonirrigated land. It is as free as possible from noxious weeds. (Bushel 60 lbs.)

25 c lb.; $\$ 2.0010$ lbs.; $\$ 18.00$ per 100 lbs.
Price on Imported Seed and Cheaper Grades Given on
White Dutch Clover (Trifolium Repens). Mixed with other grasses. For lawn purposes this is very desirable on account of its creeping stems. It spreads rapidly and acts as a binder; very hardy, and remains green throughout the season; i.t is alzo excellent for bee food. Sow 6 to 8 lbs. per acre......45c lb.; $\$ 4.00$ for 10 lbs.

Alsike or Swedish (Trifolium Hybridum). An excellent variety of luxuriant growth and very sweet; valuable for bee pasturage or ensilage. Sow 6 to 8 lbs. per acre.

30c lb.; \$2.75 for 10 lbs.; \$25.00 per 100 lbs.
Sapling, or Mammoth Clover, English Clover, Cow Grass, Perennial Red Clover (Trifolium Pratense Perenne). It is valuable when sown with other grasses, for mixed hay, as it ripens later than the common Red Clover. Sow 10 to 12 lbs. per acre......... Market price.
Scarlet, Crimson or Carnation Clover (Trifolium Incarnatum). Annual. Time of flowering, June. Height, $11 / 2$ to 2 feet. Where a single crop is wanted, this is one of the best Clovers that can be grown; it makes good hay and is excellent for feeding green, the yield being immense, and after cutting it at once commences to grow again, and continues until freezing weather, but, being an annual, dies after maturing its seed. Should be sown in August to October, also early spring; 10 to 15 lbs . per acre...15c lib.; $\$ 1.2510$ lbs.; $\$ 10.00$ per 100 lbs .

## MILLETS.

Tennessee, or German Golden Millet. We have secured a full supply of Tennessee, or German Golden Millet (cultivated seed), which we know will give the best satisfaction. Sow one bushel per acre. 40c peck; $\$ 1.50$ per bushel (50 lbs.) Northern or Western Grown Millet........35c peck ( $121 / 2 \mathrm{lbs}$.) ; $\$ 1.15 \mathrm{bu}$. ( 50 lbs .) Fungarian Grass. This grass resembles the Millet; it is of fine growth, and makes Hog an excellent hay. Sow 1 bushel per acre..35c peck ( 12 libs.) ; $\$ 1.15 \mathrm{bu}$. ( 48 lbs.) Hog millet. Known also as Broom Corn Millet. The name Hog Millet has been applied to emphasize the use to which it is now being put as a valuable food for hogs; also good food for birds and poultry. Sow one bushel per acre. millet, or "Pencillaria.". When planted and cultivated $\$ 1.50$ bushel ( 50 liks.) attain a height of 8 to 10 feet, with slender stalks and slender, lomg-bladed leaves. When sown broadcast or drilled in rows, 12 to 18 inches apart, 8 to 10 los. per acre : should be used........15c 1b.; $\$ 1.20 \quad 10$ lbs.; $\$ 10.00$ per 100 lbs. Japanese Barnyard Millet. Sometimes called Billion Dollar Grass. It grows to a height of 6 to 8 feet and produces from 12 to 30 tons per acre. Cattle and horses eat it greedily and fatten rapidly. It is a remarkable stooler and should not be sown very thickly-10 to 12 lbs . per acre broadcast being sufficient. In drills 3 lbs. per acre........................... $75 \mathrm{c} 10 \mathrm{lbs} . ; \$ 4.00$ per 100 lbs . in drills $3 /$ to one SORGHUM, OR SUGAR CANE.
Plant in drills $3 / 4$ to one bushel: broadcast, 1 to $11 / 2$ bushels to the acre. Sorghum is being used extensively as a green food for cattle, horses and mules. (Bushel 50 lbs.) Price changes.
Farly Orange Cane. A strong grower; much more juicy than any other variety. The stalk is heavier and a little later than the Amber.. $5 \mathrm{c} 1 \mathrm{lb} . ; 40 \mathrm{c} 10$ lbs.; $\$ 1.35 \mathrm{bu}$. Early Amber Cane. This popular and well known variety is the earliest. and makes the finest quality of both sugar and syrup...5c lb, ; 40c 10 lbs .; $\$ 1.35$ bushel. BROOM CORN, KAFFIR CORN.
Improved Evergreen. The best for general cultivation; brush firm, of good. length White Kd Kaffir Corn. The stalks keep green and are brittle and juicy, making excellent mules. The seed heads form at the top of each stalk, and as soon as these show the grain well, the joints next below the top send up shoots, which yield the second seed heads. For the grain sow in rows 3 feet apart; 3 to 5 lbs. of


## VETCHES.

Vetches, Spring Tares (Vicia Sativa). Sown broadcast at rate of 1 to $11 / 2$ bushels;
Sand, Winter or Hairy Vetch (Vicia Villosa). . Thrives on poor arid, sandy soils Is sown either in fall or spring, and generally mixed with rye as a support to the plants; is perfectly hardy, and the produce is recommended as most nutritious. Should be sown at the rate of $11 / 2$ bushels to the acre (Bushel 60 lbs .)
tion 15 c lb.; $\$ 1.75 \quad 10 \mathrm{lbs}$; ; $\$ 7.50 \quad 60 \quad 1 \mathrm{~b}$.


Tennessee Millet.

## MISCELLANEOUS FARM SEEDS.

The prices quoted are subject to market fluctuations. Should any article seem high, or when customers are in need of large quantities, we will be pleased to submit samples and quote, on application, the lowest prices that the market will justify at the time. Please state quantities when writing for prices.

Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover.

## DWARF ESSEX RAPE.

A forage plant of highest value. It can be sown in April for an early crop, and for fall crop in July, August and September, and still later further south. In a few weeks from the time of sowing, sheep, hogs or cattle can be turned on it. Under favorable conditions Rape is ready for pasturing sheep or cattle within six weeks from time of sowing, and on an average one acre will carry 12 to 15 sheep six weeks to two months. When on the Rape they should at all times have access to salt. Pigs and cattle are also very fond of it. The plant is a rank grower and should have heavy manuring as well as high cultivation. Any corn soil will grow Rape. Sow the seed by the end of June and the Rape. can be ready to feed at a season when it is most needed. It does well sown with oats. After oats are cut the Rape grows rapidly. If the soil is rich and clean, sow broadcast; if not so clean, sow in drills and cultivate as for corn. When sown broadcast, use 5 to 6 pounds, and if in drills, 2 to 3 pounds to the acre. 10 c 1 lb .; 90 c 10 lbs.; $\$ 7.50100 \mathrm{lbs}$.

## COW PEAS.

## (The Great Land Renovator.)

At the time of going to press the market for


## Photograph of a Field of Esséx Rape.

 Cow Peas and Soja Beans is such that it is impossible to name a satisfactory firm price. We will quote special prices on application, or all orders accompanied with the money will be filled at the lowest market price, upon receipt. The value as a fertilizing crop exceeds that of clover, for, in addition to being a larger nitrogen gatherer than the clover, they draw from the subsoil to the surface large amounts of potash and phosphoric acid, thus putting the soil in most excellent condition for following crops. The feeding value of Cow Peas, either green fed as hay or preserved as ensilage, is very high, being considerably above that of Red Clover. The yield of green vines per acre runs ordinarily from 5 to 15 tons.Sow $11 / 4$ to $13 / 4$ bushels per acre, on land thoroughly pulverized and disc or plow with a cultivator or double shovel plow. If wanted for hay, cut when peas are forming, cure as clover. If peas are for fertilizer, sow same quantity after same preparation as for hay; turn under when peas are in bloom. If farmers will first roll and disc peas they will turn under much easier and be more satisfactory. For a fertilizer, especially to be followed by wheat or corn, they are simply the best. Bear in mind that the Southern Cow Peas belong to the Bean family, therefore must not be sown until the ground is thoroughly warm and all danger from frost is past.

Early Black. Matures quickly, best variety for the extreme northern sections of the country.
Whip-Poor-Will. An early variety, tall, upright, medium yield of vines, large yield of peas, for which they are particularly grown. Highly recommended for "hogging down."
Clay. The leading variety in the South. Large yield of vines and peas, but require longer season to mature than the former-named varieties.
New Era. Seed small, dun colored; earlier than Whip-Poor-Will, but more trailing in habit. A great favorite in many places.
Mixed Cow Peas. These are splendidly adapted for those who merely wish same for feeding purposes, and being mixed, we are able to offer them at a lower price.

## SOJA, OR SOY BEANS.

Valuable forage plant; has attracted increasing attention yearly. It is one of the most nutritious of all vegetable products. It will produce a crop of 20 to 30 bushels per acre, and is as easily grown as other beans. For pasturing or feeding as green fodder it is very valuable, and nearly equal to clover for fertilizing. The dry beans, when ground, makes an excellent meal for feeding to milch cows. When roasted and ground they form an excellent substitute for coffee. Sow haif a bushel per acre broadcast, or plant in drills 3 feet apart, and 1 to $11 / 2$ feet between the plants, dropping 2 or 3 beans in each hill, which will require one gallon per acre.

## CANADA FIELD PEAS.

There is no crop of greater value than Field Peas. Whether for fodder, in mixture with oats, sown at the rate of 2 bushels each per acre, or the peas sown alone at the rate of? 3 bushels per acre for plowing under. Like all leguminous crops, peas have the power of extracting nitrogen from the air, and the soil from which a crop of peas has been harvested is richer in nitrogen than before the peas were sown upon it. ( 60 lbs. bushel.)

65c peck; \$2.40 bushel.

## SPELTZ.

The heads are somewhat similar to two-rowed barley. For fattening cattle, poultry, horses, sheep, pigs, etc., it is claimed to be ahead of any other grains. Cultivation similar to wheat or oats. Sow at the rate of 50 to 60 lbs. per
6 c lb.; $\$ 2.00$ for 50 lbs.;
c lb.; $\$ 2.00$ for 50 lbs ; $\$ 3.50$ for 100 lbs . BUCKWHEAT.
Shculd be sown about the middle of June broadcast, using from $3 / 4$ to 1 bushel to the acre. Japanese. This sort has proven to be much earlier and more productive than any other variety, Silver Full. The grain is of light gray color.

## SELECTED SEED OATS.

## Prices on Application.

Broadcast 2 to 3 bushels to the acre
Red Rustproof. These are the standard oats of the Southern States, yielding large crops When all other sorts were destroyed by rust. winter Turf. Perfectly hardy in the Southern and Middle States. Yields on good land, from 50 to 70 bushels to the acre of fine, heavy grain weighing from 35 to 50 pounds to the meas-
White, Black and Mixed.
Market price.
Spring Barley................... $\$ 1.35$ per bu. ( 48 lbs.)
Beardless Barley............. $\$ 1.25$ per bu. (48 lbs.) Sunflower, Mammoth Russian. May be grown to great advantage in waste ground, from early spring to the latter part of July. An excellent, cheap food for fowls. Plant 10 to 12 lbs. per acre..10c lb.; 75c 10 lbs.; $\$ 5.00100 \mathrm{lbs}$.
Teosinte (Reane Luxurians). The stalk can be cut several times during the season. Should not be planted until the soil is perfectly warm in spring. Requires about 4 lbs. of seed per
Hemp Seed. $\vec{W} \mathrm{e}$ wili be pleased to quote market prices upon application. Sow at rate of $3 / 4$ to 1 bushel per acre.
Flax Seed. Northwestern. Sow at rate of $3 / 4$ to 1 bushel per acre.
Owing to Market Fluctuations, Will Quote Prices on Application, Stating Quantity Wanted.

## NORTHERN GROWN SEED CORN.

## Prices Subject to Market Changes. Seamless Bags Holding Two Bushels, 20c Fach Bxtra.

Our seed corn has been grown for us by specialists in Ohio and Indiana for seed, and will be found of the highest grade as to quality and germinating power. Sow eight quarts.to the acre. Prices quoted by express or freight, not prepaid

McCullough's Champion White Dent. The best White Dent Corn. If planted early, say May 10 to 20 , it will come nearer making a crop of corn without rain than any other known variety. Makes a wonderful growth as far south as Georgia. In fact, it will mature in any corn country. It grows a strong, vigorous, deep-rooted stalk, stands up well, and in strong land and good season will make from 100 to 125 bushels per acre. Ears 10 to 12 100 to 125 bushels per acre. Ears 10 to 12 50 c peck ( 14 lbs ) ); $\$ 1.80$ bushel ( 56 lbs .)
Eeid's Yellow Dent. One of the best varieties of yellow corn grown. Ear medium in size, remarkably uniform, and of a bright yellow color, with solid, deep grain and small, red cob. Has from 18 to 24 rows of kernels on the cob, 50 to 60 grains in the row, and is well filled over the ends, and especially the butt, leaving a small shank, which makes it a great favorite with huskers. Best shredding sort, as it shatters the least of any by actual test...........50c peck; \$1.80 bushel (56 lbs.)
Ieaming Yellow. Ears of good size,, cob red and small. A strong grower, and very prolific. 40c peck ( 14 lbs ) ; \$1.35 bushel ( 56 lbs .)
Golden Beauty. Beautiful golden color, strong grower, of remarkable size. The rows are straight and filled out to the extreme end of the cob. Ripens in 110 to 120 days.
Silver Mine. One of the best yielding. White Dent Corns. Cylindrical shape, tapering a little at the tip end; 18 to 20 rows; kernels deep and cobs small. A fine shelling and high yielding variety...40c pk. (14 lbs.); \$1.40 bu. (56 lbs.)

Peerless (White). Will mature in 90 days, therefore may be sown later than any other variety, and still there is no danger of it being damaged by frost. Produces generally two large ears to the stalk, and in good land will yield one hundred bushels to the acre. 50c peck ( 14 lbs .) ; $\$ 1.65$ bushel ( 56 lbs .)
King of the Farliest Dent. An early yellow corn, adapted for high latitudes; will mature in 80 to 85 days. 45 c pk . ( 14 lbs .) ; $\$ 1.50 \mathrm{bu}$. ( 56 lbs .)
Gold Mine. Early Yellow Dent, ripening only a few days later than King of the Earliest; ears are of good size and symmetrical; grain is very deep; cob small.

40 c peck ( 14 lbs .) $\$ 1.40$ bushel ( 56 lbs )
Early Mastadon. The largest Early Dent Corn in cultivation. It is 90 to 100 -day corn, with long grain, very large ears, and will outyield any corn in the world.

45 c peck ( 14 lbs ) ; $\$ 1.50$ bushel ( 56 lbs )
Red Cob Ensilage. A southern type of large, white corn, with deep red cob, strong leafy stalks and short joints. Adapted to all sections of the country, and a general favorite with thousands of dairy farmers.
$\$ 1.15$ bu. ( 56 lbs.); $\$ 11.00$ for 10 bu.
Sugar Corn for Ensilage. There is nothing better for green feed or curing for winter than sweet corn. Cattle highly relish it, and when fed on it, keep in fine condition and give an abundance of milk. It has the great merit of being so sweet and palatable that cattle eat every part of the stalks and leaves, and consequently none is wasted. Also excellent for soiling. Sow thickly in drills or broadcast at the rate of 2 to 3 bushels per acre. Price quoted on application.

MANGEI WURZEL; SUGAR BEET; RUTA BAGA; PUMPKIN; ARTICHOKE, ETC. See Garden Seeds.

## SELECTED SEED POTATOES.

We select our Seed Potatoes in the best northern districts and expressly for seed purposes. As prices are liable to vary, we shall be pleased to give quotations on application.

They are put up in barrels of about $23 / 4$ bushels
 each. No charge for barrels. Bags 10c each.
Early Ohio (Red River Stock). A week earlier than Early Rose. Cooks dry and mealy.
Early Rose. The leading variety for earliness and productiveness
Early Beauty of Febron. Ripens with the Early Rose; valuable market variety.
Bovee. Extra early; very productive; of fine quality. Flesh white and very dry.
Early Six Weeks. Extra early, oblong in shape; flesh solid; cooks dry and mealy
Triumph. Extra early; fine bright red skin; white flesh.
Burbank's. Flesh fine grained and of excellent flavor; very productive.
Chicago Market. Very popular, early, good quality and yields well.
White Star. A large cropper, fine floury texture and delicious flavor.
White Elephant. Late, large, enormously productive, and of excellent flavor.
SEED SWEET POTATOES. Yellow and Red Jersey, Red Bermuda and Southern Queen. Write for prices. Ready for shipment about April. 1. For Plants, see page 24.

MISCELLANEOUS BIRD AND SUNDRY SEEDS.

| Per 1 lb . | Per 1b. | Per 1 lb . |
| :---: | :---: | :---: |
| Black Locust.................. 40 c | Cuttle Bone (1 oz. 5c)........ 40 c | Mustard Seed, white, for pickles.10c |
| Honey Locust.................. 40 c | Fennel Seed...................15c | Mustard Seed, crushed............ 10 c |
| Castor Beans................. 20 c | Flax Seed ( 4 lbs. 25c)......... 10 c | mustard Seed, black..............10c |
| Canary Seed (3 lbs. 25c).....10c | Flax Seed (crushed)...........10c | Osage Orange-Bois D'Arc....... $35 \mathrm{3c}$ |
| Mixed Bird Seed ( 3 lbs , 25c)..10c | Hemp Seed ( 4 lbs. 25 c )........ 10 c | Pumpkin Seed. . . . . . . . . . . . . . . . 15 c |
| Caraway Seed..................15c | Lettuce Seed, for birds....... 20 c | Rape Seed (3 1bs. 25 c ) $\ldots . . .1{ }^{\text {R }}$ 10c |
| Coriander Seed................15c | Maw or Poppy Seed........... $15 \mathrm{5c}$ | Sunflower Seed (4 lbs. 25 c ) $\ldots . . .1{ }^{10 \mathrm{c}}$ |
| Celery Seed, for flavoring.....30c |  | $\underset{\text { Wird Gravel }}{\text { Watermelon }}$ Seed................15c |
| Cotton Seed. . . . . . . . . . . . . . . . 20 | Millet, large ( 4 lbs .25 c ) | Bird Gravel (3 lbs. pkg.).........10c |



## cCullough's Selected Flower Seeds

Every year we carefully revise our list of flower seeds, add a number of splendid new sorts and discard all inferior varieties. Our collection will be found to contain everything really desirable. The latest and best in the floral world. Our, stock of seeds is of the highest possible quality.
ANNUALS attain full growth from seed, flower and die in one year.
BIENNIALS grow from seed one year, bloom and die the next, though some varieties bloom the first season when sown early
FERENNIALS last for several years, blooming annually after the first season, though some varieties will bloom the first season if sown early.
Discount on Packet Flower Seeds. For 25 Cents select 6 Five-cent, or 3 Ten-cent pkts. For 50 $\$ 1.30$ For Cents select Packets to the amount of 65 Cents. For $\$ 1.00$ select Packets to the amount of $\$ 4.00$.

PLEASE ORDER BY NUMBER. WE PAY THE POSTAGE.


ABUTIION. (Flowering Maple.) Elegant flowering perennial shrubs of strong growth and easy cultivation, free-flowering, with various colored, beautiful drooping bell-shaped flowers. Considered indispensable for flowering indoors during the winter and spring months, and useful for beddins out in the summer. Sown indoors any time besore April, they will produce plants that will flower outdoors the first season and indoors all winter.
1 Fine Mixed. Of choice varieties and colors........10c pkt.
ACEILLEA, (Milfoil or Yarrow.)
2 Ptarmica "The Pearl." One of the best hardy white perennials. Grows about two feet high, and from spring till frost is covered with heads of purest white double flowers. A grand plant for cemetery decoration. Easily grown from seed, flowering the first season if sown early.......10c plet.
ACONITUM. (Monk's Hood, or Wolfsbane.)
3 Napellus. A hardy perennial, growing in any good garden soil, producing long spikes of curiously-shaped blue and


## ACROCLINIUM. A pretty annual "Everlasting," growing about

 15 inches high, bearing lovely white or rosy-pink flowers, which, when cut in the bud state, can be dried and used in winter bouquets. A nice thing to grow in a mixed border aside from its use as an everlasting.4 Double Mixed .............................................. 5c pkt.


ADIUMIA. (Mountain Fringe, Allegheny Vine.) 5 Cirrhosa. A graceful, hardy, biennial climber, but, as it resows itself year after year, it might be considered perennial. The feathery foliage closely resembles that of the Maiden-hair Fern. The flowers are tube-shaped, flesh-colored, somewhat like the Bleeding Heart, and completely cover the plant. For covering trellises, stumps of trees, etc., it is very desirable. Flowers the first year from seed........................ 5c pkt.
AGFRATUM. (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. The various blue varieties are without doubt the most satisfactory bedding plants of this color mor our trying climate. 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.
6 Blue Perfection. Dwarf compact growth, large dark-blue flowers: valuable for borders and bedding . . . . ....................................... $5 c$ pkt.
7 Iittle Dorrit. Azure blue, very floriferous, $3 / 4$ ft. ............................................ 5c pkt.
8 Album. White, profuse bloomer, $11 / 2 \mathrm{ft}$. 5 c pkt.
AGROSTEMMA. (Rose of Heaven.) An attractive, free-flowering, hardy perennial of easy culture, producing flowers on long slender stems like a single pink. Blooms the first season. Fine for cutting; 1 to 2 feet.
9 Mixed Varieties

## ALYSSUM.

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

10 Little Gem, or Carpet of Snow. Of dwarf, compact habit, 4 to 6 inches in height. It begins to bloom when quite small, and the plants are a solid mass of white from spring to late in autumn, and undoubtedly the best white-flowering edging plant in the list. (See cut.) 50 cts. per oz...........5c pkt.
11 Sweet Alyssum. Of trailing habit; flowers white. AMARANTEUS. 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 center of large beds. They thrive best in a hot, sunny location, not too rich soil, and given sufficient room to develop their full beauty.
12 Caudatus. (Love Lies Bleeding.) Blood-red; drooping ricolor Splendens. (Joseph's Coat.) Leaves red yellow and green. An improvement on the old sort, of more brilliant coloring ...................5c pkt.
AMIMOBIUM. One of the hardiest of everlastings, valuable for forming winter bouquets, in connection with grasses and other everlastings. The flowers should be gathered before fully opened. Hardy annual.
14 Alatum Grandiflorum. White, large flower...5c pkt.

AMPFIOPSIS. A hardy perennial climber, with olive green leaves, which turn to scarlet in the autumn. The best and most popular climber for covering brick or stone walls
15 Veitchii. (Boston or Japanese Ivy.). .10c pkt. ARCTOTIS. (African Daisy.)

16 Grandis. A remarkably handsome annual from Southwest Africa. It forms much-branched bushes 2 to 3 feet high; its flowers are large and showy, being pure white on the upper surface, the reverse of petals pale lilac-blue. Daisy-shaped flowers of all kinds are always popular with flower lovers, and in the Arctotis we have one of the very best. It is easily grown from seed, and may be started in hotbed, in the house, or in the open ground, and the plants may be expected to come into bloom early in July and continue until quite hard frost, and will be a mass of bloom long after the more tender flowers of the garden have passed away. It delights in a sunny. situation. As a cut flower it is especially valuable, the blooms, lasting a week or ten days in 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 .................................

## ASPARAGUS.

17 Plumosus Nanus. (Asparagus Fern.) This graceful climbing Asparagus has fine foliage,



Alyssum-Little Gem.
18 Sprengeri. (Emerald Feather.) One of the best plants to grow in baskets, for greenhouse or for outdoors in the summer. The fronds frequently grow 4 feet long, and are fronds frequently grow 4 feet long, and are tions; grows readily from seed........10c pkt.

## AN'IRRHINUM.

## (Snapdragon:)

The Snapdragon is one of our finest perennials. If planted early will flower the first year as an annual. The newer sorts are flowers of great variety of colors and markings and brilliancy, making rich spikes, beautiful for cutting. Sow seed in the open ground, transplanting to one foot apart each way. They will bloom in July and August.
Giant-Flowered-Tall. Flowers nearly double the size of the older sorts:
19 Giant Queen Victoria. Very large; fine white. Giant Delilah. White and carmine...10c pkt Giant Firefly. Scarlet and white......10c plet.
22 Giant Purple King. A new variety with immense deep glowing purple flowers...10c pkt. 23 Giant Venus. Beautiful light rose, white throat . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10c pkt 24 Giant Romeo. Beautiful dark rose...10c pkt.
25 Giant Yellow Shades ................... . 10c pkt.
26 Giant Scarlet and Crimson ..............10c plkt.
27 Giant Mixed Colors. Tall growing... 5c pkt.


Antirrhinum-Dwarf.

## AQUILEGIA, OR COLUMBINE.

Popular free-flowering plants, blooming profusely through the spring and early summer. For planting in permanent borders or along the edges of shrubbery this old-fashioned favorite is one of the best of all hardy plants. Hardy perennial, 1 to 3 feet.

32 Alba Flora Plena. Beautiful double pure white variety, $11 / 2$ feet ........................................ 5c pkt. Californica Hybrida. Large yellow flowers, with dark orange spurs ....................................................
34 Coerulea. (Rocky Mountain Columbine.) Sepals deep blue, petals white; extra fine, 2 feet.............10c pkt. Coerulea Hybrida. Large flowered long spur hybrids.

- Long-Spur long-spurred flowers, shading from light pink to dark rose, with white center and yellow anthers......10c pkt.


## 37

38

Blooms profusely; about 12 inches high.



MIISCEILANEOUS ASTERS.
39
nllough's "Premier" Asters. ure is composed of the finest large flowering double varieties, which, for size of flower, excellence of color and habit can not be surpassed. Grown by specialists in Europe and America, each variety imported separately, and mixed by ourselves; the finest ever offered
40 China Asters, Mixed. A general mixture of fine sorts and colors .....................5c pkt.
41 Pink Beauty. A magnificent variety of strong, free, upright growth, blooming from early in August until well on in September, with long, strong stems. Chrysanthemum shape, the inner petals incurved, outer reflexed; color a soft, delicate, blush pink; a shade that is always in demand for cutting.........10c pkt.
42 Daybreak. Of symmetrical growth; attains a height of 18 inches, and produces during August perfect globe-shaped flowers, of a delicate pink tint . ................................ 10c pkt.
43 Lavender Gem. One of the mose beautiful Asters. Of comet type, with large, artistic, loosely-arranged flowers of the most charming shade of lavender imaginable...........10c pkt.
44 Purity. Identical in every way to Daybreak, but of pure glistening white..........10c pkt.
45 Snowdrift. A most valuable variety, coming into flower in July, with superb plumy snowwhite flowers of the Ostrich feather type.
46 Royal Purple. The flowers are large with full centers well covered, petals flat and incurved. Color a rich shade of Royal Purple. This variety is distinct in gromth from the branching Asters. The side stems start from the main stem close to the ground, and not in side shoots from the main stem.....10c plit.
47 Giant Branching Comet. Magnificent flowers on stems over a foot long; flowers extremely loose and graceful; a grand type for cutting. Mixed colors ................................... $10 c$ pkt.
CREGO'S GIANT ASTERS. A magnificent strain, bearing immense plumy flowers.
48 Crego's Giant, White
10c pkt.
49 Crego's Giant, Pink 10c pkt.
QUEEN OF THE MARKET, The earliest flowering first-class Aster, coming into flower in July, or fully three weeks in advance of the general run; of branching habit; flowers of good size and borne on long stems, making them exceeding valuable for cutting; excellent for growing under glass; 1 foot.


A

## McCULLOUGH'S SELECTED ASTERS.

 STERS are one of the most important summer and autumn flowers, and receive special care at our hands. Our list comprises only such sorts as can be planted with perfect confidence that nothing better is procurable, no matter at what price or from what source.The early sorts begin blooming in July, followed by the mid-season kinds, which flower during August; then the late-flowering varieties, which are at their best through September. It is quite easy, therefore, with a little care in the selection of the varieties, to have Asters in flower from the first days in July until hard frost.

Asters will thrive in any good soil, prepared in the same way as you would for a crop of vegetables, but it is well to remember that any extra 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 thoroughly rotted manure, and the addition of wood ashes or air-slaked lime, and we do not advise growing them on the same ground two years in succession. Half hardy annuals.

SEMPIE'S BRANCEING ASTERS. This superb strain is of American origin, and is especially adapted to our climatic conditions.
The plants form strong, branching bushes, 2 to $2 \frac{1}{2}$ feet high, bearing on long, strong stems their handsome Chrysanthemum-like flowers, which, under ordinary cultivation, average 4 inches across. The form of the flowers, together with the length of the stems, places them at the head of Asters for cutting. They come into bloom from two to three weeks after the average type, usually being at their best during September.


CARLSON or INVINCIBLE ASTERS. The early flowering branching Aster. A selection of the Paeony flowered type. The flowers are large and firm; the stems long and stiff, and the colors decided and pleasing. The plants grow about 24 inches high and come in bloom about ten days before the Semple's Branching Asters.


EARLY HOHENZOLLERN ASTERS. The finest type of the Giant Comet, or Ostrich Feather Asters. Much larger than the Giant Comet, the petals longer, more curled and twisted, and produced in greater abundance. Borne on long stems.

Per pkt.
Per plet.
69 Brilliant Rose 10 c
72 Pink ..........10c
70 Crimson .......10c
73 White .........10c
71 Light Blue ....10c 74 Mixed. All colors.
IMPROVED VICTORIA ASTERS. An unrivaled and favorite class. The flowers are of great size, measuring four inches and over across, beautifully imbricated and perfect in form, of great richness and variety of color; from twenty to forty on a plant; height, $11 / 2 \mathrm{ft}$.
Crimson Per pkt.
79 Scarlet Per pkt. Dark Blue ....10c 80 White ......... 10c Light Blue ...10c 81 Finest Mixed. All
colors 10c


## BALSAMS.

## (Lady Slipper, or Touch-Me-Not.)

One of the oldest and best known summer-blooming annuals, of easy culture. Desirable for garden or pot culture. The soil should be of the richest and best quality. Set them about 15 inches apart, and give them plenty of manure-water. Tender annuals; 2 feet.
82 McCullough's Premier Mixed. Unrivaled for the great variety of color and size of flower; includes all the most desirable shades and colors..10c pkt
. Brilliant salmon rose fowers; very double, of finest camellia-flowered type....10c pist. White Perfection. The finest pure white grown;
flowers unusually large, solid and double. .10c pkt. Choice Double Mixed. All kinds. oz. 50c....5c plst.

## BELLIS.

## (English Daisy.)

A favorite perennial plant, which will stand the winter if given the protection of a few leaves or litter; in bloom from early spring until well on in the summer. The seed we offer is saved from the finest double varieties; easily raised from seed; usually sown in August, but can be sown in spring, and for best results should be sown each year; 4 inches. (See cut.)

87 Longfellow. Large, double, dark pink flowers; with long,
 88 Snowball. A beautiful white variety, with long stems, all $11 / 2$ inches in diameter. Finest mixed.....................10c pkt

Bachelor's Button.
Blue-Bottle or Ragged Sailor. (See Cyanus.)
Balsam Apple and Pear. (See Momordica.)
Balloon Vine. (See Cardinspermum.)
Black-Eyed Susan. (See Thunbergia.)

## BEGONIAS.

## (Everblooming Bedding

 Varieties.)The following are varieties of Begonia Semperflording plants with Geraniums and Coleus, doing equally and Coll in full sunlight, and surpassing both in positions partially or wholly in shade. 90 Gracilis Iuminosa. This differs from Begonia Gracilis in the lustrous reddish brown color of
 the-foliage, while the flowers measuring 1 to $1 \frac{1 / 2}{}$ in. across, are of a fiery dark scarlet. It is very free flowering, and where massed produces a splendid effect. No better sort for groups and bedding has yet been seen................................................... $10 c$ pkt. 91 Vernon. Bright orange carmine flowers, deep red foliage . . ................................................... $10 \approx$ pkt.
92 Vernon Grandiflora. A large-flowering form of the above, with which it is identical in growth, floriferousness and color. The flower is nearly twice the size of the type..................................................... pkc 93 Semperflorens, Single Mixed. This mixture contains all the best varieties, ranging in color from pure white
to the deepest crimson; splendid...............10c pkt.

## BRACHYCOME.

## (Swan River Daisy.)

Free-flowering, dwarf-growing plants, covered during the greater part of the summer with a profusion of pretty Cineraria-like flowers. Suitable for edgings and small beäs, or pot culture. Half-hardy annual; 1 foot.
94 Mixed. Light blue and white......................5c pkt.

## BROWALLIA.

95 Free-flowering plants, covered with bright blue flowers, which continue to bloom during the summer and autumn. Sow during April and May, in good, light, rich soil. Half-hardy annual. Mixed..5c pkt.

## BRYONOPSIS.

A beautiful annual climber of the gourd species, with ivy-like pale green foliage and showy fruit, first green striped white, turning when ripe to bright scarlet striped white. 96 Laciniosa. 10 feet...5c pkt.

TUBEROUS-ROOTED BEGONIAS.
(See Bulbs.)

Calliopsis.


## CARNATION

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 summer flowering.
104 Fine Double Mixed. A good strain for
door culture.

10c pkt.
105 Marguerite Giant. These are deservedly the most popular the amateur, as the amateur, begin fowthey begin flow-
ering in four months from time of sowing. Finest Mixed. 5c pkt.


Marguerite Carnation.

## CARDIOSPERMUM. (Eanloog

A rapid growing annual climber; succeeds best in light soil; seed vessels look-like miniature balloons. 106 Cardiospermum. (Love-in-a-Puff.) .......

## CANNA.

Soak the seeds in warm water until they show evidence of swelling; then sow in sandy loam, and place in a hotbed; When up to the second leaf, pot off singly.
107 Mixed. Crozy's finest sorts. Per oz., 20c...5c pkt. CAMPANUTA. (Canterbury Bells.)
This old-fashioned flower is a favorite with all. Stately and showy, and of the easiest growth. Hardy biennials. 108 Medium (Single Canterbury Bells) The old-fashioned sort, with beautiful, large, bell-shaped blossoms. Single Mixed. All colors............5c plst. Calycanthema (Cup and Saucer Canterbury Bells). This is unquestionably the finest type of this oldMixed. All colors of the Cup and Saucer type.5c pkt.

## CANDYTUFT.

Universally known and cultivated, and considered indispensable for cutting; bloom profusely; 1 foot.
110 Empress, or Snow Queen. Large trusses of pure
white flowers …................................................... pkt.
111 White Rocket. Pure white, large truss.....5c pkt.

113 Finest mixed. Ali colors; oz., 20c.............. 5 s pkt.


## CALLIOPSIS.

Showy and beautiful free-flowering annuals, blooming all summer and excellent for cutting; $11 / 2$ to 2 feet.

97 Golden Wave. A very showy sort, with bright, golden-yellow flowers, with small, dark centers, blooming profusely..5c pkt.
98 Finest Mixed .............................5c pht.

## COREOPSHS.

99 Ianceolata Grandifiora. One of the finest hardy garden plants forming large clumps, grows 2 to 3 feet high and increasing in beauty, luxuriance and floriferousness each year; it flowers the first season from seed sown early. It is an improved variety of the lanceolata type, producing langstemmed, rich, yellow flowers, flowering in profusion for a long period during the summer; unequaled for cutting; grows anywhere. Hardy perennial............10c pkt.

## CALENDULA.

## (Pot Marigold.)

Showy, free-flowering hardy annuals, growing in any good garden soil, producing a fine effect in beds or mixed borders and continuing in bloom until killed by frost; valuable also for pot culture; 1 foot.
100 Prince of Orange. This variety surpasses in beauty the well known Calendula Mteor. The stripes around each petal are of a deep orange color, making a brilliant appearance................................. pkt.
101 Pure Gold. A grand variety, with double extra large flowers of a 102 Fine Double Mixed. Contains the choicest sorts. 5 c pkt

## CALCEOLARIA.

Unsurpassed for pot culture in the greenhouse or conservatory, producing their brilliant flowers in great profusion and variety.

103 Eybrida Grandifiora. Mixed varieties.........25c pkt.
Castor Oil Ecan. (See Ricinus.)
California Poppy. (See Eschscholtzia.)

## -



Campanula Medium (Canterbury Bells.)


Centaurea Cyanus (Cornflower).

## CELOSIA PLUIVIOSA.

(Feathered Cockscomb.) Make fine plants for large beds or groups, and the plumes or flowers can be cut and dried for winter bouquets.
126 Thompson's Superb (Triomphe de l'Exposition). Of pyramidal growth, attaining a height of 3 feet, and producing graceful, feathery plumes of the most brilliant crimson...10c pkt. Thompsoni Magnifica. Simcept in colors, which vary in the most magnificent shades, ranging from the clearest yellow to the darkst blood-red. . . . . . .15c pkt. golden-yellow plumes. Plumosa, Mixed. Feathered varieties in all colors, 5c pkt.

## CENTAUREAS.

Under this name is included such popular annuals as the Cornflowers, Sweet Sultans, etc. They are favorites in all sections of the country, are perfectly hardy, will grow and do well almost anywhere, and are much in demand as cut flowers.

## CENTAUREA CYANUS.

Ragged Sailor, Cornflower or Blue Bottle. Very attractive flowers of easiest culture, one of the most graceful of all the old fashioned flowers. Sow early in the spring in the beds where they are to bloom.
114 Emperor William. Fine sky-blue............5c pkt.
115 Emperor William, Semi-doußle. This is a new variety of Cornflower. Very fine dark blue. .5c pkt.
116 Mixed. Blue, white, rose, etc.................... 5 p prt.
117 Double-flowered Mixed. All colors, including blue, rose, white, etc........................................... 5 pkt.

## CENTAUREA IMPERIALIS.

## Royal Sweet Sultans.

This beautiful class is undoubtediy the finest of all Sweet Sultans for cut-flower purposes. The sweet-scented, artistic-shaped flowers are borne on long, strong stems, and when cut will stand for several days in good condition. It is best, in this latitude, to sow very early in the spring, so that they may perfect their flowers before very hot weather comes.


## WHITE-LEAVED CENTAUREAS.

## (Dusty Millers.)

Fine for bedding, vases, hanging-baskets and pots; also extensively used for margins. As an edging to a bed of dark-leaved Cannas or Scarlet Sage, these are particularly effective. Sow the seed early indoors and transplant in effec
Mav.


## 122 Candidissima. Silvery 123 white ...... 10c pkt. Gymnocarpa. Fine-cut silvery foliage. <br> 10c pkt. <br> CELOSIA, OR COCKSCOMB.

Free-blooming, graceful plants, growing best in rather light soil, not too rich, producing beautiful comb-shaped flowers; grown in pots, they are fine for the greenhouse or conservatory. Halfhardy annuals.
124 Glasgow Prize. A superb sort, with enormous rich, deep crimmous rich, deep crim125 Dwarf Mixed. Large solid heads of bloom.

## CENTROSEMA.

(The Butterily Pea.)
Interesting and beautiful hardy perennial vine of rare and exquisite beauty. It blooms early in June from seed sown in April, and bears in the greatest profusion inverted pea-shaped flowers, from $11 / 2$ to $21 / 2$ inches in diameter, ranging in color from a rosy violet to a reddish purple.
130 Grandifiora

## CINERARIA.

A well known greenhouse plant, having a range and brightness of color scarcely, surpassed. It may be had in bloom through the greater part of the year.
131 Hybrida Grandifiora. This strain of Cineraria can not be surpassed, either for size of flowers or beauty of color. Many of the blooms measure $21 / 2$ inches in diameter. We have received very flattering reports from florists and private gardeners of their success with our Cineraria seed. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 25 pkt.

## Seeds are different from other merchandise. The real value

 of seeds can only be known after months of labor. Buy your seeds of a reliable seed house with a reputation back of it. Seeds of real merit must be grown and sold by practical, trained seedsmen, with a reputation made and to be maintained.
## CHRYSANTHEMUMS. <br> anNuAl VARIETIES.

Showy and effective garden favorites, extensively grown for cut flowers. The hardy annuals are summer-flowering border plants, and quite distinct from the hardy perennial and autumn flowering varieties.
132 Inodorum Bridal Robe. Of compact and upright habit. The plants grow about 12 inches high, and are covered the entire summer with their beautiful snowwhite double flowers, which resemble the White English Daisy. Valuable for cutting................... 10c pkt. Segetum, Evening Star, or Helios (Corn Marigold, or Annual Golden Marguerite). A splendid variety for cutting, flowers 3 inches across, of pure golden-yellow; in general appearance resembles the Yellow Paris

134 Coronarium Double Mrixed. Yellow, white etc.. 5 p pkt. 135 Single Mixed (Painted Daisies). Many colors..5c pkt.

## PERENNIAL VARIETIES.

136 "Shasta Daisy." A grand large-flowering Daisy, hardy, robust growth and produces larger and finer fowers each season as the plants increase in strength. The flowers measure four inches in diameter, and while single have three or more rows of long, slender, snowywhite petals surrounding a small golden yellow center or eye. They are especially useful as cut flowers as well as showy bloomers for planting in beds or borders of perennial or hardy flowers. Selected Seed, much superior to the original strain................. pkt.
137 Frutescens Grandifiorum ("Paris Daisy," or Marguerite)
 color, which is a beautiful clear yellow Japanese Hybrids. The seed here orfered has been saved from a magnificent collection. S e ed sown in spring will produce flowering plants by fall. 15c pkt.
140 Fardy Pompon. A fine strain of the old-fashioned hardy fall-flowering sorts, with double buttonlike blossoms. Mixed colors...10c pkt.

## CLEOME.

(Giant Spider Flower.)
141 Pungens. Singularlooking, rose-colored flowers; the stamens look like spiders' legs, and present a very attractive appearance annual, 3 feet. This plant is now used extensively in many of the public parks, planted among shrubbery, and is very .effective. 5 c pkt.



Single Annual Chrysanthemums.

## CONVOLVULUS.

(Morning Glory.)

## MAJOR, OR CLIMBING VARIETIES.

Deservedly very popular, as they are one of the most free-flowering and rapid-growing plants in cultivation, thriving in almost any situation; the beauty and delicacy of their brilliant flowers are unsurpassed; annuals; 15 feet.
143 Morning Glory, Mixed. All colors. Per oz., 15 c.
144 Japanese Morning Glory. The flowers are of gantic size, exquisite variety of colors and magnificent marbled foliage. The flowers measure from 4 to 6 inches across. The colors are limitless in variety and very beautiful. This mixture contains a finer and larger collection of colors with larger flowers, more frilled than the ordinary mixture...................................... $10 c$ pkt.

## COBAEA SCANDENS.

A magnificent rapid-growing summer climber, and bearing large bell-shaped purple flowers. In sowing, place the seeds edgewise and cover lightly. 145 Purple Lilac...


## COLEUS.

Our strain of hybrid varieties produces the finest colored, most attractive and novel foliage plants for house or garden culture. A most interesting subject to grow from seed. Easily raised. Sow in March or April.

## 142 Mixed.

25 c pkt.

## CYPRESS VINE.

One of the most popular summer climbers; flowers small, thickly set, in delicate fernlike foliage. Half hardy annual.
146 Scarlet.
5c pkt.
147 Mixed Colors. Oz ., 30 c . 5c pkt.
Columbine.
(See Aquilegia.)
Coreopsis.
(See Calliopsis.)

## $3<3$

FLOWER SEED BY WEIGHT.

We carry a
large stock of flower seeds and flower seeds and quantity desired quantity desired
of any sort. Send us your list for estimate.


Cosmos.

## COSMOS.

Beautiful autumn-blooming plants. They produce thousands of beautiful flowers in pure white, pink and crimson shades, furnishing an abundance of cut blooms for autumn decoration when other flowers are scarce. Should be sown in spring in the open ground, when danger of frost is past, or the seed may be started under cover and afterwards transplanted. Plant not less than 18 inches apart in rows or in masses in beds. When the plants are about a foot high the tops should be pinched out to induce a bushy growth. They prefer a rather light, not too rich soil, but do well almost anywhere.

Mammoth Perfection Cosmos. A magnificent selection, bearing flowers of mammoth size and perfect form, and representing the highest developments in Cosmos to date. We offer it in the following colors:
148 Crimson. Rich and deep................................ $5 c$ pkt.
149 Light Pink. A popular color.............................. 5 c pkt.
150 Pure White..................................................... 5 p pkt.
151 Mixed Mammoth Perfection, $1 / 4$ oz., 20c..........5c pkt.
152 Giant-fiowering "Lady Lenox." The latest development in this popular autumn flower, bears gigantic flowers, with wide, overlapping petals of splendid substance, with wide, overlapping petals of splendid substance, very long stems, in color a beautiful deep rosy-pink. The plant is of strong, vigorous growth........10c plet.

## CYCLAMEN.

A popular pot-plant for winter and spring-flowering, blooms are very freely produced and last a eight to ten months.
158 Giant-flowered (Persicum giganteum). Best strain; orchid-flowering. Mixed. 25 c pkt.

## DAISIES.

(See Bellis.)
EXTRA EARLY COSMOS.
Seeds sown in the open ground produced plants that were covered with bloom two months before the lateflowering kinds. While the flowers are not so large as the late sort, they are of good size, and will undoubtedly perfect their flowers in the most northerly States. 153 Dawn. White, flushed 154 Crimson. . $\dot{\text { Rich.10c } 10 c}$ pkt. 155 Pink. A pretty shade. 156 Pure White 10c pkt. 157 Mixed, Early Cosmos All colors, $1 / 4 \mathrm{oz}$., 25c; 10c pkt.

## HORTICULTURE.

See list on inside of back cover.

## DAHLIA.

Dahlias are easily grown from seed and bloom the first season. The earlier they are started the better, which can be done nicely in a box in a sunny window or the greenhouse. Some specimens grown from seed are fully equal to many of the named sorts, and there is always the chance of getting some entirely new varieties. The Single Dahlias are being planted more extensively every year; they are quick and profuse bloomers, and their colors are especially rich and brilliant. Tuberousrooted half-hardy perennials; protect the roots during winter in a dry cellar in sand.
159 Large-Flowering Choicest Double Mixed. This elegant assortment of seed is saved from round, double flowers; many beautiful colors............10c pkt. Pompon Varieties, Fine Mixed. These have small, round, perfectly double flowers; many beautiful colCactus Varieties, Choicest Mixed. Most popular at the present time; distinct and elegant; petals pointed; blooms perfectly double............10c pkt. Twentieth Century or Orchid-Flowered. A truly exquisite single Dahlia. Individual flowers are 5 to 8 inches across. Innumerable colors, that have the Single Giant Perfection. This strain produces flowers of immense size, in a great variety of coloring.

10c pkt.

## DIGITALIS.

## (F'oxglove.)

Handsome and highly ornamental hardy plants of stately growth. They are now used extensively with good effect for naturalizing in shrubberies, the edge of woods and other half-shady places; 3 to 5 feet.
164 Gloxiniaeflora. This is a fine strain of Foxglove, with handsome spotted Gloxinia-like flowers on long spikes; all colors, mixed....................... 5c pkt.
 mounted by one enormous flower; very odd: all col-
ors, mixed.


Delphinium, Giant Hybrids.

## DIANTHUS, OR PINKS.

This elegant family contains many of the most valuable and popular flowers in cultivation. All the sorts classed as annuals may be sown directly in the garden as soon as danger from frost is past, and will in a short time become a mass of bloom, and so remain all summer. Elegant as cut flowers for bouquets, as the stems are good. Grow about 1 foot high, and are of easiest culture.

## DOUBLE ANNUAL PINKS.

166 Chinensis f. pl. (China Pinks). Large, double, fragrant flowers. Mixed colors..

5c pkt.
167 Feddewigi Diadematis fl. pl. (Double Diadem Japan Pink) Densely double flowers in beautiful tints of crimson lilac purple, outer edges fringed with white................5c pkt
168 Iaciniatus fl. pl. (Double Fringed Japan Pink). Large, double. showy flowers, with fringed edges; various colors and beautifully striped .............................................. 5 . pkt.
169 ROYAI FINK (Dianthus Heddewigi Nobilis). The flowers are very large and the petals are frilled and fringed. The colors are of a deep yet very bright blood-red, then shade to carmine and pink and even white........................... 5 c pkt,

## SINGTE ANNUAL PINKS.

170 Dianthus Laciniatus Nanus (New Hybrids). This is a grand new strain of the annual Pinks, with laciniated or fringed petals. The flowers vary in shade from white to deep rose and even to purplish red; are all tinged more or less with bright salmony red or salmony scarlet. The plants grow only about 10 inches high and are remarkable for their free-flowering character.
. 50 pkt.
HARDY GARDEN, or CLOVE PINKS. This splendid class of hardy perennial Pinks should be in all gardens. They have the delightful clove fragrance.
171 New Double Large-Flowering Grass, or Spice Pinks (Plumarius Semperflorens, Fl. Pl.). One foot high. The flowers, which are beautifully fringed, are much larger and more double than the old varieties, while the colors are far richer, including a large variety of colors and markings not known to the old-fashioned Pinks. Many are exquisitely spotted and splashed. They emit a delightful, sweet-scented, spicy odor. Perfectly hardy, requiring only the ordinary culture of Pinks. They increase in size and beauty every year. Bloom profusely during the spring and early summer.15c pkt.
172


## DELPHINIUM.

(Hardy Perennial Larkspurs.)
One of the most exquisite blue-tinted flowers that we have. Very effective planted in beds or masses, in borders, or better than all in combination with white lilies, blooming at the same time as the exquisite Lilium Candidum. If picked freely and not allowed to go to seed, they will continue blooming all summer. Plant $1 \frac{1}{2}$ to 2 feet apart each way. Perennial varieties should be sown in the fall or very early in the spring, transplanting to the open ground.

173 New Giant-Flowering Hybrids. These magnificent Hybrids, the grandest of Delphiniums in existence, produce beautiful spikes of immense flowers, single, semi-double and double. Flower spikes are from 2 to 3 feet in length. The colors are very beautiful, ranging from pure white through all the shades of lavender and blue. Mixed Colors............ 10c pkt.
174 Elatum (Giant Bee Larkspur). Clear, blue flowers, 3 feet.
Formosum Flegant spikes of the richest dark-blue 5c pkt. with a white center; especially fine for cutting; 4 feet. 5 c pkt.
176 Formosum Coelestinum. Light, sky-blue flowers, with darker centers; a very fine variety; 4 feet.......................... 10c pkt.
177 Mixed Chinese Varieties. This elegant mixture contains a great variety of shades, from pure white to gentian-blus. The plants are brilliantly showy....... Annual Delphiniums. (See Larkspur.)

DIMORPHOTHECA (African Golden Daisy).
178 Aurantiaca. An extremely showy annual Daisy from South Africa, which seems to suit our climatic conditions perfectly. The bushy plants grow 12 to 15 inches high. The flowers, which are $21 / 2$ inches and over across, are a unique, rich, glossy orange-gold, with dark disc and halo. These glitter in the sunshine and present a magnificent sight when in full bloom. Seed may be sown in the same way as Asters or Petunias, and should have a dry, sunny position. They bloom the greater part of the summer and fall..............ioc pkt.
DOIICEOS (Hyacinth Bean). A rapid-growing annual climber, flowering freely in erect racemes, followed by ornamental seedpods; for covering arbors, trellises, etc. Sow the seed in the garden in May, where they are to remain; 10 feet.
179 Finest Mixed. Very choice mixture of all the best climbing varieties. $1 / 2$ oz., ioc; oz., 15c.............................5c pkt.

DUSTY MITLER. (See Centaurea.)

## ESCHSCHOLTZIA.

(California Poppy, Gold Cups.)
The California Poppy is a showy, free-flowering plant of low-spreading growth, with finely divided foliage, blooming throughout the season. Seed should be sown thinly in shallow drills early in spring. Hardy annuals.
180 Mixed. Single cup-shaped flowers in shades of bright yellow, deep orange, pink and silvery white....................... pc pkt. center 182 Carmine King. A beautiful carmine rose color, as intense on the inside as on the outside of the petals, which gives it an altogether novel and beautiful effect
183 Golden West. The flowers measure pkt. 3 to 6 inches in diameter; they have large, overlapping petals, often daintily waved at the edges. Color, light canary-yellow, with an orange blotch at the base of the petals, which blotch often suffuses almost the whole flower. . ......................... 5 c pkt.
ECHINOCYSTIS (Wild Cucumber Vine).
184 Lobata. One of the quickest-growing annual vines we know of; splendid for covering trellises, old trees, fences, etc. Per
 EUPHORBIA. Strong-growing annuals, suitable for beds of tall-growing plants or mixed borders; the flowers are inconspicuous; the foliage, however, is exceedingly orna-

185
Variegata (Snow on the Mountain). At-


## Eschscholtzias, or California Poppies.

tractive foliage, veined and margined with white; 2 feet. Per oz., 30c.
5c pkt.
186 Heterophylla (Annual Poinsettia Mexican Fire Plant, Painted Leaf). An annual resembling in habit and color the beautiful hothouse Poinsettia. The plants grow 2 to 3 feet high, of branching, bushlike form, with smooth, glossy-green leaves, which about midsummer become a beautiful orange-
 EVERLASTING, ETERNAI, OF STRAW FLOWERS. (See Acroclinium, Ammobium, Gomphrena, Helichrysum, Rhodanthe and Xeranthemum.)


## Caillardia, Kelway's Hybrid.

FEVEREEW. (See Pyrethrum.)
FORGET-MER-NOT. (See Myosotis.)

## FOXGTOVE.

## GERANIUM.

(Pelargonium.)
The heads of gorgeous flowers, of many shades of color, borne continuously, render this one of the most popular plants grown, either for pot culture in winter or for bedding out in summer 187 Zonale, Mixed, A superb strain of the 1 largest and finest varieties ... 10 c pkt 188 Apple-scented. This fragrant favorite variety can only be grown from seed to form riety can only be grown from seed to form GNAPHATIUM (Edelweiss). This famous flower of the Alps is of a downy texture, starshaped, and pure white. They are highly prized as souvenirs, and are sold at a high price in Switzerland.
189 price in switzerland. Whit

## GAILLARDIA.

(Blanket Flower.)

## Annual Varieties.

Splendid showy annuals; in bloom from early summer till November; excellent for beda borders or for cutting; should be sown where they are to bloom; $11 / 2$ feet.
190 Picta. Crimson and orange........5c pkt. 191 Ficta Lorenziana. A charming, profuse, double-flowering strain; mixed colors. 5c pkt. 192 Picta Mixed. Single sorts; fine colors

5c pkt.
Hardy Perennial Varieties.
The following are among the showiest and most effective hardy perennial plants, and should find a place in every hardy border. They thrive in almost any position or soil, require little or no protection and take care of themselves. If sown early they begin flowering in July, continuing a mass of bloom until frost; fine for cutting; 2 feet.
193 Kelway's Hybrids. The finest strain of Perennial Gaillardias. The flowers are of enormous size, and the colors are most varied. This is one of the hardy perennial plants that no garden should be without. In flower for about three months; 2 feet.......................... 10c plit. Grandifiora Compacta. A compact variety, forming bushy plants 12 to 15 inches high, and bearing
 GODETIA. Beautiful garden annual, of easy culture in any good soil. Large flowers, embracing a great variety of rich colors. Can be grown in pots; $11 / 2$ feet. Hardy annual.
196 Finest Mixed
5c pkt.
GOMPHRENA (Globe Amaranth). A desirable everlasting, valuable for its handsome globular heads of flowers. Seed germinate very slowly. Half-hardy annual.
197 Mixed $\qquad$


Gourds.

## ORNAMENTAL GOURDS.

|  | limbing plants with curiously shaped fruit, in various colors. Being of rapid |
| :---: | :---: |
| growth, they are fine to cover old fences, trellises, stumps, etc. The foliage is |  |
| ornam | ental, and the marking of some of the fruit quite extraordinary. Do not |
| plant the seed till all danger of frost is over, and select rich, mellow ground. |  |
| Tende | r annual climbers, 10 to 20 feet hig |
| 198 | Calabash, or Dipper. Long, slim handle................................ 5c pkt. |
| 199 | Dish Cloth. This variety is very ornamental, with clusters of large, yellow flowers. The fruit, when dried, is used as a dish cloth.................sc pkt. |
| 200 | Giant Bottle. Large and ornamental.................................... . . . 5 ckt. |
| 201 | Hercules Club. A curious sort. Club-shaped.........................5c pkt. |
| 202 | Japanese Nest Egg. White; fac-simile of an egg; do not crack, and are not injured by heat or cold. Very ornamental climber..................5c pkt. |
| 203 | Orange. The well-known mock orange...............................5c pkt. |
| 204 | Pear-shaped. Green and white striped. ..............................5c pkt. |
| 205 | Sugar Trough. Used for buckets, Very large....................... 5c pkt. |
| 206 | African Pipe. The stem end of the fruits are much used in making pipes. |
| 207 | Mixed Varieties: All kinds; per oz., 25c.............................. 5 . ${ }^{\text {c }}$ c pkt. |

## ORNAMENTATGRASNES.

The Ornamental Grasses serve the double purpose of rendering the mixed flower bed or border attractive during the summer, and for the use of the spikes or panicles in a dried state in winter bouquets. For large beds or groups on lawns nothing gives a finer effect, and they are now largely used in prominent positions in many of the finest public parks, etc. When carefully dried, they are useful in making up winter bouquets. Cut when in full bloom, and before the flowers get too old; tie in small bunches and hang up in a dry, dark place, with the heads downward.
208 Briza Maxima. (Large Quaking Grass.) A beautiful variety Hardy annual; 1 foot......... 5 c pkt.
209 Brcmus Brizaeformis. A graceful variety, with dropping panicles. Hardy perennial, flowering the 210 first season; 1 foot. ............................................................................................ 5 . pkt. 210 Coix Iachryma. (Job's Tears.) Broad, corn-like leaves, and hard, shining, pearly seeds, resembling
 season if sown very early; 10 feet......................................... 212 Eulalia Japonica. One of the most beautiful of the tall-growing
213 Gynerium Argenteum. (Pampas Grass.) The finest ornamental
grass in cultivation. Half-hardy perennials; 10 feet....5c pkt.
214 Pennisetum Ruppelianum. Beautiful and graceful spikes of pur-
215 ple; this is one of the best; $21 / 2$ feet......................................... second season from seed. 2 feet. ..................................... pkt. 216 Finest Mixed. Used for making winter bouquets..............5c pkt. GYPSOPEIIA (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. Hardy perennial.
217 Paniculata.

White, fine for bouquets.
5c pkt.

## HELIANTHUS.

## (Sunflower.)

It is raised as an absorbent of miasma in damp or ill drained situations, thus preventing fevers. The seed is good for feeding poultry. Hardy annuals.
SINGIE SUNFIOWERS. These Sunflowers are indispensable for cutting. Sown on a sunny spot in April or May they come into bloom early in summer, and keep up a constant supply of flowers until cut down by frost. Cucumerifolius (Miniature Sunflower). Small, single, rich, yelStella (Improved Miniature Sunflower). Differs from 10c..5c pkt by its larger and better formed flowers of the purest golden yellow, with black disc; $1 / 4$ oz., 15c..................................... pkt.
220 Orion. Artistic and effective new variety of "Stella." The petals 221 Perkeo. A charming dwarf variety of the Miniature Sunflower


Single Sunflowers.

221 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,


322 Miniat 15c. 2 Mireties, Mixed. A multitude of Miniature Varieties, Mixed. A multitude of new varieties have been raised from the popular Miniature Sunflower which we offer in mixture. They all differ from the parent, most of them being larger, and many with curiously twisted petals. The prevailing colors are pale yellow, golden and creamy white, some with black centers, and all beautiful; for cutting they are indispensable; $1 / 4 \mathrm{oz}$, 15c.....5c plt.

## Double Sunflowers.

223 Crysanthemum-rlowered. An excellent plant for the lawn or shrubberies where color effect is desired. The plants grow 6 to 7 feet and produce a great number of double flowers. On account of their size, long stems and color the flowers are well adapted for vases; oz., 25 c . Globosus Fistulosus (Dahlia Sunflower) Flowers large, double of rich saffron color; 6 feet; oz, 25c................................5c pkt. Mammoth Russian. Extra large flowers, with an abundance of seed; oz., 10c................................................................... . . . $5 c$ pkt.
226 Double Varieties, Mixed; oz., 20c........................................ 5 c pkt.

## Hardy Perennial Sunflowers.

227 Mixed. Contains the finest single flowering hardy perennial sorts including such varieties as Maximilliana, Miss Mellish, Orgyalis, Tomentosus, etc., etc. Seeds sown early will produce flowering plants the first year; as subjects for the hardy border, as well as for cuttins. they are of great value.

10c pirt.


Chater's Prize Follyhocks.

## HOLLYHOCK.

One of the most majestic of hardy plants, and a clump or line in any garden gives an effect not attainable with any other plant. For planting among shrubbery or forming a background for other flowers it is without equal. Seed sown any time before midsummer will produce fine plants for flowering next year. To get results this season it is necessary to get year-old plants. These we offer with other hardy plants under their proper heads.
228 Chater's Prize, Double Mixed. This strain stands unrivaled in richness and delicacy of coloring, with magnificent spikes of very double flowers; 3 pkts., 25 c. ...................... 10 p pirt.
229 Chater's Double Pink............................................. 10c pkt.
230 Chater's Double Scarlet............................................. . . . . 0 pkt.
231 Chater's Double White............................................... 10c pkt.
232 Chater's Double Yellow.......................................... . . . . $10 c$ plrt.
233 Choice Double Mixed.............................................. 5 c pkt.
234 Mammoth Fringed Allegheny. Mammoth flowers of loosely arranged fringed petals, which look as if made from the finest China silk. The colors vary from the palest shrimp pink to deep red. The plants are of strong growth, sending up spikes 6 to 7 feet high.

Can be ................................................ pkt.
Everblooming. Can be treated as annuals, the seeds may be started in the house or hotbed in March or April, and will commence to flower in July, and stay in flower until late in the season: Colors vary from snowy white, rosy carmine, yellow, blood-red to the deepest black in single; also in semidouble and double flowers. Plants branch out freely. 10c pkt.
236 Single. Many prefer the single flowering Hollyhocks. They are usually of freer growth and present a handsome appearance when covered with their artistic blossoms. Finest Mixed. All colors................................................. 5 p pkt. HELICHRYSUM (Straw Flower). Everlasting flowers, large and full. Colors, white, yellow and red. Cut before the flowers fully expand. Hardy annual.
237 Double. Finest mixed............................................. . . . 5 c pkt.
HEIIOTROPE. A half-hardy perennial, flowering during the whole season; its delightful perfume makes it a deswable bouquet flower; a splendid bedding plant, or can be trained as a greenhouse climber
238 Lemoine's Giant. Of robust growth and producing heads of flowers double the size of the old sort....................10c pkt.
239 Finest Mixed. All colors......................................... 5c pkt.
HIBISCUS (Marshmallow) Showy ornamental plants, for mixed beds or shrubbery borders, having large-sized, beautifullycolored flowers; blooms the first year if sown early
brown Africanus. Large, cream-colored flowers, with a brown center; hardy annual; $11 / 2$ feet. ...................5c pkt.
241 Crimson Eye. Flowers of the largest size, pure white, with large spot of velvety crimson in the center of each flower. Hardy perennial; flowers the first year from seed sown early.
242 Mallow Marvels (Meehan's). Immense flowers from 8 to 10 inches in diameter, in following colors; fiery crimson, blood red, shell pink and white. Their great beauty surpass all other perennials in profusion of bloom and brilliancy of color. Of herbaceous character they come up year after year and are absolutely hardy. In bloom from July to October.

10c pkt. HONESTY (Moonwort, Satin Flower). Early free-flowering plants. Admired for their silver-like seed pods. Hardy biennial.
243 Lunaria Biennis
.5c pkt. HUMULUS (Japanese Hop). Annual climbing Hop, of rapid growth, valuable for covering trellises and verandas. Tender annual.
244 Japonicus. A very ornamental and fast-growing climbing plant. The foliage resembles in shape that of the common Hop, is very dense, and in color a lively green; annual.............................. 5 . pkt.


Heliotrope.

245 Japonicus Variegatus. A variegated variety of the Japanese Hop. The leaves are beautifully and distinctly marked. As with the green-leaved variety, it is never injured by init is never injured by insects nor affected by the and bright variegated foliage until late in the autumn................. 5 5c pkt.
HUNNEMANNIA (Giant Yellow Tulip Poppy, or Bush Eschscholtzia).


246 Fumariaefolia. 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, popy-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....5c plst. HYACINTE BEAN. (See Delichos.)

IMPATIFNS (Sultan's or Zanzibar Balsam). Charming plants for the decoration of the greenhouse or dinner table, producing bright, waxy-looking flowers profusely and almost continuously. The young seedlings should be carefully handled, as they are exceedingly brittle at the outset.
247 Holstii. It forms elegant bushes $11 / 2$ feet in height. The flowers measure $11 / 2$ inches across. and are of a brilliant vermillion color. In a half-shady situation, the plants grow luxuriantly and form effective and showy flower beds, also an excellent pot plant.15c pkt. 248 Sultana Hybrida. Beautiful hybrids. Varying shades of color, from delicate pink to the deepest red.10c pkt. IBFRIS (Hardy Candytuft).
249 Gibraltarica Hybrida. White, shading to lilac. 10c pkt. 250 Sempervirens. A profuse white-blooming, hardy perennial, coming in fower early in the spring, much used for cemeteries, rockeries, etc.; 1 foot.............5c pkt. ICE PIANT. Handsome and curious plants for hanging baskets, rock-work, vases and edgings. The leaves and stems are covered with crystaline globules, giving it the appearance of being covered with ice. succeeds best in a sandy soil and warm situation. Half hardy
251 Mesembryanthemum. Crystallinum (Ice Plant)..5c pkt.

## MOON FLOWER, ETC.

## (Ipomoea.)

Climbers of rapid growth, with beautiful and varied flowers; for covering walls, trellises, arbors or stumps of trees they are invaluable.
252 Cross Bred or Hybrid Moon Flower. 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 is a rapid grower, and within a few months will grow as much as 40 feet. To insure germination, take a sharp knife and cut a small nick in shell of each seed, and soak in lukewarm. water for about 4 hours before planting. Oz., 75c.........5c pkt.

Strong Moon Flower Plants, 20c each; \$2.00 doz. By mail, 25c each.
253 Setosa (Brazilian Morning Glory). Flowers 3 inches or more across, of a beautiful rose color, borne in large clusters very freely from July to frost. As a quick-growing vine it has no equal, covering an enormous space in a few weeks time........................... $5 c$ pkt.

KENIIWORTF IVY. A charming, small, neat, hardy perennial trailing plant, suitable for baskets, vases, pots and rock-work.
254 Linaria Cymbalaria. Lavender........10c pkt. KOCETA (Summer Cypress, or Burning Bush). A highly ornamental annual of rapid growth which forms regular pyramids about 3 feet high, having a cypress-like appearance. The leaves are slender and of a light green until September, when they change to carmine and blood-red. The flowers are minute but countless. Sow indoors in April and plant out in May, or sow in open ground about May 1. Plants do best in a sunny exposure.
255 Kochia Tricophylla, oz., 50c.
.5c pkt.


## LARKSPURS.

## (Annual Delphinium.)

These popular garden flowers have been greatly improved of late in color and size of blooms and habit of plants. Hardy annual.
256 Double Stock-Flowered. These tall-growing and branching Larkspurs produce the most brilliantly beautiful spikes of double flowers; continuously in bloom all summer. All colors, mixed ................................................ pr
257 Dwarf Hyacinth-Flowered. Resembles a Dutch Hyacinth in style of bloom. Our mixture includes a very fine range of colors....5c pkt. 258 Giant Hyacinth-Flowered, Tall. A superb class. The splendid flowers are very large, very double and of various beautiful colors, shadings and markings; long spikes of bloom like immense Hyacinths...........................10c pkt.
259 Double Dwarf Rocket. A most choice mixture of varieties, that grow about 1 foot in height
260 Double Tall Rocket. This well-known mixture embraces the very choicest colors in the taller growing sorts....................... 5 c pkt. Fardy Perennial Larkspur. See Delphinium.
IANTANA. One of the most desirable half-hardy 261 prinest Mixed. All colors...............5c pkt.
LATHYRUS (Everlasting, or Hardy Sweet Pea). Showy, free-flowering, hardy perennial climbers for covering old stumps, fences, etc.
262 Mixed. All colors. $\qquad$ 263 Lavender (Lavandula Vera). Well known, sweet-scented hardy perennial; should be extensively grown in the mixed border; 3 feet. . . . . . . . . . ................................. 5c pkt


Moon Flower, Cross Bred or Hybbrid.

IOBELIA. A charming dwarf-plant, admirably adapted for beds, edgings and rock-work. Their delicate, drooping foliage and pretty little blue and white flowers render them very attractive in pots or hanging baskets. The hardy perenatal varieties are among the most attractive of our garden favorites, producing beautiful spikes of handsome flowers in autumn.
264 Crystal Palace Compacta. Rich blue; finest for bedding.
265 Gracilis. Pale blue; trailing, fine for vases.......5c pkt.
266 Speciosa. Dark blue, trailing, fine for vases......5c pit.
267 Dwarf Mixed Varieties. For borders................5c pkt.
268 Cardinalis Hybrids. Splendid hybrids mixed; highly rec-

## IUPINUS.

269-Annual Mixed. Free-flowering, easily grown annuals, with long, graceful spikes of rich and various colored peashaped flowers; valuable for mixed borders and beds; pre-

270 Polyphyllus Roseus. A fine variety of the perennial Lupine, with showy spikes of rose-colored flowers..10c pist.
271 Perennial Mixed. Hardy perennial varieties, in pink, blue and white mixed............................................... 5 pkt.

## 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 better suited for bedding purposes, or for pot culture; they succeed best in a light soil, with full exposure to the sun.

## AFRICAN VARIETIES.

(See also Calendula.)
272 Orange Prince. A high bred type bearing densely double flowers of a rich, deep golden-orange color; very showy..5c pkt. Iemon Queen. Another fine variety, with soft, lemon-yellow flowers, and forming a fine contrast to the preceding..5c pkt. 274 Pride of the Garden. Immense flowers, densely double. Color golden-yellow. A feature of this variety is the compact, dwarf habit of the plant, which forms dense bushes 15 to 18
 275 \#1 Dorado. Flowers very iarge, imbricated and extremely double. Colors in all shades of yellow.
276 Iarge African. Double, orange and lemon, mixedi, 2 to 3 feet. Per $1 / 4$ oz., 20c........................5c pkt. RENCH VARIETIES.
277 Scotch Prize. A fine strain, with admirably striped double flowers; 1 foot..................................... Legion of Honor. Single Dwarf Marigold, forming compact bushes. Flowers golden yellow and brown; blossoms in great profusion..................... c c pkt. 279 Dwarf French. Fine colors, mixed, very double; 1 foot; per $1 / 4$ oz., 20c....................................... plst. MARVEI OF PERU, or FOUR O'CTOCKS (Mirabilis Jalapa). The well-known Four-O'Clocks. A handsome free-flowering garden favorite; half hardy perennial; free-flowering garden favorite; half he first season from seed.
280 Finest Mixed. Beautiful colors; 2 feet; oz., 15c
MAURANDIA. Beautiful, rapid, slender growing climbers, blooming profusely until late in the autumn; also fine for the conservatory or greenhouse; if desired for he house, take up before the approach of frost. A halfhardy perennial, flowering the first season if sown early.
281 Barclayana. Deep violet; fine
282 Finest Mixed. All colors
MOON FLOWER. (See Ipomea.)
MORNING GLORY. (See Convolvulus.)
MOURNING BRIDE. (See Scabiosa.)
MATRICARIA (Double White Feverfew). Free-flowering plants; producing all season fine double, white flowers. A fine bedding or pot plant.


MIGNONETTE.

## A well-known hardy annual.

287 Grandifiora. Large-flowering, fragrant; oz., 15c. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5c pkt. Deriance. One of the finest sorts; excellent Machet. Dwarf pyramidal growth, with very Very curious climbing vine, with ornamental foliage, fruit golden-yellow, warted, and when ripe opens, showing the seed and its brilliant carmine interior; annuals; 10 feet.
290 Balsamina (Balsam Apple) Round appleshaped fruit with very fine glossy green foli-
291 Charantia (Balsam Pear). Pear-shaped fruit: foliage heavier than the above; the fruits are
 succeed best in a shady, moist situation; perennials and hardy if given a slight protection through the winter.
292 Alpestris Victoria. Of bushy habit, bearing large, bright azure-blue flowers.....10c pkt. Palustris. The true Forget-Me-Not; beautiful blue flowers: 6 inches 10 ckt Palustris Semperforens. A dwarf Forget-MeNot, continuing in bloom from early spring until autumn; blue; 8 inches........10c pkt.


For ease of culture, duration of bloom, brilliancy of coloring and general excellence, nothing excels Nasturtiums. All they need is a moderately good soil in a well-drained, sunny position, and from within a few weeks from 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 almost distinct:
tail, or Chimbing 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 seedpods can be gathered while green and tender for pickling; 6 to 10 feet.

295 Chameleon. Different richly-colored flowers on the same plant.
296 Crimson. Rich and velvety.
297 Chocolate. An odd and unique color.
298 King Theodore. Deep crimson maroon; dark foliage.
299 Iemon Yellow. Clear yellow white with few
red veins.
300 Orange. Pure orange; no markings.
301 Pearl. Creamy white.

302 Prince Henry. Cream, spotted and tipped scarlet.
303 Purple. Rich shade of purplish crimson.
304 Rose. A lovely shade of ruby rose.
305 Scarlet. Glowing vermilion.
306 Schulzi. Rich, deep scarlet.
307 Straw Striped Scarlet. Effective
308 Vesuvius. Salmony rose; an exquisite shade. 309 spotted. Rich yellow, spotted garnet.

Price. Any of the above Tall sorts, 15c per oz; 40c per $1 / 1 / \mathrm{lb}$.; 5c plt.

## 310 McCULLOUGHS PREMIER MIXTURE OF TALL NASTURTIUMS.

A gorgeous mixture. Absolutely the finest produced. It contains all the new Giant Flowering kinds together with many other grand new hybrids. A mixture positively without rival.

A wonderful diversity of rich colors and new and striking combinations are found in this unequaled mixture. A row in full bloom is truly gorgeous beyond description, containing every shade and tint of yellow, rose, scarlet, orange, carmine, violet, purple, lemon, bronze, maroon, ruby, cream and pink, both in solid colors and mottled and striped in many ways............15c oz.; $40 c \quad 1 / 41 \mathrm{c}$.; $\$ 1.25 \mathrm{lb} . ; 5 \mathrm{c}$ plt. 311 Mixed Tall Nasturtiums. There is no flower of which you need seed in larger quantities for liberal plantings than Tall, or Climbing Nasturtiums. For the low price, this mixture is very choice.

10c oz.; 25c $1 / 4 \mathrm{lb} . ; 80 \mathrm{c}$ lb.; 5c pkt.

## TOM THUMB, DWARF OR BEDDING VARIETIES.

312 Aurora. Chrome-yellow, spotted and striped with deep crimson.

## 313 Beauty. Yellow-striped red.

314 Chameleon. This interesting variety produces flowers of different colors on the same plant.
315 Crystal Palace Gem. Sulphur spotted maroon. 316 Impress of India. Splendid variety, brilliant crimson with dark foliage.
317 Golden King. Brilliant yellow.
318 King of Tom Thumbs. Intense deep scarlet flowers, dark foliage.

319 King Theodore. Dark maroon, bluish-green foliage. One of the best.
320 Iady Bird. Rich golden yellow, barred with bright ruby crimson.
321 Luteum. Fine yellow.
322 Pearl. Creamy white.
323 Prince Henry. Golden yellow, marbled and spotted with brilliant scarlet.
324 Rose. Light rose, splendid color.
325 Ruby King. Brilliant crimson rose.
326 Spotted King. Orange spotted crimson.
327 Vesuvius. Brilliant salmon pink.

Price. Any of the above Dwarf sorts, 15c per oz.; 40c per $1 / 4 \mathrm{lb}$; 5 fc pkt.
328 McCULLOUGH'S PREIMIER MIXTURE OF FINEST DWARF NASTURTIUMS.
This is our best mixture of the dwarf varieties. It is composed exclusively of the most elegant, large-flowered sorts, and the brilliantly colored flowers range through every shade and tint known in this favorite annual. This seed will produce a bed or border gorgeous beyond description. Oz., 15c; $1 / 4 \mathrm{lb}$., $40 \mathrm{c} ; 1 \mathrm{lb}$., $\$ 1.25 ; 5 \mathrm{c}$ pkt.
329 Mixed Dwarf Nasturtiums. We handle such large quantities of Dwarf Nasturtiums that we are able to offer this especially choice mixture at a very low price. You should plant this mixture very liberally. Oz., 10c; $1 / 4 \mathrm{lb} ., 25 c ; 1 b ., 80 c ; 5 c$ pkt.
Lobb's Climbing, Ivy-leaved and Variegated-leaved Nasturtiums are offered on next page.

## NASTURTIUIMS

(See also preceding page.)
LOBB'S CITMBING NASTURTIUMS (Tropaeolum Lobbianum). Both foliage and fiowers of this class are somewhat smaller than the Tall varieties, but the splendid profusion of bloom and the intensely brilliant colors of the flowers render them of the greatest value; 6 to 12 feet.
Asa Gray. The lightest color yet obtained; sulphur

331
332 yellow, very delicate. Geant des Batailles. Sulphur, spotted red. .5c pkt. Lucifer. Very dark scarlet, splendid.......5c pkt. Napoleon III. Golden yellow, spotted with brown. 5c pkt. 335 Lobb's Finest mixed. This elegant assortment of Lobb's Climbing Nasturtiums is composed of the most brilliant colors in this class. Oz., 10c; 1/4 1b.,
336 Nasturtium, Madame Gunter's Hुbrids climbing strain. For richness and variety of colors these new Hybrids have no equal among Nasturtiums. There are shades of rose, salmon, brightest red, pale yellow, either as self colors or spotted and striped. The foliage is mostly dark and contrasts very effectively with the rich colors, and are free
337 Tropaeolum Canariense. (Canary Bird Flower.) Bright yellow; 10 feet............. 5 c plet. NASTURTIUM IVY エEAVED. A new class with thick, green, lobed leaves, resembling those of the English Ivy. The flowers are of a delicate fringed formation and are borne in great abundance throughout the season.
338 Tail Ivy Ieaved Mixed; 15 c oz.........5c pkt.
339 Dwarf Ivy Ireaved Mixed; 15c oz.....5c pkt. NASTURIIUM VARIEGATED LEAVED. The foliage is strikingly variegated, rendering the plants very ornamental even when not in flower, and when in bloom the effect is doubly enhanced. They are superb for garden culture and also make lovely pot plants.
340 Tall Variegated Mixed. All colors; i5c oz.
341 Dwarf Variegated Mixed. All colors; 5c pkt. 5c pkt. NASTURTIUM GOLDEN FOLIAGE. A striking and most desirable type for bedding and potting. The contrast between the clear golden yellow foliage and flowers are remarkable.
342 Dwarf Golden Foliage. Mixed colors; 15c oz. NIGEITA (Love in a Mist, or Devil in the Bush) 343 Damascena A compact free-flowering plant with finely cut foliage, curious-looking flowers and seedpods; of easy culture, growing in any garden soil; hardy annuals; blue and white mixed; 1 foot.................................. pkt.
344 Miss Jekyll. A lovely variety with cornflow-
T.

348


## Dwarf Nasturtiums

OTIANA. Ornamental plants, very effective both in foliage and flower; the flowering sorts continue in bloom throughout the season and produce their fragrant, tubular-shaped flowers in great profusion; hardy annual.
345 Affinis. Large, pure white flowers of delicious fragrance. If taken up in the fall, cut back and potted they will bloom all winter.5c plrt. Affinis Hybrids. These magnificent Hybrids have large flowers in many beautiful colors and brilliant shades, fragrant...... 10c pkt. ering half-hardy annual, giving a continuous display of brilliant flowers through summer and autumn. The plant is of branching bushy habit, 2 to 3 feet high, and carry the flowers in clusters. The flowers measure from $11 / 2$ to 2 inches across and remain open all day.
OXATIS coloréd flowers and dark foliage, suitable for borders, greenhouse decoration, rock-work or baskets; half-hardy perennial.
(Chinese Primroses.)
This is indispensable for winter or spring decorations in the home or conservatory. The seed should be sown in light soil, but for final potting a richer soil is necessary, consisting of two parts

## PRIMUIA CFITNENSIS FIMBRIATA.

349 Alba Magnifica. The finest pure white with bright yellow eye, beautifully 350 Chiswick Red. Large briliant scarlet, finely fringed.............20c pkt. 351 Coerulea. Fine blue; excellent.20c pkt. 352 Delicata. Delicate rose; finely fring353 Choicest mixed ${ }^{\text {Mis..........20c pkt. }}$ tains nothing but the finest sorts of Chinese Primroses........20c pkt.
PRIMULA OBCONICA
354 Primula Obconica Grandifiora Fimbriata. Very large flowers, with nicely fringed and toothed petals. The flowers are produced in constant succession, ranging in color from white to rose; a beautiful pot plant.
355 Primula Obconica Gigantea. This new variety is the finest yet introduced; of strong, vigorous growth with immense heads of large individual meoms. Varies in color from pale blooms. raries in color from pale Primula Forbesi. (Baby Primrose.) Very free-flowering, beautiful rosy lilac flowers. Fine for pots and bouquets. Seedlings begin to bloom 3 months after being sown. 10c pkt.
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 cold frame. 357 Auricula. Finest Mixed. Extra choice; saved from 358 Veris (Polyanthus). Splendid colors; extra fine. 10c pkt. 359 Vulgaris. True Yellow English Primrose....inc pkt.


McGullovgh's Premier Pansies.

## PANSY.

(The Favorite Flower.) Pansies are the most popular of all flowering plants and are grown over the widest extent of country. They bloom most freely and produce largest flowers in cool, moist locations, or during early spring and late fall months. They flower profusely, however, even during the summer, from seed sown in open ground early in spring.

Pansy seed has been always a leading specialty with us, and we offer not only the largest and finest collection, but most carefully selected strains of each variety.

Seed germinates best while soil is still cool and moist. We would advise sowing in shallow drills in seed-bed early in spring when the trees are starting out in leaf, and again in September when the weather becomes cool. As above stated, plants from the spring-sown seed flower with great freedom throughout spring, summer and fall, while the stocky young plants grown in fall and winter produce the largest and finest flowers early the following spring.

The finest Pansies are, as a rule, shy seeders, which accounts for the difference in the price of the various mixtures offered.
360 McCullough's Premier Pa sies. In this magnificent mixture of mammoth-flowering Pansies the blossoms are borne on long stems well above the foliage and are distinguished for their gorgeous and varied colorings and beautiful markings; of fine substance, velvety texture, perfect form, and giant size, frequently measuring 3 inches in diameter. The colorings are wonderfully rich and varied; every shade and tint of rose, canary-yellow, black, white, cream, lavender, garnet, sky-blue and orange

361 McCullough's Special Mixture. A superior mixture, selected from choice, large flowering strains of English, French and German growers. $1 / 4$ oz., $\$ 1.25 . .$.
362 Giant Trimardead, Mixed. These are the largest flowered of all; a most showy class, of robust and very compact growth. The flowers are carried well above the leaves; splendid for bouquets, as the stems are long. Mixture of finest colors. $1 / 4 \mathrm{oz}$. 60 c . . 10c pkt.
366 Masterpiece. The enormous large flowers are borne well above the foliage on strong stems. The petals of the flowers are waved or curled, and contain the richest colors. Each petal is distinctly marked with a large dark blotch, and most of the flowers are margined with a light, white or yellow edge............................................ 15c pkt. Bedding Pansies in Separate Colors.
For liberal plantings in the garden beds, these fine sorts are the most desirable.
367 Azure Blue.
368 Black.
369 Dark Purple.
370 Dark Red.
371 Light Blue.
372 Pure White.
373 Purplish Violet.
374 Pure Yellow.
375 Yellow Black Center.
376 Rosy tilac.
All above Bedding Pansies, each 5c pkt.; $1 / 4 \mathrm{oz}$, 35c; 1 oz., \$1.25.

GIANT TRIMARDEAU PANSIES.
(Separate Colors.)
377 Bridesmaid. White shining Rose, beautiful-
Canary Bird. Giant five spotted variety. Bright golden yellow.
379 Emperor William. Indigo blue, blotched, black
380 Golden Queen. Pure golden-yellow. Very fine
381 King of the Blacks. Lustrous jet black.
382 Iord Beaconsfield. Lavender, heliotrope, purple.
383 Peacock (Gloriosa). Garnet, cream and blue. 384 President Carnot. White, large violet
385 Snow-Flake. Spotless, snow-white.
All above Giant Pansies, each, 10c pkt; $1 / 4 \mathrm{oz} ., 60 \mathrm{c}$.

363 Fine Mixture of Bedding Pansies. The oldfashioned Pansies. Our mixture contains all the most showy and distinctly marked varieties. For freedom of bloom none surpass

364 Bugnot's Superb Blotched. A French strain of extra large size, choicest colors, and with beautiful broad blotches and delicate pencil-
365 Cassier's Giant saved from very large and beautifully blotchsaved from very large and beautifully blotch-


Phlox Drummondi, Mixed Colors. Flowers not so large as the grandiflora type, but just as free-flowering and effective. Oz., 50c.5c pkt.
IARGE-FIOWERING DWARF VARIETIXS. A type combining the size of the individual flower and head of the finest Grandifloras with the Dwarf, compact growth of the Dwarf sorts, a perfect combination; and while they do not come in the large variety of colors found in the taller-growing type, the colors offered will be found very effective for beds, borders, etc., etc.; 8 inches.
394 Brilliant Rose
iery Scarlet (Firebail)............................ pkt.
395 Fiery Scarlet (Fireball)................... 10c pkt.
396 Fure White (Snowball) . . . . . . . . . . . . . . . 10c pkt. Finest Mixed Colors (Dwarf Varieties). 10c pkt.

STAR PHIOX.
398 Phlox Cuspidata (Star of Quedlinburg). Finest mixed. Beautiful star-shaped flowers in showy colors'.
.10c pkt.
399 Phlox Fimbriata, Finest Mixed. A fine strain, with petals beautifully fringed; distinct and fine............................................ . . . $10 c$ pkt.

HARDY PERENNIAI PHTOX (P. Decussata).
400 Hardy Herbaceous Perennial, and quite distinct from the varieties of Phlox Drummondi, which are annuals, offered above; all colors mixed; saved from our own unequalled


## PORTULACA. (Sun Plant)

One of our finest hardy annual plants, of easy culture, thriving best in a rather rich, light loam or sandy soil, and luxuriating in an exposed, sunny situation; the flowers are of the richest colors, and produced throughout the summer in great profusion; fine for massing in beds, edgings of rock-work; 6 inches.
401 Single Mixed Colors. Per oz., 40c.............. 5c pkt.
402 Double Mixed. Flowers perfectly double, of the most brilliant scarlet, crimson, white, yellow, etc. ........................................................... oz. pkt.

PYRETHRUM.
Handsome herbaceous plants of easy culture, and becoming more popular as they become better known.
$P$. Aureum is the well-known Golden Feather so much used for edging, carpet bedding, etc., while the others are most attractive hardy plants.
403 Aurem (Golden Feather). Yellow foliage. 1/4 oz., $20 c$.
04 Eybridum. Large flowering single mixed. Hardy perennial, bearing large Daisy or Cosmos-like flowers, ranging in color from light pink to deep red, with bright yellow centers; blooms in May and June and again in fall, and are one of the most graceful and long-lasting cut flowers $; 2$ feet. $1 / 4 \mathrm{oz}$., 30c.. 10 c pit.

## HINTS ON THE CULTURE OF FLOWERS FROM SERD.

Much annoyance and disappointment may be saved by giving close attention to the following: Avoid especially deep planting, over-watering, under-watering or sowing too thickly.


Dwarf Phlox.

## POPPIES.

Annual Poppies should be sown as early in the spring as possible where they are to remain, as they do not stand transplanting. Sow very thinly, preferably in cloudy weather or after a shower, barely cover the seed, press down firmly, and they will come up in a few days. If they come up too thickly, they must be thinned out to stand 3 to 4 inches or more apart if you wish best results. It is well to make several sowings at intervals to keep up a succession of bloom. If picked just before expanding the flowers will last several days. It is also advisable to pick the old flowers as soon as fallen, which will lengthen the blooming season quite a while.

## SINGIE ANNUAL POPPIES

405 Select Shirley. This is an extra fine strain of these charming Poppies. They are single and occasionally semi-double, and range in color from the purest white through the delicate shades of pale pink, rose and carmine to the deepest crimson and blood-red, while many are daintily edged and striped. In fact, so varied are they that scarcely any two flowers are exactly alike. Oz., 50c...........5c pkt.
406 Admiral. A single paeony-flowered variety of surpassing beauty, having large, smooth-edged flowers of glistening white, with a broad band of brilliant scarlet around the top. These two colors form a very striking contrast, and when planted in groups produce a magnificent effect.......................5c pkt.

407 Danebrog, or Danish Cross. Very showy variety, producing large flowers of brilliant scarlet, with a silvery-white spot on each petal, forming a white cross....................5c pkt.
408 Umbrosum. Richest vermilion, with a deep, shining black spot at the base of each petal.

5 c pkt.
409 Flag of Truce. Large, satiny-white flowers 5c pkt.
410 Tulip Poppy (Papaver Glaucum). Large, tulip-like flowers of dazzling scarlet; 15 inches. Per $1 / 4$ oz., 15c.......................... 5 c pkt.
411 Fire Dragon. Very showy flowers of brilliant deep scarlet, with black spots, margined white 2 to $21 / 2$ feet. Per $1 / 4$ oz., 20c.........5c pkt.
412 The Bride. A beautiful variety with very large, pure white, perfectly-formed flowers.

5c pkt.
413 Single Mixed. Annual sorts. Oz., 20c.5c pkt.


Shirley Poppy.

DOUBLE ANNUAI POPPIES. The Double Annual Poppies make a gorgeous show, and are largely used for beds and borders.
414 American Flag. Beautiful variety; flowers very large and double, snow-white, bordered with scarlet. ..................................... $5 c$ pkt.
415 White Swan. Immense double flowers, beautifully fringed and of purest white...5c pkt.
416 "Mikado" (The 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.............5c pkt.
417 Carnation Flowered. Splendid double fringed flowers, mixed colors........................5c pkt.
418 Paeony Flowered. Large, showy, double globular flowers, resembling a double Paeony; mixed colors. Per oz., 20c.............5c pkt.
419 Double Mixed. Annual sorts. Oz., 20c..5c pkt.

HARDY PERENNIAI POPPIES. Oriental and Bracteatum Poppies should be sown in early spring in the open ground as soon as it is fit to work. The plants disappear during July and August, appearing again as soon as the weather gets cool. When this fall growth starts is the time they should be transplanted to their permanent flowering quarters. It is well to mark the places they are planted with a stake to insure the roots against disturbance during their annual resting period.

420 Bracteatum. Immense orange-scarlet fiowers, very similar to the Oriental Poppy. $1 / 4$ oz., 20c...5c pkt.


421 Orientale (The Large Oriental Poppy). A charming summer-flowering hardy plant, producing numerous leafy stems about $21 / 2$ feet high, with large, deep crimson flowers, having a conspicuous black blotch on each petal; exceedingly showy....5c pkt.
Orientale Hybrids. Beautiful Hybrids of the Oriental Poppy, producing flowers of immense size, 6 colors, such as salmon, cherry, etc. $1 / 4 \mathrm{oz} ., 50 \mathrm{c}$

## ICELAND POPPIES.

## (Papaver Nudicaule.)

These are of graceful, neat habit, with bright green fern-like foliage, formed in tufts, from which issue slender stalks about 12 inches high, bearing their brilliant flowers in endless profusion; most useful for cutting, for which purpose pick when in bud; blooms the first year from seed, and if the seedpods are picked off continue in flower the entire season.
423 Finest Mixed. $1 / 4$ oz., 20c $\qquad$ .5c pkt.
424 New Irybrid Iceland. The latest development in this lovely species, varying in color from sulphur-yellow through different shades of orange to chamois and salmony rose...................................... $10 c$ pkt.

## MCCULLOUGE'S SELECTED FLOWER SEEDS

Give best satisfaction. We test hundreds of varieties every year in our trial grounds, and know that you can not buy better flower seeds, no matter where you buy or what you pay.

## PETUNIA.

For outdoor decoration or house culture few plants equal the Petunia in effectiveness. They commence flowering early and continue a sheet of bloom throughout the whole season until killed by frost; easily cultivated, only requiring a good soil and sunny position. There are two distinct kinds of Single Petunias-the Grandiflora sorts, with large flowers, and the small flowered section, which gives abundance of bloom.

NOTE.-It is well known that seed saved from the most carefully hybridized flowers produces but a small percentage of double flowers, the balance being singles of unusually fine quality. The weaker seedlings should be carefully saved, as these invariably produce the finest double flowers. The same is true of the single sorts, the large, strong seedlings usually being weedy, while the weaker seedlings produce the finest flowers of best colorings. It is best to sow Petunias indoors and transplant to the open in May. The Single Bedding kinds can be sown right out of doors in May.

## DOUBLE TARGE-FHOWERING.

425 McCullough's Splendid Double Fringed. One of the finest strains in existence. The double flowers are very large, full, and beautifully formed, having the edges of the petals elegantly fringed......35c pkt.
426 Grandinora Double Mixed. Choice strains of fine colors and large flowers..........................25c pkt.

## SINGIE TARGE-FIOWERING.

427 McCullough's Mammoth Single. This mixture is made by ourselves, and includes, besides the California Giants, all the colors of the large-flowering and fringed sorts, and the unsurpassed Superbissima varieties, with their delicately-veined throats in various colors, and their truly mammoth flowers.


428 Giants of California. Flowers very large, in great variety of colors and markings, with broad, deep, yellow throats, veined...15c pkt. 429 Buffled Giants. New; very large-flowered; ruffled, fluted and fringed, striped and mottled, blotched and solid self-colors, with many color-combinations quite new in Petunias.
430 Grandiflora Single, Finest Mixed. Superb strain from show flowers; very large and of great substance.............................15c pkt.

## SINGLE BEDDING PETUNXAS.

431 Brilliant. Beautiful and effective compact variety, flowers brilliant carmine pink.,10c pkt. 432 Dwarf Inimitable. Compact-growing variety flowers cherry-red, striped with white.10c pkt. Snowball. A fine compact variety, producing its pure white flowers throushout the entire season. Excellent for pots or bedding. 10c pkt. 434 Alba. Pure white, large flowers, desirable for cemetery beds or where large masses of white are wanted...................................5c pkt. 435 Kermesina Splendens. Rich crimson, fine.
436 Howard's Star. A beautiful free-flowering strain, color crimson maroon with a clearlydefined five-pointed star of bluish-white. For bedding, baskets, vases, etc.........10c pkt.


SINGIE PETUNIAS-Continued.
437 Striped and Blotched. Fine for massing. 5c pkt.
438 Finest Single Mixed. Superb strain bedding Petunias. Oz., \$1.50.......................10c pkt. 439 Fine Single Mixed. Very fine quality. $O z$, 75c........................................... . 5 c , pkt.
RHODANTHE. The flowers should be gathered before they fully expand. If allowed to grow too long they open too much, and lose their beautiful bell form. Flowers everlasting. Half-hardy annuals.
440 Maculata. Mixed, all colors .5c pkt.

## RICINUS.

## (Castor Oil Bean.)

Known as "Castor Oil Plant" and "Palma Christa." Highly ornamental and stately growing plants of tropical origin, with luxuriant foliage of varied colors and brilliant colored fruit. When grown on lawns or in the garden as single specimens, they form a magnificent showy plant; height 8 to 15 feet. Start seed in pots, in Mareh, and transplant as soon as the ground is warm. Half-hardy annuals.
441 Cambodgensis. The main stem and leaf stalks are of shining ebony black; the leaves are very large and richly colored, changing to different shades; 6 feet................................... 5 . 5 pkt.
442 Gibsonii Mirabilis. Dwarf, branching habit, deep red foliage; 4 feet............................. 5 . pkt.
443 Zanzibariensis. An entirely new and distinct class of these handsome ornamental plants, which surpass in size and beauty all the varieties hitherto known. The plants attain great dimensions, presenting a splendid aspect with their gigantic leaves. As single specimens on the lawn or in large groups they are very effective; 8 to 10 feet.

444 Finest Mixed. All varieties. Oż., 30c....5c plst.

## RUDBECKIA (Cone Flower).

445 Bicolor Superba. Fine free-flowering annual variety, growing about 2 feet high, forming a dense bush and producing in great abundance on long stems its bright flowers. The disc is brown, the florets golden-yellow, with large, velvety-brown spots at the base; very effective and useful for cutting....................................................
446 Purpurea (Giant Purple Cone-Flower). A most interesting hardy perennial, producing all summer large, showy, reddish-purple flowers; about 4 inches across, with a remarkably large coneshaped center of brown; thickly set with golden tips in spiral lines.....,...................10c plrt.

## SALVIA.

## (Flowering Sage).

The Scarlet Sage has long been a favorite bedding plant also grown for conservatory decoration, bearing long spikes of flowers in great profusion from July till frost; half-hardy perennials, blooming the first year from seed, which should be sown as early as possible, either indoors or in a hotbed, and the young plants transferred to their fiowering quarters when the weather has become settled and warm. May also be sown in the open ground in May.
447 Splendeng (Scarlet Sage). One of the finest summer and fall plants, with masnificent brilliant scarlet flowers;
448 "Bonfire", or "Clara Bedman." This is one of the finest of the Scarlet Sages, growing in a compact bush about 2 feet high by 2 feet in diameter. Its erect spikes of flowers of brilliant scarlet stand clear above the dark-green foliage and completely cover the plant. It attracts immediate attention in the garden, and is one of the most effective and gorgeous plants in cultivation.......10c plst.
449 Ball of Fire. The most compact type of Scarlet Sage yet introduced, and popular for beds or borders requiring a variety of dwarfer habit than the regular Scarlet Sage or the variety "Bonfire.".................................... 10 c pkt.
450 Zurich. Extra early flowering variety. The plants are dwarf and compact, and commence to produce their large brilliant fowers early in July and continuing to bloom until killed by frost............................................ 10 p pkt.

## SALPIGIOSSIS.

The Salpiglossis is one of the greatest favorites among annuals, partly because of its easy culture, but principally for its beautiful, almost orchid-like flowers, which it produces from early summer until late fall. Seed should be sown early in spring in a hotbed or window and transplanted when weather is settled or directly out of doors after danger of frost.

451 Emperor. This variety forms only one leading stem, and bears on its summit a veritable bouquet of the most beautiful flowers' each one richly veined with gold...........10c pkt.
452 Finest Mixed. All colors. .5c pkt.

SMIIAX (Myrsiphyllum Asparagoides).
453 In many respects the 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. $1 / 4 \mathrm{oz}$., 20c.5c pkt.
STOKESIA (Cornflower Aster).
454 Cyanea. A rare and beautiful hardy perennial. The plant grows about 24 inches high, each bearing from 20 to 30 handsome laven-der-bIue cornflower-like blossoms; in blocm from July till frost. One of the choicest subjects for the hardy border and indispensable for cutting.................................
SHASTA DAISY. (See Chrysanthemum.)

## SCABIOSA.

(Mourning Bride, Sweet Scabious, Pincushion Flower.) Seed can be sown any time in the spring after danger of frost is past. They grow about $21 / 2$ feet high, and come into bloom early in July, and continue Without interruption until hard frost. The beautiful flowers in exquisite shades are borne on long stems, and when cut keep in perfect condition for the best part of a week. They make effective borders or beds, and no garden is complete Without Scabiosas, especially where flowers are wanted for cutting.


## HARDY PERENNIAT SORTS.



Scabiosa.

462 Caucasica (Blue Bonnet). One of the handsomest of hardy perennials, especially valuable for cutting, the blooms lasting a long time in water; lilac-blue; 3 feet..................................... 10c pkt.
463 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, extremely floriferious, producing a continuous crop all summer. A fine cut flower

## SCHIZANTHUS. (Butterliy, or Fringe Flower.)

This is one of the airiest and daintiest flowers imaginable, especially adapted to bordering beds of taller flowers and those of a heavier growth. The seeds germinate quickly and come into bloom in a few weeks from sowing. The florescence is such as to completely obscure the foliage, making the plants a veritable pyramid of the most delicate and charming bloom. If a continuous show of bloom is desired, it will be well to make sowings of seed in a sheltered bed and transplant into the borders as required. The Schizanthus make admirable pot plants for the house, and are charming for window boxes in winter. For this purpose sow in the autumn.
464 Dwarf Large-Flowered. A new variety, forming compact pyramidal plants a foot high, literally covered with large, beautiful orchidlike flowers in a bewildering range of color...............10c pkt.
465 Wisetonensis. A variety largely used as a pot plant for the house or conservatory. It is remarkably free-flowering, and presents a beautiful appearance with its myriads of blooms, the ground color of which is white, dotted with delicate rose. A very shy seeder.
466 Mixed. A splendid mixture of the regular type.............5c pkt.

## WILD FLOWER GARDEN MIXTURE.

These mixed flower seeds embrace varieties of such easy-growing and pretty flowers as are suitable for forming a wild flower garden. They are vevy useful for woodland walks, roadsides, railroad embankments, and for sowing alongside of fences and on untidy bare spots of ground which are so frequently unsightly, and which, if properly cared for and kept free from weeds, can be made to produce a continual display of bloom during the summer. See page 55.

## SWEET PEAS.

Flowering Peas are among the most useful and beautifui of all our hardy annuals. Every year our list is carefully revised, with a view to keeping it strictly up to date.

## How to Grow Sweet Peas.

The principal essential for the best success is a cool, deep, moist soil, and a sunny situation. The ground should be prepared deep and rich. Fall preparation, where possible, is preferable, but if done in the spring, use no green manure. Bone meal is good if old rotted manure can not be obtained. Sow early, even before the frost is out of the ground, as sweet Peas need the cold, moist spring ground to make the root growth. In the latitude of Cinginnati, February is not too early. In the South, sow in the fall. Sow the seed in deep furrows, the bottom of which must be at least 6 inches below the level of the soil; this is to guard against a summer drought. Cover the seeds only one inch, after which the furrow is still five inches deep. When the plants are 2 or 3 inches high thin out to 2 inches apart and fill in another inch or so of soil around the plants, always leaving a portion of the plant above the surface; do this at intervals until the furrow is nearly full; it should always remain a little hollow, to hold the rains, and to allow water to be applied by the bucketful when necessary.

During dry weather they should be watered thoroughly and frequently and given an application of liquid manure once a week. A mulch of hay or rakings from the lawn will be found beneficial during hot weather. The flowers should be cut as often as possible, and all withered blooms should be removed, to prevent the plants from running to seed, which would stop them from continuing in bloom.

## IARGE-FITOWERING NAMED VARIETIES.

The Following Named Varieties, 5 c pkt; 15c cz; $50 \mathrm{c} 1 / 4 \mathrm{Ib}$ 。
467 America. Crimson scarlet, striped on white. Large size
468 Aurora. Standard and wings white, shaded with salmon
469 Black Knight. Pure maroon, self-colored, large size.
470 Blanche Ferry. Rose pink standard, white wings.
471 Coccinea. Cerise red, self-color, very bright and effective.
472 Dorothy zckford. The finest pure white. The plant is short-jointed, and grows an enormous mass of bloom.
473 Earliest of all. Rose pink standard, with white wings.
474 Earliest White (Burpee). The earliest white.
475 Flora Norton. Pure bright self-blue; quite distinct.
476 Gladys Unwin. Bright light pink, a little deeper at the edges.
477 Helen Pierce. Pure white, veined, mottled and marbled with
kright blue. Edward VII. A lovely, intense, bright crimson. A giant flow-
King Eaward with A strong stems and growth; does not burn in the sun.
479 Tady Grisel Familton. Beautiful pale lavender; in form it is one of the most advanced giant flowering type.
480 Lord Nelson. Standard dark navy blue; wings shaded purple
481 Iottie Eckford. White ground, shaded and edged with light blue and
482 Tovely. Standard and wings deep rose at base, shading to pale pink and blush at edges; large size.
483 Mont Blanc. Splendid pure white; early
484 Miss Wilmott. Standard orange pink; wings rose tinted orange.
485 Mrs. Alfred Watkins. A superb pale pink, of large size with a bold wavy
486 standard. Large, open and wavy form.
486 Mrs. E. Kenyon. A beautiful primrose color; a bold giant flower; a most desirable variety.
487 Mrs. Geo. Higginson, Jr. A clear, delicate light blue.
488 Mrs. Walter Wright. Rose purple, self-colored. It changes to a bluish purple as it fully matures.
489 Navy Blue. Standard indigo; wings indigo shaded to navy blue.
490 Nora Unwin. Pure white, very large, open, wavy form, free-flowering with long stem. One of the finest.
491 Othello. Standard and wings dark maroon.
492 Prima Donna. Bright blush pink; large size and fine form.

493 Frince of Wales. Bright rose; large flower; the prettiest of the bright red varieties.
494 Queen Alexandra. Intense scarlet; flower of finest form; very free flowering.
495 Royal Rose. Standard deep rose shading with pink; wings light pink; very large flower.
496 St. George. The bold expanded standard is a rich orange color, while the large wings are orange carmine.
497 Shasta. Pure white; very large size; open form. The petals both standard and wings, are wavy on the edges.
498 Stella Morse. Primrose yellow, tinged with blush pink.

MIXTURES OF SWEET PEAS. All of the mixtures offered below have been made up by ourselves out of the finest named varieties, insuring a satisfactory result in color, and must not be confounded with cheap grades, which are harvested in mixture and always contain a large proportion of dull and undesirable colors.
499 McCullough's Premier Mixed. This mixture contains all the best-named large-flowering varieties and novelties, and is undoubtedly the finest and most complete mixture ever offered, being put up by ourselves from named varieties only, in the proper proportion of colors. 10 c .0z.; $35 \mathrm{c} 1 / 4 \mathrm{lb}$.; $\$ 1.25 \mathrm{lb} .5 \mathrm{c}$ pkt.
500 Fine Mixed. A very good mixture of over 20 varieties. $1 / 41 \mathrm{~b} ., 20 \mathrm{c}$; lb., 75 c .
501 Spencer Orchid-Flowered Mixed. This mixture contains the large orchid-flowered varieties, and no one need hesitate about purchasing this mixture, as the best of care is taken to have all the colors of the beautiful crumpled or waved varieties to blend. Oz,


MIXTURES OF SEPARATE SHADES. For such as prefer to grow the various colors separate we have prepared the following mixtures out of the finest named sorts.
502 Pink Shades. Light to deep pink.
503 Red Shades. Bright rose to dark scarlet.
504 Lavender and Blue Shades. Lavender to heliotrope.
505 Purple and Maroon Shades. All the dark colors.
506 White Varieties, Mixed.
Any of the above mixed shades, 5c pkt.; 15c oz.; 50c 1/4 lb.

## ORCHID-FLOWFRED SWEFT PEAS.

The introduction of this type has created new interest and added to the popularity of Sweet Peas. They are quite distinct from the standard sorts, having large, round, open flowers of extraordinary size, usually measuring 2 inches across, with wavy standards and widespreading wings, a very large percentage bearing 4 of these immense blossoms to the stem, which is long and strong, making them of exceptional value for cutting.
507 Asta Ohn Spencer. Flowers of large size, lavender. suffused with mauve; standard and wings waved and fluted. The stems are long and sturdy 20c 1/2 oz.; 35c oz................................... 10c pkt.
508 Beatrice Spencer. Standard white, tinted with soft pink and buff, while each wing has a blotch of brighter pink near the base. 20c $1 / 2 \mathrm{oz} ; 35 \mathrm{c}$ oz.
10 c pkt.

509 Countess Spencer. Bright clear pink, showing a little deeper at the edges. 30c oz..........10c pkt.
510 玉nchantress. Bright pink shading, a little deeper at the edges. The form is open and the margins of the petals are wavy; flowers very large. 30c oz. . . . . . . . . ............................................. $10 c$ pkt.
511 Fthel Roosevelt. Flowers of the largest and most perfect Spencer type. The ground color is a soft primrose or straw color, overlaid with flakes and splashes of blush-crimson. 30c $1 / 2 \mathrm{oz}$; 50 c oz.

15c pkt.
512 Flora Norton Spencer. Bright blue with a little tint of purple. Flowers very large. $20 \mathrm{c} 1 / 2 \mathrm{oz}$; 35c oz. ................................................. 10 c pkt.
513 Florence Morse Spencer. Delicate blush, with pink margin; very large, open, wavy form, with long stems. 20c $1 / 2$ oz.; 35c oz..................... 10c pkt.
Orchid-Flowered Mixed. (See Mixtures on preceding page).
514 George Eerbert. Bright rosy carmine color. 20c $1 / 2$ oz.; 35c oz.........................10c pkt.
515 King Edward Spencer. The largest and best Scarlet Sweet Pea. The large flowers are waved and crinkled; standard and wings deep rich carmine scarlet. 20c $1 / 2$ oz.; 30c oz..10c pkt.
516 Tovely Spencer. Bright pink at the base of both standard and wings, shading to a softer pink and becoming almost white at the edges. 25c $1 / 2$ Oz.; 40c oz............................10c pkt.
517 Marie Corelli. The wings are a pure rich rose crimson, while the standard shows a tint of cherry red. 25c $1 / 2 \mathrm{oz}$.; 40c oz....10c pkt.
518 Primrose Spencer. Primrose or creamy yellow; standard and wings waved. The best of this color. 30c oz...................10c pkt.
519 Senator Spencer. The color is a varying combination of deep claret and chocolate, striped and flaked on a ground of light heliotrope, standard and wings are marked the same. 20c $1 / 2$ oz.; 35c oz........................... $10 c$ pkt.
520 White Spencer. The finest White Sweet Pea with large fluted and wavy petals; long, stout stems. 30c oz. . . . . . . . . . . . . . . . . . . . . . 10c pkt.
521 W. T. Hutchins. Light apricot overlaid with blush pink. 25c $1 / 2 \mathrm{oz}$; 40c oz.......10c pkt.

## STOCKS. <br> (Gilliffower.)

Stock seed may be sown in the open ground, or in the hotbed or cold frame, but if transplanted, let this be done when the plants are small, just out of the seed-leaf, or the plants become slender and never make good plants nor flower well. A little shade from the hottest sun, and water in the evening, will add much to the size, beauty and durability of the flowers. Make the soil deep and rich.
522 McCullough's Cincinnati Market. A fine perpetual blooming stock, producing one long, sturdy spike, closely set with enormous double flowers. A grand variety.......10c pkt.
523 Beauty of Nice. A handsome winter stock of quick growth; flowers large size, of a delicate flesh pink...................................... 10c pkt.
524 Princess Alice (Cut and Come Again). If sown early it commences blooming in June and continues until frost. It throws out numerous side branches bearing clusters of very double, pure white, fragrant blossoms, and is excellent for cutting.........10c pist.


Sweet William. is without a rival for open-ground planting, attaining a height flowers are enormous in size and very double.

| ight Blue |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |

526 Rose . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
527 Scarlet. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10c pkt.
528 White. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $10 c$ pkt.

529 Finest Mixed Perfection. All colors..............................10c pkt.
530 Dwarf German Mixed. All Colors............................. 5c pkt.
SWFEI WILIIAM (Dianthus Barbatus). The double and single varieties, with their rich and varied colors, produce a charming effect for beds and borders. Seed planted early will bloom in the fall. It is better to sow seed every year to have young plants, as they flower more freely. Hardy biennial; height 1 to $11 / 2$ feet.
531 Holborn Glory. This strain is a large-flowered selection of the Auricula-Eyed section, the most beautiful and admired of all Sweet Williams. The individual flowers and trusses are of extraordinary size, and the range of color, all showing a clear, white eye, is superb...................................................10c pkt.
532 Single Mixed. A very choice assortment of all the best single-
533 Double Mixed. This mixture you will find of very superior quality; containing all colors and shades....................... plet.
SUNFLOWER. (See Helianthus.)
SWEET SULTANS. (See Centaurea.)
SNOW-ON-TEE-MOUNTAIN. (See Euphorbia.)

## TORENIA.



VIOLET. (Viola Odorata.) A great favorite, suitable for groups or borders. anc much in demand on account of its proon account of bloom and delightful fragrance. Violightful fragrance. Viovery slowly. Hardy perennial.
540 Finest Mixed. All varieties mixed ..ioc pkt.
We promise good seeds, courteous treatment and quick service. Send your order NOW.

## THUNBERGIA.

(Black-Eyed Susan.)
534 Beautiful, rapid-growing annual climbers, preferring a warm, sunny situation; used extensively in hanging baskets, vases, low fences, etc.; very pretty flowers in buff, white, orange, etc., with dark eyes; mixed colors; 4 feet;

535 Fournieri. A very fine annual; a splendid plant for vases, hanging baskets, borders, etc.; covered the entire season with a mass of bloom. Sky blue, with three spots of dark blue, bright yellow center . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $10 c$ pkt.

## VINCA.

(Madagascar Periwinkle.)
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, or as soon as the ground is warm, continuing until frost; or they may be potted and kept in bloom through the winter; a fine cut flower, every bud opening when placed in water; 2 feet. (See cut.)


## Vinca Rosea.



Thunbergia.

## VERBENAS.

Nothing is easier to grow, and the display they give during the summer is equalled only by the Phlox. To have the best results seeds should be started early (in the house) and the young plants bedded out by the first of June. Set them a foot or more apart, and in a month, at least, they will be so grown and matted together that one can hardly tell one plant from another. A circular raised mound is a good place on which to plant Verbenas. The bed should have the full sun, and a good supply of water. Verbenas are easier grown from seeds than from cuttings, and such plants are more vigorous and free flowering. Sow them early and they will bloom constantly from June until frost. The lavish and showy display of flowers
a Verbena bed is one of the most attractive. strain of these elegant mammoth-flowering Verbenas will make beds and borders in the garden of the greatest brilliancy. These are our best Verbenas, and for enormous flowers of rich and superb colors are unsurpassed. They bloom most profusely. Our mixture contains every desirable color and shade. 1/8 oz., 25c; $1 / 4 \mathrm{oz} ., 40 \mathrm{c}$ actory assortment containing many fine colors and shades. $1 / 8$ oz. 543 Mammoth Defiance. Brilliant scarlet, fine for bedding . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10c pkt.
544 Mammoth Candidissima. Large trusses of pure white flowers . . . . . . . . . . . . . . . . . . . . . . . . 10c pkt
545 Mammoth Blue. Bright blue, in various shades
10c pkt.
546 Mammoth Pink. Bright shades of pink; fine
547 Temon Verbena very gariragran age goes well with any flower.............10c pkt.
WALIELOWER. Well known, deliciously fragrant, half-hardy perennials; blooming early in the spring, with large, conspicuous spikes of beautiful flowers: they should be protected in a cold frame in the winter, and planted out in May; are much prized for bouquets.
548 Double, Finest Mixed
10c plkt.
549 Single, Finest Mixed
5c pkt.

## XERANTHEMUM. (Everlasting or Immortelle,

 Showy double free-flowering border annuals. If the flowers are cut in the bud state they may be dried and used for winter bouquets.Mammoth Verbena.
Finest, Mixed Double. All colors......... 5c pkt.


Mammoth Flowering Zinnia.

## ZINNIAS.

## (Youth and Old Age).

The Zinnia is one of the most brilliant and showy of annuals, and has long been a general favorite. The seed can be sown early in the hotbed or light window, and transplanted, or sown later in the open ground. They come into flower early in the summer and keep on blooming until hard frost.
551 Mammoth-Flowering Mixed. The plant forms a handsome bush, 2 feet high, and the mammoth, per-fectly-formed double flowers, measuring 5 to 6 inches across of most intense and brilliant colors,

552 Queen Victoria. A pure white variety. The flowers are perfectly double, of fine form and measure about 4 inches across. This excellent variety comes
553 Curled and Crested. A beautiful strain, the petals being twisted, curled and crested into the most fantastic and graceful forms. The colors comprise all the beautiful shades characteristic of the Zinnia. 10c pkt.
554 Zebra. A very pretty strain of striped flowers, as the colors vary on each plant, they present a curious as well as beautiful appearance.......10c pkt.
IARGE FLOWERING DWARF. This we consider the best type for general use, forming bushy, compact plants not over 2 feet high, and bearing perfect double flowers as large as the taller-growing sorts.
555 Flesh-pink. Delicate shade. $1 / 4$ oz., 20c....5c pkt.
556 Dark Scarlet. Very rich. $1 / 4$ oz., 20c......5c pkt.
557 Canary. Clear yellow. $1 / 4$ oz., 20c..........5c pkt.
558 Jacqueminot. Rich crimson. 1/4 oz., 30c....5c pkt.
559 Orange. Striking. $1 / 4$ oz., 20c.................5c pkt.
560 Scarlet. Bright and fiery. $1 / 4$ oz., 20c......5c pkt.
561 White. $1 / 4$ oz., 20c................................. $5 c$ pkt.
562 Salmon Rose. Beautiful shade. $1 / 4 \mathrm{oz}$., 20c..5c pkt.
563 Finest Mixed. All colors. Oz., 50c..........5c pkt.

## "WILD GARDEN" FLOWER SEED.

Each package contains about 100 varieties of hardy flower seeds mixed together, and wherever planted will insure something new almost every day. Is suitable for sowing in shrubbery, under trees and in beds on which no care will be bestowed, or even for sowing in exposed situations, where wildness is preferred to order and precision. To those who can not bestow the necessary care required in a neatly laid out flower garden, the "Wild Garden" presents a substitute which for its unusual and varied effect, for cheapness and small amount of labor necessary for its construction, has no rival. 600 Dwarf sorts. Growing from 12 to 18 inches high.


## SUMMER FLOWERING BULBS AND ROOTS. <br> Our Frices Include Postage on Single Bulbs and by the Dozen, Except where otherwise noted. Bulbs Quoted by the Fundred are not sent Prepaid.



## Amaryllis Johnsonii.

Plant in equal parts sandy loam and leaf mould. If convenient, start in hotbed, beginning with fifty degrees of heat, increasing to sixty or seventy. When the leaves appear, water carefully and not in too great quantity. The Formosissima and Rosea planted in May make rich and showy border plants.
Atmasco Rosea. These flower all summer. Small, delicate, pink flowers.................................5c each; 50 c per doz. Belladonna Major. White, turning to rose as the flower ages. 25c each; $\$ 2.50$ per doz. Formosissima. Rich, velvety crimson, fine...15c each; $\$ 1.25$ per doz. Johnsonii. Large flower, crimson-scarlet, striped with white.
Halli. (Lycoris Squamigera.) A perfectly hardy Amaryllis, having flowers of a delicate lilac pink shaded blue, borne on stems two to three feet high, the flowers being trumpet shaped. Lycoris Squamigera produces in early spring attractive green foliage, which grows until July, when it ripens off and disappears, and one not familiar with its habits would think appears, and one not familiar month died, but about a month the flower stalks spring from the ground.............25c each; $\$ 2.50$ per doz.

## TUBEROUS-ROOTED BEGONIAS.

Few plants are better adapted to the summer decoration of the window garden, the veranda, and the conservatory, than the Tuberous Begonia. It is a constant and prolific bloomer when well grown, wonderfully rich and varied in coloring, and so easy to grow that all persons ought to succeed with it after familiarizing themselves with its habits and requirements.
They are now used extensively for outdoor planting. Give them a partially shaded position in a light soil and well drained position, and they will give more bloom than any other plant which will grow in such a place.

A soil that will grow it to perfection is turfy matter scaped from the bottom of old sod-one part, and one part sand. Mix these well adapted to any plants having fine, fibrous roots. It is more satisfactory to apply plant-food when needed, and in such quantities as seem to be required, than to make the soil very rich from the start.
When the tubers of these Begonias are procured, spread them out on pans of moss, which should be kept moist and warm. Here they should be left until sprouts appear. It is not necessary to sprout your tubers in this manner if you can tell which is top or bottom of them, but frequently they look so much alike on both sides that you can not be sure which is which until sprouts appear, and it will not do to plant them wrong side up. Give each tuber a fiveinch pot, if grown singly, or use three tubers to a seveninch pot. Settie the tuber down into the soll to the depth gins, then increase the amount. But at no time during its existence will the plant require more than enough to make -and keep-the soil moist all through. Good drainage should be provided to guard against the dangers of over-
watering. Scarlet, white, pink, crimson, yellow and orange in Sincl separate colors...10c each; 75c per doz.; $\$ 5.00$ per 100 . Double, Scarlet, pink, white and yellow 15 c each: $\$ 1.50$ per 100. Double Mixed.......................................... $\$ 1.00$ per doz.

## TWO BRILLIANT BEGONIAS.

Two gorgeous tuberous-rooted varieties of strong but dwarf habit, 8 to 10 inches in height, and throwing up numberless stems, of full, double flowers from early in July until cut for richness and intensity, is unapproached by any other flower.
 for richness and intensity, is unapproached by any other flower. Duke Zeppelin. Intense pure vermillion-scarlet.
Lafayette. Brilliant crimson-scarlet.

## BEGONIA HARDY.

Exceedingly useful plants for the garden, good for shady places. Lustrous bronze green foliage with small pink flowers. Hardy Begonia plants can only be sent by express. Small plants, 10c each; $\$ 1.00$ per doz. Large plants, 15c each; $\$ 1.50$ per doz.

## CALADIUM ESCULENTUM. (Elephant Ear.)

One of the most effective plants in cultivation for the flower border, or for planting out upon the lawn. It will grow in any garden soil, and is of the easiest culture. It should be planted in a rich compost, where it will obtain plenty of water. Foliage light green. Size Fach Doz. By Mail Size

1. Small bulbs $\ldots . .10 \mathrm{c}$. $\$ 1.00$ 15c,ea. 4. Selected Extra


## CALADIUMS-FANCY LEAVED.

Fancy-leaved Caladiums have, in recent years, grown very rapidy in popular
Calauium Esculentum. favor, for the decoration of the conservatory greenhouse and window boxes. We have a selection of the most showy varieties 20 c each; $\$ 2.25 \mathrm{doz}$.

## CANNAS. <br> MCCULLOUGH'S COLLECTION OF STANDARD LARGEFIOWERING VARIETIES.

The sorts offered below are all strictly high-grade.
No other bedding plant will give the same uniform good results in our varied and trying climate. They do well in all sections of the country, and stand pre-eminently at the head of the list, succeeding in any sunny pozition in any kind of soil, but responding quickly to liberal treatment. For best results the beds should be spaded two feet deep and a liberal amount of manure of any kind thoroughly incorporated, and at all times supplying water freely. For best effect plant in large masses of one color, setting out the plants 2 feet apart.
Dormant Roots.
.10c each; $\$ 1.00$ per doz.
Strong plants ready about May 1 st. ..... 15 c each; $\$ 1.50$ per doz.; $\$ 10.00$ per 100.
Canna Plants can only be sent by express, at purchaser's expense.
Allemania. Orchid-flowered, pleasing dark salmon with golden markings. Green foliage. 4 feet.
Alphonse Bouvier. Finest, tall, brilliant crimson; green foliage; 6 feet.
Annie Laurie. Clear silvery pink flowers, with cream throat; green leaves; 3 feet.
Austria. Pure canary-yellow; fine large open flowers, with few reddish dots in the center of the two inside petal; 5 to 6 feet.


Augusta. Bright crimson edged with broad band of yellow; green foliage; $21 / 2$ feet.

Charles Henderson. Vermilion red, penciled with yellow in the center; compact, dwarf, with very large flowers; green foliage; $31 / 2$ feet.
Duke of Marlborough. One of the finest of the very deep crimsons; fine individual blooms in large trusses, and exceptionally free-flowering and attractive; green foliage; 4 feet.

Egandale. A favorite bronze-leaved sort, with soft currant-red flowers; 4 feet.
Florence Vaughan. Bright, rich golden-yellow, spotted with red; of large size and perfect form; green foliage; 4 feet.
Italia. Orchid-flowered. Bright orange-scarlet, with with broad golden-yellow border; the flowers are produced on massive stems, set $\pi$ ell above the foliage, which is large and heavy, green foliage; 4 feet.
King Humbert. In this grand Canna we have a combination of the highest type of flowers with the finest bronze foliage. Its flowers measure 6 inches in diameter, produced in gigantic trusses, a brilliant orange-scarlet with bright red markings; foliage broad and massive, of a rich coppery-bronze; 5 feet.
Jean Tissot. One of the brightest; color an intense, brilliant vermilion, with bright orange shadings, a color that can be seen as far as the eye will carry; massive sreen foliage; 5 feet.
Louisiana. Very large, beautiful, vivid, scarlet, Orchid-like flowers, often measuring five to six inches across. Foliage a glossy green, edged with a narrow purple band; 6 feet.
Mont Blanc. Large, beautiful white flowers on strong branching stalks, well above the foliage. It blooms early and continuously. Its great masses of snowy-white flowers contrast finely when planted with crimson and scarlet kinds. 3 feet,
Niagara. Great handsome trusses; color, deep crimson, with a border of golden-yellow; green foliage; height, 3 feet.

Mrs. Kate Gray. Rich orange scarlet, overlaid with gold; flowers large, with immense trusses, foliage bright glossy green; one of the best. 5 feet.
Pennsylvania. Intense vermilion-scarlet, overlaid with an orange sheen. Flowers measure fully $61 / 2$ inches, are produced freely; foliage rich green; 5 feet.
Queen Charlotte. Rich scarlet with a wide, bright gcld band around each petal; large flowers; green foliage; 3 feet.
Richard Wallace. A good free-flowering yellow Canna of vigorous growth, we believe this variety comes nearer to the ideal than any variety yet offered. In color it is a pleasing canary-yellow with exceptionally large flowers, which are carried well above the bright green foliage; $41 / 2$ feet.
Souvenir d'Antoine Crozy. Intense crimson-scarlet, with a broad golden-yellow border, an exceptionally free-flowering variety, and the brightest of the gilt-edged sorts; green foliage; $31 / 2$ feet.
Venus. One of the softest and most delicately colored varieties that has yet been introduced. The flowers are of fair size, of a soft rosy pink, with a pretty mottled border of creamy yellow. The plant always presents a clean, fresh appearance; green foliage; $31 / 2$ feet.
Price of above dormant roots,
10c each; $\$ 1.00$ per doz.
Strong plants ready about May 1 st.
15c each; $\$ 1.50$ per doz.; $\$ 10.00$ per 100.
By express only, purchaser to pay charges.
Robusta Perfecta. A distinct and handsome sort. makes a good screen; bearing immense leaves eleven to eighteen inches wide and three feet long, of a bright bronze-red color; the flowers are insignificant; six to seven feet high; with good cultivation grows ten feet.

10c each; 75c per doz.
Tall Cannas, Mixed. Our selection; dormant roots. 10c each; 75c per doz.
Dwarf Cannas, Mixed. Our selection; dormant roots. 10c each; 75c per doz.


Arabella. Pale primrose, tipped and shaded old rose and lavender
Catherine Duer. Of largest size, full to center; free bloomer; long stems; beautiful vivid scarlet; robust grower
Clifford W. Bruton. Canary yellow; immense size and perfect form. A tall, vigorous grower and extremely free bloomer.
Frank Smith. Rich purplish maroon, shading almost to black, each petal tipped with white, with carmine red shadings; vigorous growth, early and profuse bloomer.
Germania. Brilliant strawberry-red, a very fluffy artistic flower, standing well above the foli-
Geisha. age.
Grand Duke Alexis. Pure white, distinctly tinged delicate pink. A magnificent flower of largest size
Fenry Patrick. Pure white; large size, long stems; fine for cutting.
Jack Rose, Brilliant crimson-red, rich and glowing; stiff stems, holding its large flowers erect
Lyndhurst. Brilliant cardinal-red. A fine cut flower.
Nymphaea. The flowers are of medium to large size, always full to the center, resembling the ideal pink water-lily. The color is a clear, distinct, light shrimp-pink, tinted
Ohio. lighter toward the center. center. Color delicate shell pink, shading to deeper pink in center, reverse side of petals pink.
Perle d'Or. The grandest white decorative Dahlia to date. It is very large, and of beautiful chrysanthemum shape. It is a strong, vigorous branching grower of medium heigr $t$ about $31 / 2$ to 4 feet, and an extremely early and profuse bloomer on long stems.
Queen Victoria. Handsome deep yellow, finely quilled, perfect form.
Red Hussar. Best scarlet-crimson; a very strong, vigorous grower; fine, large, well-formed flowers on long stems. One of the best bright reds for cutting.
Stanley. Bright golden yellow, tipped red.
Storm King, Extremely early, profuse and constant bloomer. Flowers snow-white, perfect form.
sylvia. Valuable for cutting. Flowers from 4 to 5 inches in diameter, of fine form and full to the center; grow on long: stout and gracefil stems; color white, shading to soft pink on the outer petals.
Snow Oueen. Pure white, strong vigorous grower The graceful formation of the flower and adaptability for both garden decoration and cut-flower makes it extremely valuable.
Snowclad. (Pompon.) The finest white with long
Sunshine full centers, long stems, largely used for cutting.

## DAHLIAS.

The Dahlia is one of the most important summer and autumn flowers. Commencing to flower in July, they are a perfect blaze of bloom until stopped by frost. Especially fine for cut flowers.

## A FEW CULTURAI NOTES.

One of the most important points in the cultivation of the Dahlia is to select a well-drained position where they will receive the full benefit of the sun during the greater part of the day.

As to soil, they are not at all particular, except that in the case of a stiff clay some loose material should be added, such as coarse sand, old mortar, or anything which Will make the soil loose and friable. The soil must be deeply dug, if possible to a depth of two spades, and a
liberal amount of suitable plant food incorporated. For this nothing is more satisfactory than well-decayed stable manure; but where this can not be conveniently procured pure bonemeal, sheep manure, or any chemical fertilizer rich in ammonia and phosphoric acid will answer as a substitute.

The planting of dormant roots in the latitude of Cincinnati may be done at any time between April 25 th and June 15 th, the earlier planting being preferable. Plant the bulbs three inches below the surface of the ground, laying the bulb on its side. Do not crowd your plants, but plant at a distance of not less than $21 / 2$ or 3 feet, and, as soon as the shoots appear, remove all but two or thnee of the strongest, and these, when about a foot high, should be secured to-stout stakes.

Keep free from grass and weeds and water regularly in dry weather.
BEST STANDARD DECORATIVE AND SHOW DARTIAS.
Named Varieties; 15c each; $\$ 1.50$ per dozen.
A. D. Livoni. Soft pink, with quilled petals and full to the center; long stems.
Susan. A very pleasing variety, its color, a delicate shell pink, as well as its remarkable-free flowering qualities, is not approached by any other Dahlia of this type
White Swan. Pure white, large and fine: the hardi-
$\mathbf{W m}$. Agnew. Richest shade of intense dazzling red and very large in size, sometimes 7 inches across; magnificent flower in color and form; always full to the center; long petals, outer
row beautifully twisted
Black, changing to black-maroon as the flower fully expands; of fine form and full to the center.

## CACTUS DAFIIAS.

Countess of Ionsdale. Profuse bloomer and one of the best. Flowers very large and of a beautiful shade of salmon-pink, blending into amber
Floradora. Beautiful scarlet crimson, full to the center, fine pointed petals; good size; branch-
Gabriel Ang growth and profuse bloomer curved twisted petals; color combination of scarlet and cinnamon shades, sometimes tip-
ped white. ing to white in the center. Undoubtedly the finest and most perfect pink Cactus Dahlia to date, and as a cut flower likely to supercede all other pink sorts.
Mrs. F. J. Jones. Very large, perfect, rich, bright scarlet, with cream-colored edge; occasionally comes self-colored.
Standard Bearer. Intense cardinal-red, with long twisted petals; early and profuse bloomer.
Winsome. (Cactus.) Pure white, flowers large with twisted, incurved petals, giving great depth to flower. A strong, vigorous grower of branching habit.

## SINGLE DARIIAS.

Suitable for cut flowers on account of beauty, grace and long stems.
Crimson Century. Rich, deep, velvet crimson, shaded maroon, with rose halo around a yellow disc
Maroon Century, Rich maroon, with yellow disc.
Pink Century. Delicate soft pink.
Scarlet Century. Brilliant scarlet, golden disc
White Century. Pure white with large, heavy overlapping petals of good texture.
Twentieth Century. Early in the season an intense rosy-crimson, shading gradually to almost white on the edges and a light halo around the disc. As the season advances the flowers become lighter, changing to almost pure white, suffused with soft pink
Price of the preceding varieties, 15 c each; $\$ 1.50 \mathrm{doz}$.

## MIXED DAHIIAS.

Our mixtures are made from selected varieties and contain many more kinds than we list here Double Mixed, Cactus Mixed, Single Mixed. Our selection...................10c each; $\$ 1.00$ doz.

## GLADIOLUS.

The most attractive of all surnmer-flowering bulbs are the Gladioli. Wonderful improvements are being made each year in the size, color and beauty of these flowers, and our list comprises only the best, both in mixtures and in named sorts.

For best results they should have a sunny position. A light, sandy loam suits them best, but they do equally as well in heavy soil provided there is perfect drainage. Wellrotted stable manure is the very best fertilizer, and where convenient it should be spread over the land in the fall, and dug in the following spring. Sheep manure is an excellent substitute, and can be applied in the spring. The best time to plant is about the first of May, putting in the smallest bulbs first, and reserving the larger bulbs for later planting. A succession of bloom may be had from July to October by making plantings two weeks apart up to the end of June. To make a good show they should be planted from three to four inches apart each way. The depth to plant is regulated by the size of the bulb, large bulbs being covered about six inches deep, smaller ones from three or four inches.

After they have flowered and the foliage begins to turn yellow, which is usually along about the beginning of October, lift the bulbs, cutting off the stems, placing them in trays or sheves in an airy cellar or some such place, where the temperature will not fall below 45 degrees, or over 60 degrees. In such a position they will keep perfectly until time for resetting the following season.

They are very effective when planted among Roses, Paeonies, Shrubbery, etc.

In cutting Gladioli for the house, it is best to cut the spikes as soon as the first one or two lower flowers are open. The remainder will open in the house. Remove the faded flowers, cut a little off the stem, and change the water every day; treated in this way, a spike will last a week or ten days.

## Add 10c per dozen extra for postage

America. Conceded to be one of the finest varieties for cutting or bedding ever sent out; color a beautiful soft flesh-pink; orchid-like in its coloring and texture; growth and habit perfect.

10c each; \$1.00 per doz; \$6.00 per 100.
Attraction. Rich, deep crimson, with conspicuous pure white center and throat; beautiful and attractive.

10c each; $\$ 1.00$ per doz.


Augusta. A lovely and useful pure white variety 5c each; 50c per doz.; $\$ 3.50$ per 100 .
Brilliant. Glistening scarlet with carmine and white throat. The best scarlet. $\mathbf{8 c}$ each; 75 c per doz.; $\$ 5.00$ per 100 .
Best Violet. A tall large flowered solid violet, with fine narrow white bars on lower three petals. A strikingly rich color very noticeable.

10c each; \$1.00 per doz.
Blue Jay. The nearest approach to a really blue Gladiolus yet sent out; color rich, deep, royal violet-blue. This, when cut in combination with Sulphur King, is truly exquisite.

10c each; $\$ 1.00$ per doz.
Chicago White. Pure white with faint lavender streaks in the lower petals. They are borne on tall straight stems and from 5 to 7 flowers are open at one time. It is one of the earliest to bloom hence valuable as a cut flower sort, either for forcing or outdoor planting.

15c each; \$1.50 per doz.
Kunderi "Glory:" The broadly expanded, wide open flowers, all face in the same direction and are carried on straight stout stalks, fully $31 / 2$ carried on straight stout stalks, fully $31 / 2$
feet. From 3 to 8 of these handsome flowers feet. From 3 to 8 of these handsome flowers sitely ruffied and futed. The color is a delicate cream pink with a most attractive crimson stripe in the center of each lower petal. The ruffling of the petals in this new strain has attracted much attention.

15c each; $\$ 1.50$ per doz.
Marie Iemoine. Slender spike, well-expanded flowers; upper division of a pale creamy color, flushed salmon, lilac; the lower division spotted violet and yellow. A very dainty variety.....5c each; 50c per doz.; $\$ 3.00$ per 100
May. Lovely pure white flowers, finely flaked bright rosy crimson; strong spike. Good forcing variety...5c each; 50c per doz.; $\$ 3.00$ per 100 .
Mrs. Francis King. A magnificent new variety The large blooms are of a delightful lisht scarlet and are well placed on the large spikes, bearing six open flowers at one time.
$5 c$ each; 50c per doz.; $\$ 3.00$ per 100 .
Princeps. An especially fine variety, with immense wide-open amaryllis-like flowers, of a rich, dazzling scarlet, marked with white on the lower portion. which serves to intensify the brilliancy of the scarlet, 15 c each; $\$ 1.50$ per doz,

Shakespeare. White, slightly suffused with carmine rose; large rose blotch. .10c each; 90c per doz. Sunlight. Light crimson with large canary-yellow throat, mottled maroon; very striking color 8c each; 75c per doz. Taconic. Bright lively pink, flecked and striped on the lower petals are deep crimson. Wild Rose. Bright rose or blush tint, exceedingly delicate and pretty. Valuable as a cut flower variety, either for forcing or outdoor planting. One of the best.....15c each; \$1.50 per doz. Wm. Falconer. Beautiful clear light pink, spikes of great length and flowers of immense size.
Yellow Bird. An unusually large and vigorous yellow with finely barred lower petals. A splendid shade of yellow, one of the very best in its color. ..............15c each; \$1.50 per doz.

## GTADIOLUS IN MIXTURE.

If Gladiolus are wanted by mail, add 10 c per doz. for postage. Single bulbs mailed without additional charge.

Our mixtures offered below are made up of fine varieties, not the common sorts, which produce varieties, not the common sorts, which produce bulbs, and are sure to oive satisfactory results. McCullough's Superb Mixture. This is our popular mixture, and is composed of fine sorts, in all colors, in first-size bulbs only. We have tested many brands of mixtures, some of them costing twice as much as this, but have never seen any which surpassed it in variety of coloring or general excellence.

5c each; 35c per doz; $\$ 2.50$ per 100 American Hybrids Mixed. These are fine early hybrids, and while not as fine as the preceding, the size and coloring of many of the sorts are truly marvelous

4 c each; 25 c per doz.; $\$ 1.50$ per 100

## GIADIOLUS IN SEPARATE SHADES.

Scarlet and Crimson shades mixed...5c | Eaz |
| :---: |
| $\mathbf{2 5 c}$ |
| 100 | White and Light

Yellow and Orange Striped and Variegated " "...5c 50c 3.50 Fink and Rose " " ...5c 35 c If Gladiolus are wanted by mail, add $10 c$ per doz. for postage.

## LILIES.

No class of plants can lay so much claim to our attention as the Lilies. They are stately, elegant and beautiful, and possess the most agreeable perfume, and for general effect, whether growing in garden or house, they have no rivals. The soil should be rich, deep and mellow with good drainage, as nothing will injure the bulbs more than water collecting and standing around them Do not put manure around the bulbs when setting, as it collects moisture and insects, and often causes the bulbs to decay. Top dressing is the better way to enrich the soil after the bulbs are set. The beds should be we covered with eaves and straw manure to exclude to their size.
Auratum. (Golden Japan Lily.) This superb Lily has flowers 8 to 10 inches in diameter composed of six white petals, thickly studded with rich chocolatecrimson spots and a bright golden band through the center of each petal; exquisite vanilla-like perfume. Extra stong bulbs. 20 c each; $\$ 2.00$ per doz. Large bulbs ..............15c each; $\$ 1.50$ per doz. Canadense. One of our hardy native sorts, and bears a graceful stem of drooping bell-shaped yellow and red flowers...............10c each; $\$ 1.00$ per doz. Longiflorum. A variety bearing in clusters beautiful snow-white trumpet-shaped flowers of rare fragrance; fine for forcing and house culture.
legans. This large showy lily brigh; $\$ 1.25$ per doz. proven hardy and effective for both beds, has borders..................15c each; $\$ 1.50$ per doz.
speciosum. (Lancifolium.) Well known as Japan Lilies, and one of the most popular garden varieties, also excellent for pot culture, of easy growth, and may be relied upon to give satisfaction, growing two to four feet high and blooming in August.
Speciosum Album. Large white flowers of great sub-


Tilium Auratum. stance, with a greenish band running through the center of each petal Extra strong bulbs Large bulbs
Speciosum Rubrum, or Roseum. White, heavily spotted with rich, rosy crimson $15 c$ each; $\$ 1.50$ per doz. Extra strong bulbs
 growing plant often eight feet, bearing from 20 to 30 flowers Tenuifolium (Siberian Tily) A native of Siberian petals reflexed; show, and native of Siberia. One of the hardiest Lilies; flowers vivid scarlet, with requiring blooming early in the spring. It is of easy cultivation .15c each; \$1.50 per doz. Tigrinum Flore Pleno (Double Tiger Lily). "This is a plant of stately
 habit, bearing an immense number of double, bright orange-red flowers, spotted with black, three to five feet. August.

## IILY-OF-THE-VATLEY.

No garden is complete without a bed of these fragrant flowers. Should be planted in a shady place, where if left to themselves they will spread and increase rapidly.
Large Clumps. Planted in a shady, moist situation, being one of the hardiest of flowers, they require little or no attention. $\mathbf{3 5 c}$ each; by mail, add 20 c each for postage.

## TUBEROSES.

One of the most fragrant and beautiful of the summer flowering bulbs. By skillful management a succession of flowers may be obtained fill the year round. For early flowers they can be started in February or March, in the greenhouse or hotbed; and for succession they can be planted at intervals as late as August. For flowering in the open border, plant about the first of May.
Excelsior Pearl. Much superior to the ordinary Double Pearl Tuberose. This variety is characterized by its short, robust stem and long spikes of flowers, which are more double and twice as large as those of the old sort


5c each; 35c per doz.; \$1.50 per 100 Single Ever-Blooming Tuberose. This charming single fiowering Tuberose is of the purest white, both inside and out. The odor is less heavy than that of the Double Tuberose........5c each; 35c per doz.

## GIOXINIA.

Magnificent for house culture, producing in great profusion beautiful flowers of rich and beautiful colors. They succeed best in sandy loam and peat and require a moist heat.
Large Flowering Varieties. Finest Mixed..........15c each; $\$ 1.50$ per doz.

## MADEIRA OR MIGNONETTE VINE.

A rapid growing vine, covering a large space in a short time. Fleshy, heart-shaped leaves of a light green and numerous racemes of feathery flowers of delicious fragrance..............................5c each; 40c per doz.

## OXALIS. (Summer-Flowering.)

Valuable for edging walks, flower beds, etc. Bulbs planted three inches apart form rounded rows of delicate foliage, about one foot high, which produce flowers in endless succession.
Dieppi. Bright crimson
15c per doz; 75c per 100. Dieppi Alba. Pure white, very fine............................................... doz. 75c per 100. Lasandria. Fine, rose pink, beautiful cut foliage. This is the tallest and when planted in a bed with Dieppi, should occupy the center.

## PALMS, FERNS, BEDDING PLANTS, ETC.

We call special attention to our stock of Palms, Araucarias Ficus, Pandamus and other plants, which is the largest and most complete in the West. We have a full line of sizes, and can offer special inducements on FINE SPECIMEN PLANTS. Whenever possible we solicit a personal inspection of our stock either at NURSERIES OF THE MCCUIIOUGE SEED CO., McCullough Station, Pleasant Ridge, Ohio, Stock either at NURSERIFS OF TRE MCCULLOUGH SEFD CO., McCullough Station, Pleasant Ridge, Ohio,
or at OUR STORE,
OIG Walnut Street, Cincinnati, Ohio. Send all correspondence to our Cincinnati offices. Palms, Ferns, Araucarias, Dracaenas and other plants can only be sent by express at purchasers' expense.

## PALMS.

ARECA TUTESCENS. One of the most graceful and beautiful palms grown; the foliage is of a bright glossy green, with rich golden yellow stems.
kentia belmoriana. One of the hardiest and best Palms for growing in the house. They are of slow growth and not affected by the dry KENTIA FOSTERIANA. A taller growing variety than the above, with broader leaves and longer stems. It makes a large plant in a shorter period-and for its majestic appearance, it is greatly in demand. IATANIA BORBONICA. (Chinese Fan Palm.) A very popular variety. IIVISTONIA ROTUNDIFOLIA. One of the prettiest Palms, especially suited for table decoration. The foliage is gracefully recurved, forming an
 PHOENIX ROEBELENII. The delicate beauty of this the most graceful of all the Phoenix, and a palm which will become one of the most popular varieties for room decoration. The plant is of vigorous growth, and its gracefully recurving leaves, with very narrow, dark green pinnae, give the plant a lightness and airiness not surpassed.

## FERNS.

ADIANTUM CUNEATUM. The popular Maiden Hair Fern.... 25 c to $\$ 1.00$ ADIANTUM FARLEYENSE. This is the finest of all the Maiden Hair


Boston Ferns.
 foliage always attractive, easy of Bright shining green pinnate of house ferns .......................................................... to best 81.50 NEPHROLEPIS BOSTONIENSIS (Boston Fern). The fronds arch and droop very gracefully, on account of which it is frequently called the Fountain Fern. This drooping habit makes it an excellent plant to grow as a single specimen on a table or pedestal. 50 . $\mathbf{5}$. We have a few handsome Specimen Plants of Nephrolepis in hanging baskets and pots from \$3.50 to \$10.00 each. NEPHROIEPIS ELEGANTISSIMA COMPACTA, A Dwarf Form of Nephrolepis Elegantissima, making dense, bushy, compact growth of ideal habit and shape. It forms a round, symmetrical, compact mass of foliage. One of the most valuable Ferns.
$\$ 1.00$ to $\$ 5.00$ NEPEROLEPIS WHITMANI. The most valuable Nephrolepis of the Ostrich Plume type yet introduced, is dwarf and compact habit, the pinnae being deeply divided, gives the plant a graceful apPTERIS TREMUUA. One of the finest ferns for house decoration; growing very rapidly and throwing up large, handsome fronds, makes magnificent specimens; easily grown and very popular.

25 c to $\$ 1.00$

## MISCELLANEOUS HOUSE PLANTS.

ArAUCARIAS. Tender, but deservedly popular evergreens, and classed among the handsomest and most serviceable of decorative plants. We offer Araucaria Excelsa. Araucaria Excelsa Glauca and Araucaria Robusta from $\$ 1.00$ to $\$ 5.00$ each, according to size and variety. ASPARAGUS SPRENGERI. A beautiful, graceful plant of drooping habit, for pots or hanging haskets. ASPARAGUS PLUMOSUS NANUS. Fine decorative vine, easily grown, and of a light, feathery growth 15c, 25c and 50c.
 DRACAENA FRAGBANS. One of the most admired of decorative plants, with beautiful deep green
 FICUS ELASTICA. The well-known India Rubber Tree, one of the best for table or parlor decoration. FICUS PANDURATA. The New Large-leaved Rubber Plant Leaves of remarkable substance enabling PANT the plant to flourish under the most favorable conditions....................................... $\$ 2.50$ to $\$ 5.00$ sar and gracefully curved. ........ $\$ 1.00$ to $\$ 5.00$ SANSEVIERA ZEALANICA, An elegant variegated plant, especially adapted for house decoration the thick leathery leaves standing the heat and dust of the house with impunity......25c, 50c.and $\$ 1.00$

## GENERAL LIST OF BEDDING PLANTS.



## EVERBLOOMING HYBRID-TEA ROSES.

This collection of Roses embraces the most popular of the Hybrid-Tea type, several of them, varieties with which every lover of Roses is familiar, and all of them thoroughly tested sorts which have been found most satisfactory for outdoor planting.

They combine, in a large degree, the hardiness of the Hybrid Perpetual class with the free-flowering qualities of the Tea Roses, and withstand the winter with little or no protection.

We especially recommend this collection of Roses to those who wish a supply of extra choice flowers for cutting throughout the summer and fall months.

All Roses thrive best when well watered, sprayed with Hellebore and Bordeaux Mixture for insects and fungus, and fed either by applications of manure water, or Bonemeal at the rate of two pounds per square yard. The Hybrid Perpetuals are particularly susceptible to such treatment and respond quickly. Pot grown roses should not be planted out of doors until all danger of frost is past.

We do not recommend the mailing of Roses. 10 each; $\$ 5.00$ per extra if doz.
American Beauty. This is the queen of all roses, being extra large, full and fragrant. The color is a fine deep pink shaded toward the center a carmine crimson. We do not recommend it for outdoor culture. Burbank. Color, bright pink; strong; vigorous grower, perfectly hardy, fragant and free-flowering.
Ftoile de France. Rich, velvety crimson, with cerise-red center. A strong, vigorous grower, with good flowers, which are full and double and as beautiful in the bud as in the full-blown flower, and borne on strong, upright shoots in great profusion.
Etoile de Lyon. Deep golden yellow; very large and full buds, strong, vigorous grower; fine for outdoor sum-
Frier
von Marshal. Splendid hal Brifiant red, large double flower. bederid grower and very free bloomer. A grand
Gruss an Teplitz. This, the reddest of all red Roses, is a Rose for everybody, succeeding under the most ordinary conditions. In color it is of the richest mature; it is of good size very fragrant, a free strong grower, and a most profuse bloomer, the strong grower, and a most profuse bloom
Hermosa. Probably the most popular bedding rose. It is a bright pink color, free-flowering and perfectly hardy.
Kaiserin Augusta Victoria. Soft pearly-white, tinted with just enough lemon in the center to relieve the white; remarkably fragrant, beautifully formed flowers on long, graceful stems; a strong, free, healthy grower, with bold, handsome foliage,
Killarney. Probably no Rose has ever taken such a prominent place so quickly as Killarney. It is one of the most popular of our garden Roses, and also one of the leading varieties for winter cut flowers. It is perfectly hardy in this latitude; in growth it is strong and robust, and as free-flowering as any Rose we know. In color it is a sparkling, brilliant, imperial pink; the blooms are large, the buds long and pointed, the petals very large and of great substance, and just as handsome in the full-blown


Ia France.

Ia Erance. An old favorite, and probably the most popular Rose the world over. A model garden Rose in every way; flowers clear satiny-pink; large, very full and of perfect form.
Mme. Abel Chatenay. The most popular Rose in England, both in the garden and as a cut flower, thousands of its beautiful buds being sold daily on the streets of London; it succeeds equally well here, is a strong grower and produces very freely beautiful flowers of carmine-rose, shaded with salmon
Madame Caroline Testout. Brilliant satiny rose; flowers and buds extra large, of excellent substance, and keeps its color well; hardy, strong grower.
Madame Jules Grolez, A beautiful satiny rose color, very bright and attractive, flowers of large size, Maman Cochet. Deep rose pink. A strong, healthy growing variety, with rich, bright foliage. A grand bedding rose, as it is a profuse and continuous bloomer.
Maman Cochet White. The flowers are large size, pure white, sometimes tinged with rose; the finest

Taft. Color bright rose shading to pink on outer petals. Flowers large and fragrant, strong, vigorous grower. The best pink summer blooming rose.
Wm. R. Smith. The flowers are large and double. The petals softly curled, colored cream with flesh tint tips, buffy-yellow base and the center pink; fine bedding variety.
White Killarney. A pure white sport from Killarney, with which it is identical. It is perfectly hardy with light protection. A strong, robust grower, flowering very freely throughout the season.

## HARDY HYBRID PERPETUAL ROSES.

Among all the hardy, plants few are so commonly well liked or more valuable than the roses, particularly the "June Roses" as the Hybrid Perpetuals are called. They are strong growers, bearing large globular flowers and are so hardy that they succeed in any locality. The severest winters will not kill them but it is generally conceded that protection is beneficial when the straw, manure. cornstalks or
other covering is not so thick as to be unnatural and smother them.
Extra Strong Plants, 50 c each; $\$ 5.00$ per dozen.
Captain Christy. A lovely rose, very large, double buds of d deep fiesh color
Captain Hayward. Bright crimson-carmine; a distinct shade Coquette des Blanches. White tinted pink, medium size, perfect form.
Duc de Rohan. Brilliant carmine, high center; excellent Frau Karl Druschki, The ideal hardy white rose, pure in color, perfect in form; strong grower and free in color,
General Jacqueminot. Brilliant scarlet crimson, of fine shape and exquisite fragrance
Harrison's Yellow. The Hardy Yellow Rose of olden times. Deep golden yellow, semi-double and very hardy, suitable for planting in old fashioned gardens and amongst shrubs, prune lightly as this variety flowers on the previous year's growth.
Madame Plantier. Pure white and a free bloomer; unrivalled for hedges or cemetery use. Magna Charta. Bright pink, suffused with carmine; strong
Mrs. John Laing. Soft pink, of beautiful form; exceedMrs $\mathbf{R}$ sharman and
wford. Deep rosy pink, outer petals Paul Neyron. Very large dark rose; by far the Jargest Ulrich Brunner. Bright.

## MOSS ROSES.

Crested Moss. Rose color, beautifully crested.

## Strong Plants, 50c each; $\$ 5.00$ <br> HARDY CLIMBING ROSES.

Extra Strong Plants, at 50c each; $\$ 5.00$ per dozen. Crimson Rambler. This grand old climber hardly needs description. The magnificent trusses of bright crimson flowers are freely produced and admired by everyone. It is still one of the easiest of Roses to succeed with. Unsurpassed for walls, hedges, pillars, arches,


Gen. Jacqueminot.


Crimson Rambler.

Dorothy Perkins, A good one. As hardy as Crimson Rambler. The flowers are borne in clusters and are very double; the petals are very prettily rolled back and crinkled. The color is a most beautiful shell pink and holds a long time without fading.
Flower of Fairfield. (Ever Blooming Crimson Rambler.) A sport from Crimson Rambler, with same climbing habit, hardiness and immense trusses of crimson flowers. It flowers on the young wood in its first year, iis of vigorous growth, and when in bloom supersedes anything else by the wonderful display of its immense clusters of blossoms. It starts blooming in early spring and continues to flower till late in fall.
Gardenia. (Tichuriana.) Buds bright yellow, opening double flowers of a cream color, incurving towards evening to the shape and the color of a cape jessamine. Suitable for climbing over walls, arbors, stumps of trees and for trailing over rocks or rough ground. The foliage is retained on the plants almost the entire winter, making them practically evergreen.
Michigan Climber. Single variety; flowers nearly two inches in diameter; produced very freely; color, bright rich pink; strong, vigorous

Pink Rambler.
Rambler. Pure satiny rose, single in clusters. The partially open buds being bright light carmine, thus producing a strong and pleasing contrast.
White Dorothy Perkins. This beautiful new Rose is the counterpart of the well known Dorothy Perkins, excepting in the color which is pure White Rambler. Closely resembles the Crimson Rambler in vine and foliage. Large clusters of pure white single fowers, which are deliciously fragrant. The flowers remain on the plant a long time and keep a long time when
Yellow Rambler. The flowers are borne in immense clusters, often as many as 150 blossoms in a buncin. The color is a decided yellow; the flowers are very fragrant; the habit of growth is very vigorous. Well established plants of making shoots eight to ten feet in one season.

## ROSA RUGOSA.

The lovely Rugosa Roses form sturdy bushes three to five feet in height, covered with handsome. glossvgreen foliage and clusters of beautiful single fowers, which emit a delightful odor. They bloom nearly the whole summer, and are covered during autumn and winter with red seed pods.
Rugosa. Glossy crimson.
Eugosa Blanche de Coubert. Double.pure white, a vigorous rampant grower; very free.

## HARDY HERBACEOUS PERENNIAL PLANTS.

The steadily increasing demand for hardy plants has induced us to give them more attention and to increase our stock considerably. For such of our customers who are not acquainted with the different varieties we shall be pleased to make suitable selections of the most desirable species, that when once planted, with very little care, will keep the garden gay with flowers from the time frost leaves the ground until late in autumn.

15c each; $\$ 1.50$ per dozen (except where noted). If sent by mail, 20c each.


## Coreopsis Lanceolata Grandifiora.

Anchusa Italica, Dropmore Variety. A strong growing plant 5 to 6 feet high with broad foliage and large spikes of beautiful blue flowers the entire season. Anemone Queen Charlotte. Large semi-double pink flowers. The most popular of all.
Anemone Whirlwind. Large semi-double, pure white flowers; very free flowering.
Anthemis Tinctoria. The hardy Marguerites are among the most satisfactory summer-flowering perennials, growing about 15 inches high and blooming continuously during the entire summer. Large golden yellow flowers.
Antirrhinum. (Snap Dragon.) Assorted colors.
Aquilegia. (Columbine.) Favorite late spring and early summer blooming plants, growing about two feet high. Assorted colors.
Arabis Alpina. A dwarf growing plant completely covered with white flowers in early spring. den, good for shady paces Lustrous bronze garfoliage with small paces. Lustrous bronze green ia Australis. (False Indiowers.
Baptisia Australis. (False Indigo.) Strong, grower, with dark green, deeply cut foliage, and spikes of dark blue flowers in June and July; 2 feet.
Bocconia Cordata. An attractive plant, growing 6 to 8 feet high, with large foliage and long spikes of white flowers in August. Well adapted for single white flowers in
Boltonia Iatisquama. (False Chamomile.) Large single, Aster-like flowers, blooming profusely during summer and autumn. Pink, slightly tinged with lavender. 4 to 6 feet.
Campanula. (Canterbury Bells.) An elegant genus of plants, rich in colors, profuse in bloom.
Chrysanthemum, Hardy. These beautiful small-flowered varieties are very popular for out-door bedding purposes. They are hardy, with a slight covering of leaves or coarse stable litter during the winter. Chrysanthemum, Maximum. A free-growing plant, forming bushy plants, which continue in full blocm from June to August. The flowers are 3 inches and over in diameter, pure white with a golden center; they are of great substance and last a week or more when cut. $21 / 2$ feet.
Coreopsis Lanceolata Grandiflora. A beautiful hardy border plant; grows 15 to 18 inches high, and produces its bright golden yellow flowers in great profusion the entire season.
Delphinium Chinense. A pretty variety, with fine feathery foliage and intense gentian-blue flowers.
Delphinium Formosum. (Larkspur.) Large flower spikes, deep blue with white eye.
Delphinium Kelways Fybrids. These grand Delphiniums are the handsomest of this class of plants and deserve a position in every garden; strong vigorous habit, with large flowers, in spikes 2 feet. ra Speetabilis. (Bleeding Heart.) An old-fashioned favorite, equally well adapted for forcing for early spring flowering as for planting in the open border; its long racemes of graceful heartshaped pink flowers are always attractive.
Digitalis. (Foxglove.) A handsome and highly ornamental, hardy perennial plant of stately growth, fine for shrubberies and other half-shady places; 3 feet.
Funkia Coerulea. (Blue Day Lily.) Blue, broad, green leaves.
Funkia Subcordata Grandifloria Alba. (August Lily.) Pure white, lily-shaped, fragrant flowers.
Funkia Undulata Variegata. Foliage green, striped with white.
Gaillardia Grandifora. Beginning to flower in June, they continue one mass of blooms the entire summer. Flower, 3 inches in diameter; center dark reddish brown; petals orange to crimson.
Felianthus, Maxmilliana. Single-flowered variety; growing from 5 to 7 feet high; September and October. The flowers are produced in long, graceful sprays, which make it invaluable for cutting purposes.
Helianthus, Multifioris El. Pl. (Double Hardy Sunfower.) One of the most useful perennial plants. It produces its large, double Dahlia-like golden yellow flowers during July and August; 4 feet.
Helianthus Rigidus. A desirable variety, flowers single, golden yellow, with dark centers; 3 feet.
Helianthus, Soleil D'Or. Deep golden yellow, quilled petals, not unlike a Dahlia; 4 feet; August and Sept. Hemrocalis Flava. (Yellow Day Lily.) One of the finest hardy plants; flowers large, in clusters, golden Hemrocalis Kwanso Fl. Pl. Large, double, orange fane. flowers. July and August. Fremrocalis Flava. (Tawny Day Lily.) Orange colored flowers. Hibiscus, "Crimson Eye." Flowers of immense size. Color white, with a large spot of deep crimson in the center. Hollyhock. Few hardy plants combine as many good qualities as the Hollyhock. For planting in rows or groups on the lawn, or for interspersing among shrubbery, they are invaluable. The flowers form perfect rosettes well drained, and will repay in quantity and elegance of bloom any extra care. A slight protection during the winter will be beneficial. Double and single. Assorted colors.
Lychnis Chalcedonica. A desirable plant, grows 2 to 3 feet high; flowers, brilliant orange scarlet; blooms all sum-
Lychnis Viscaria. (Ragged Robin.) A showy double variety, with deep red fragrant flowers, remaining in perfection for six weeks
Lythrum Roseum Superbum. (Rose Loose Strife.) A strong growing plant, 3 to 4 feet high, producing large spikes of rose colored flowers from July to September.
Mertensia Virginica. (Blue Bells.) An early spring flowering plant growing about 1 to $11 / 2$ feet high, with drooping panicles of handsome light blue flowers, changing to clear pink; one of the most interesting of our native spring flowers; May and June.


Dielytra Spectakilis.

# JAPANESE IRIS. 

## (Iris Kaempferi.)

A few years since we began importing this beautiful class of plants from Japan, and the demand is yearly increasing as their beauty and value become better known. No place, however small, is now complete without a collection. They are most effective when planted by groups, and thrive best in a moist soil. The flowers are of immense size, from six to eight inches in diameter and of the most beautiful and delicate shades. They are perfectly hardy, flowering in great profusion during June and July.
We offer the following list of named sorts:
Azuma Nishiki, No. 15. Outer petals have soft pink ground, shading to white at edges, inner petals lilac. Bright yellow star center, standards white with red borders. Azuma Yuki, No. 81. Petals rosy purple with heavy white veins, standards brownish-red, striped with white, yellow star center.
Banrai Nami, No. 1. Petals pale pinkish white with white standards and yellow center.
Ezonishiki, No. 6. Petals heavily splashed with purple on white ground, standards brown with purple shading, large yellow star center
Furomon, No. 28, Petals bright pink, shading to creamy white, with heavy purple veins, standards purple, yellow center.
Gosetsu No Mai, No. 12. Petals light blue, yellow star center, with dark bluish purple standards.
Hitome-No-Seki, No. 93. Petals pink and creamy white, beautifully blended, standards deep pink blotched with white, large yellow star center.
Juni-Hitoe, No. 86. Petals deep blue with pink veins, standards dark purple shading to lilac, yellow center.

Japanese Iris. Kimino-Medmui, No. 97. Petals soft lilac with dark purple veins, yellow center and delicate purple standards.
Kokyo Bare, No. 24. Petals brownish red shading to pink, spotted with white and heavily veined, standards delicate purple with creamy yellow stripes, bright yellow center.
Krishi-Ikari, No. 85. Petals brownish-red with light brown veins, center yellow, standards scarlet striped
Kuro Kumo, No. 72. Petals intense bluish-purple, heavily veined, bright yellow center, with light purple
Kyo-Dai
ama. No. 59. Petals indigo, standards greenish blue striped with white, large yellow center.
Manazum, No, 79. Petals soft lilac with darker veins, yellow center, standards purple, striped creamy white. Minoji Ga Taki, No. 15. Petals bright pink with dark carmine veins, standards lavender striped with white, center yellow.
Ogino-Mato, No. 19. Outer panels, indigo purple shading to lilac, inner petals, pink and white with yellow center, standards brownish red, marbled with creamy white,
Okino-Kamone, No. 65. Petals recurved and creamy white, standards pure white, large bright yellow
Sassa No Koe, No. 34. Petals recurved and creamy white, beautifully veined pink and white, orange yellow center, standards pure white, spotted deep pink.
Sen Nio Do, No. 20. Beautifully blotched and spotted with scarlet on white ground, blending at center to creamy white with golden yellow star center, standards white edged with pink.
Shio Kemuri, No. 25. Recurved petals of sky blue shading to white, with yellow star center, standards darker shade bordered with brown.
Shiraito-Daki, No. 100. Petals creamy white with bluish tinge, finely veined, center yellow, standards white with deep blue edges.
Tai Hei Raku, No. 99, Petals rich pansy purple, with goldenyellow center and light purple standards.
Yezo-Nishiki, No. 16. Petals lavender, heavily spotted with dark purple, center yellow, standards lavender bor-
Yodo No Kuruma, No. 8. Petals bright pink shading to dark pink at center and heavily veined, standards purple marbled with white, center yellow.
Above named varieties, 25 c each; $\$ 2.50$ per dozen. By mail 30c each.
Finest Mixed. 15c each; $\$ 1.50$ per dozen. By mail $20 c$ each. GERMAN RRIS. (Iris Germanica.)
The German Iris is one of the most desirable early spring flowering plants. The flowers of large size and of exquisite colors. No garden is complete without a collection off these beautiful "flags."
Barn von Humboldt. Dark blue.
Canary Bird. Light yellow or buff, very fine.
Coerulea. Sky blue
Florentina Alba. White: one of the most desirable.
Florentina Coerulea. Blue, very fine.
King of Yellows. Yellow.
I'Innocence. Pure white veined with orange purple.
Mad. Cherau. Standard and falls pure white; daintily edged with light blue.
Mont Blanc. Pure white.
Purpurascens. Dark purple.
Queen Victoria. Blue, gradually changing to pale bluish white.
Thorbecke. White and deep violet.
Iris Price, 15c each: $\$ 1.50$ per dozen. By mail, 20c each.
Iris Pallida Dalmatica. One of the finest of the Germanica type, of strong, vigorous habit, growing in good soil 4 feet high, with exceptionally large, fragrant flowers, standards lavender, falls lavender shaded blue; exquisite in every way and fine for massing.

25c each; \$2.50 per doz.


## HARDY HERBACEOUS PLANTS-continued.



Phlox.

## PHLOX DECUSSATA-HARDY PHLOX.

These are justly esteemed as the finest herbaceous plants. They are dwarf habit, perfectly hardy, of very easy culture, and yield a profusion of bright showy bloom. They are hardly equaled by any other hardy plant for the decoration of the garden.

15c each; $\$ 1.50$ per dozen. If sent by mail, 20c each.
Beranger. White ground delicately shaded with pink and distinct red eye.
Bridesmaid. Pure white, with large crimson-carmine eye Coquilecot. Bright orange-scarlet, with crimson eye; extra large compact flower heads.
Daubigny: Rosy purple, with enormous florets, extra fine. Eclaireur. Dark crimson, center rose, surrounded with white, an excellent variety.
Etna. Deep fiery red, dark eye. One of the most brilliant F. G. Von Lassburg. The finest white flowers; very large; strong vigorous grower.
Geo. A. Strohlein. Bright scarlet, with crimson red eye; large flowers, does not bleach in the sun.
Hermine. The best dwarf, pure white, early, fine for border; a perfect little gem.
Independence. An excellent large flowering early, pure white. Maculata. Tall growing, many branched, pyramidal trusses of bright purple.
Miss Tingard. (Suffruticosa.) Pearly white, very early and free.
Obergartner Wittig. Large, crimson-carmine flowers, vigorous grower. Bight carmine rose; large and fine.
Pantheon. Bright carmine rose; large and fine $\quad$. ${ }^{\text {R. }}$. R. P. Struthers. Bright rosy-carmine, with claret-red eye. flowers in immense panicles.
Selma. A pretty, delicate, soft, pale rose, with distinct red eye. Snowflake, Large pure white, large flowering variety.
Thebaide. Salmon with carmine eye, dwarf, extra fine.
W'm. Robinson. Bright pink. Tall growing variety, suitable for back rows.

The above plants, 15 c each; $\$ 1.50$ per dozen. If sent by mail 20 c each.

# STANDARD VARIETIES DOUBLE HERBACEOUS PAEONIES. 

Magnificent, hardy plants, almost rivaling the rose in perfume, brilliancy and color and perfection of bloom. They are perfectly hardy, require little or no care, and produce larger or finer blooms when well established.

De Candolle. Currant red, tinged amaranth; distinct color, best of its shade very large and double..............50c each; \$5.00 per doz.
玉dulis Superba. Bright mauve pink color mixed with lilac, fragrant, strong upright stems, free bloomer, early, one of the best commercial pinks ..............35c each; \$3.50 per doz.
Felix Crousse. Large double ball-shaped bloom; color brilliant red; one of the finest self-
colored varieties.....60c each; $\$ 6.00$ per doz.
Festiva Maxima. White with carmine tipped flakes to a few center petals; a strong grower with immense flowers, early, free flowering and fragrant ..............40c each; $\$ 4.00$ per doz.
Eloral Treasure. Large, full, clear pink with lighter center; blooms large on heavy stems. 40c each; \$4.50 per doz.
Jeanne D'Arc. Outside petals rose colored, inside straw colored, with crimson spots.

60c each; $\$ 6.00$ per doz.
Livingstone. Soft rosy pink, silvery reflex, strong long stems, best late pink.

75 c each; $\$ 7.50$ per doz.
Lucrece. Light rose, with flesh colored center; extra fine...........40c each; $\$ 4.50$ per doz.

## JAPANESE SINGLE PAEONIES.

The single Peonies are even more beautiful than the double. They are larger in size of flowers and more delicate in coloring. No other plant flowering at the same season can vie with the Single Peony for beauty, and an established bed, when in full bloom, with the large, silky flowers, and appearing like immense single Roses, is simply gorgeous.

We offer the following colors: Carmine, Crimson, Magenta, Maroon, Purple and Rose. 30c each: $\$ 3.00$ per doz.

| Madame Charles Teveque. Pale blush, one of the |
| :---: |
| best........... $.75 c ~ e a c h ; ~$ |
| 7.50 per doz. | Marie Lemoine. Large sulphur white shaded with pink; a magnificent variety.

50c each; \$5.00 per doz.
Meissionier. Broad outer petals brilliant purple amaranth, inner petals crimson, free bloomer. 35c each; $\$ 3.50$ per doz. Purpurea Superba. Large purplish-crimson, large guards, center petals small; tall growing. Queen Victoria. Large, full compact bloom, opening flesh, changing to white, center petals tipped with carmine..30c each; $\$ 3.00$ per doz. Tricolor Rosea. Dark violet rose; large globular flower …...........40c each; $\$ 4.50$ per doz. Officinalis Alba Plena. Light pink changing to white ...............30c each; \$3.00 per doz. Officinalis Rosea Superba. Large rose, very early and fine ............30c each; \$3.00 per doz. Officinalis Rubra Plena. The old fashioned deep crimson Peony; early..30c each; $\$ 3.00$ per doz, Unnamed Varieties. Colors, crimson, rose and white .................25c each; \$2.50 per doz.

## HARDY GARDEN PINKS.

Old favorites, bearing sweet clove-scented flowers in the greatest profusion during May and June. 1 foot.
Delicata. Soft delicate rose; very free.
Her Majesty. Large, double, white, clove-scented flowers.
Homer. Rich, rosy-red, with dark center.
Napoleon III. Large double, crimson flowers, fragrant; the finest of all hardy pinks.
15c each; $\$ 1.50$ per dozen (except where noted).
If sent by mail 200 each.

# HARDY HERBACEOUS PLANTS-continued. ORIENTAL POPPIES. <br> (Papaver Orientale.) 

These are the regal representatives of this popular genus, far surpassing in splendor of bloom all the annual and biennial kinds, and for a gorgeous display of rich and brilliant coloring nothing equals them during their period of flowering in May and June, and whether planted singly or in masses their large flowers and freedom of bloom render them conspicuous in any position. After flowering the plants die back, usually reappearing along in early September, or as soon as the weather gets cool. During this resting period care should be taken in cultivating the beds that the roots are not disturbed, any disturbance at this time usually resulting in failure. We offer the following distinct varieties:
Goliath. Flowers scarlet, of enormous size. $\quad$ Procerpine. Dark Lilac with large black blotch.
mary Studholme. Salmon, with silvery shade and a touch of carmine.
Princess Victoria Louise. Soft Lilac rose.
Royal Scarlet. Mammoth scarlet flowers with black center.

The above named varieties, 25 c each; $\$ 2.50$ per dozen.
Finest Mixed Varieties, 15c each; \$1.50 per dozen.

## ICELAND POPPIES.

## (Papaver Nudicaule.)

The plant is of neat habit, forming a tuft of bright green fern-like foliage, from which spring, throughout the entire season, a profusion of slender leafless stems 1 foot high, each graced with charming cupshaped flowers

Price of the following, 15c each; $\$ 1.50$ per dozen. If sent by mail 20 c each.
Pentstemon Barbatus Torreyii. Spikes of briliant scarlet flowers; height 3 to 4 feet; June to August; very effective.
Physostegia Virginica. One of the most beautiful of our mid-summer flowering perennials, forming denise bushes 3 to 4 feet high, bearing spikes of delicate tubular pink flowers. Strong plants.
Platycodon Grandiflorum. Large bell shaped, blue flowers, blooms from July to September. Rapid growing plant of branching habit; 2 to 3 feet high.
Platycodon Mariesi. Deep blue, bell-shaped flowers, nearly 3 inches across; 1 to 2 feet high.
Budbeckia, Golden Glow. One of the most desirable, effective flowering plants for August and September. It grows six feet high, branching freely and throwing up masses of large double yellow flowers. Invaluable for cutting.
Rudbeckia Newmanni. Dark orange yellow flowers, purple cones freely produced. 2 feet high, a gem for cutting.
Rudbeckia Purpurea. (Giant Purple Cone Flower.) Flowers about 4 inches across; of a reddish purple, with large, cone-shaped center of brown; thickly set with golden tips in spiral lines; forms bushy plants from 2 to 3 feet high. Blooms July to October.
Sedum Spectabilis. (Brilliant Stone Crop.) One of the prettiest erect growing species, attaining a height of 18 inches with broad light green foliage and immense heads of handsome, showy rose colored flowers.
Shasta Daisy. Perfectly hardy, of easy cultivation and blooms for several months. The flowers are large, 4 to 5 inches across, with large broad petals of the purest white. June to October.
Stokesia Cyanea. (Cornflower Aster.) Produces showy Aster-like deep blue flowers which measure from 4 to 5 inches across. It is of the easiest culture, succeeding in any open sunny position. The plant grows from 18 to 24 inches high, blooming freely from July until frost.
Sweet William. (Dianthus Barbatus.) Beautiful old-fashioned favorite border plant.
Tritoma Pfitzerii. The flower spikes, which are produced freely, are of gigantic size, frequently $41 / 2$ feet high, with heads of bloom over 12 inches long, of a rich orange scarlet, shading to a salmon rose on edge. A first-class acquisition.
Valeriana Officinalis. (Hardy Garden Heliotrope.) Produces showy rosepink heads of flowers during June and July with strong heliotrope odor.
Veronica Longifolia Subsessilis. A pretty species with blue flowers, produced on spikes a foot long, continuing in bloom the entire summer and fall.
Vinca Minor. (Periwinkle or Trailing Myrtle.) An excellent dwarf evergreen trailing plant that is used extensively for carpeting the ground under the shrubs and trees, or on graves where it is too shady for


Yucca Filamentosa. other plants to thrive.
Yucca Filamentosa. (Adam's Needle.) A hardy evergreen plant with long, narrow leaves that are bright green the whole year round. The flowers are creamy white, bell-shaped, produced on long spikes 3 to 4 feet high. Fine stately lawn plant.
The above plants 15c each; \$1.50 per dozen (except where noted). If sent by mail, 20c each.

## ORNAMENTAL GRASSES.

Arundo Donax. (Great Reed.) An ornamental giant grass, growing ten to twelve feet high.
Arundo Donax Variegata. A variegated form of the above, growing six to eight feet high.
Erianthus Ravennae. (Plume Grass.) Grows six to eight feet high, and produces handsome plumes in fall.
Eulalia Gracillima. (Japan Rush.) The most beautiful of all the Eulalias, with narrow, graceful foliage, entirely green without variegation, except that the mid-rib is of a silver sheen. Perfectly hardy, very valuable.
Eulalia Japonica Variegata. Leaves striped white and green longitudinally.
Eulalia Zebrina. (Zebra Grass.) A peculiar variegated grass, growing six feet high. The variegation is unlike that of any other plant, being across the leaf in regular bands, dark green and light yellow alternating. The dried blooms of all the Eulalias make beautiful winter ornaments.

250 each; $\$ 2.50$ per dozen. $10 c$ each extra by mail.

## ORNAMENTAL FLOWERING SHRUBS

Shrubs are as much a part of the garden as the lawn or flower borders, and a well arranged planting presents an attractive appearance throughout the entire year.

Shrubs have many uses. As a background to a flower border, for hiding an unsightly building, fence or foundation, or they may be planted in a mixed shrubbery border, in which case those of short, dense growth should be planted along the front of the border, graduating to the tall-growing kinds at the back.

Thorough preparation of the soil by spading, and the addition of a liberal quantity of sheep or stable manure or bone meal will be well repaid by strong, vigorous, healthy growth. In planting, care should be taken not to overcrowd, allowing sufficient room for future development, and unless an immediate effect is wanted-in which case they may be planted closer and some of them moved when necessary. The majority of the dwarf-growing kinds may be set about three feet apart, the tall, strong growers about five feet apart.

Our Shrubs are transplanted every two or three years and are furnished with plenty of fibrous roots and should not be compared to stock that is never moved from the cutting beds until sold.

We can furnish Extra Strong Specimen Plants of most all sorts at $\$ 1.00$ to $\$ 5.00$ each.
Almond Double Flowering. A desirable class of early flowering shrubs, erect slender branches, covered with small double pink flowers.
Althea (Rose of Sharon). The Altheas are among the most valuable of our hardy Shrubs on account of their late season of blooming, which is from August to October, a period during which but few shrubs or trees are in flower. They are also extensively used as hedge plants, for which they are admirably adapted.
Althea Boule-De-Feu, deep fiery red; 50c each; $\$ 5.00 \mathrm{doz}$. Althea Grandifiora Superba, blush, white shaded car-
 Althea Meehani, beautiful variegated foliage with satiny lavender colored flowers, single fully open and free blooming...........50c each; $\$ 5.00$ doz. Althea Purpurea, large single purple.
Althéa Totus Albus, single pure white.
Althea Double Rose, Double White and Double doz. A1thea simaii piaints................... 50 c each; $\$ 5.00 \mathrm{doz}$ Azalea Amoena A bushy dwarf .30c each; $\$ 3.00 \mathrm{doz}$. green leaves that deepen to a lustrous coppery hue in winter. Its neat appearance is attractive at all seasons but in April or May the whole plant is a mass of brilliant rosy crimson flowers that hold their beauty three or four weeks.. $\$ 1.00$ each
Azalea Anthony Koster. One of the prettiest of the Mollis section. Its intense golden orange-yellow flowers are of exceptional large size, and are produced very freely early in May; most useful to plant in front of the shrubbery or in connec-
Azalea Mollis. A splendid hardy species from Japan, and one of the most valuable flowering shrubs. Flowers large and showy, yellow and different shades of red, in fine trusses. 75c each; extra

Berberis Purpurea, ( Purple leaved Barberry), an interesting shrub growing 3 to 5 feet high with groups or masses, or planted by itself. 25c each; $\$ 2.50$ doz; strong plants......50c each; $\$ 5.00$ doz. Berberis Thunbergii. A beautiful Japan variety of dwarf habit. Small foliage, assuming the most varied and beautiful tints of coloring in the autumn; very desirable for grouping and a grand hedge plant. 30 c each; $\$ 3.00$ doz.; strong plants.................................................................................... $\$ 5.00$ doz.
Calycanthus rloridus. (Sweet-scented Shrub) flowers fragrant, like strawberries; double and of a choco-
 Caryopteris Mastacanthus, (Blue Spirea). A pretty autumn blooming shrubby plant producing clusters of beautiful blue fragrant flowers in great profusion from September until frost. Dies to the ground in winter. 25 c each; $\$ 2.50$ doz.; strong plants 50c each; $\$ 5.00$ doz. Cercis Canadensis. (Judas Tree or Red Bud.) Very showy and beautiful when in bloom. All the branches and twigs are covered with a mass of small pink flowers early in the spring, before the
 Clethra, Alnifolia. (Sweet Pepper Bush.) A desirable, dense growing shrub, with dark green foliage and showy upright spikes of creamy white fraorant flowers in August.

25c each; $\$ 2.50$ doz.; strong plants 50c each; $\$ 5.00 \mathrm{doz}$. Corchorus Argentea Variegata. A dwarf variety with small green foliage, edged with white. One of the prettiest and most valuable dwarf shrubs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30c each; $\$ 3.00$ doz.
Corchorus Japonica, Fl. Pl. (Globe Flower.) A graceful shrub with double yellow flowers from June to
 Corchorus Japonica, Single. A slender, green branched shrub, with globular yellow flowers from July

Cornus Florida. (White Flowering Dogwood.) The flowers, produced in spring before the leaves appear, are from 3 to $31 / 2$ inches in diameter, white and very showy. They begin to appear as the Magnolia flowers are fading, and are invaluable for maintaining a succession of bloom. Foliage grayish green, glossy, and handsome, and in the autumn turns to a deep red; one of the most showy flowering trees. 5 to 6 feet. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1.00$ each; $\$ 10.00$ doz.
Cornus Florida Rubra. (Red Flowering Dogwood.) A rare variety. similar to the common type except in color of the flowers, which are rich rosy-red. The two varieties make a fine contrast, 2 to
Cornus Mascula. (Cornelian Cherry.) A small tree-like shrub, producing early in spring, before the leaves appear, clusters of bright yellow flowers, are followed by red berries...40c each; $\$ 4.00$ doz.
Cornus Sanguinea. (Red Twigged Dogwood.) A strong growing bush, with crimson-colored branches, especially attractive in winter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 30 c each; $\$ 3.00$ doz.
Corylus Purpurea. (Purple Leaved Filbert.) A conspicuous shrub with large dark leaves; distinct and fine

## ORNAMENTAL FLOWERING SHRUBS-continued

Desmodium Pendulifiorum, a shrub-like plant that dies to the ground in winter, but comes up vigorously in spring, throwing up shoots 3 to 4 feet high which bear during September attractive sprays of bright rose-colored flowers. 40 c each; $\$ 4.00 \mathrm{doz}$
Duetzia Crena plants............... each; $\$ 5.00$ doz. tinged with pink, very desirable, 2 to 3 feet. tinged with pink, very desirable, 2 to 3 feet.
30 c each; $\$ 3.00$ doz
Deutzia Gracilis, a dwarf bush, covered with spikes of pure white flowers in early summer.

30c each; $\$ 3.00$ doz
Deutzia Iemoineii, flowers pure white, borne on stout branches, which are of upright growth. Habit dwarf and free flowering. A decided acquisition. 30c each; $\$ 3.00$ doz.
Strong plants............50c each; $\$ 5.00$ doz.
Deutzia Pride of Rochester, large double white flowers; the back of the petals being slightly tinted with rose. It excels all the older sorts in size of flower, length of panicle, profusion of bloom and vigorous habit. 30c each; \$3.00 doz, Strong plants. .......50c each; $\$ 5.00$ doz.
Hider Golden. (Sambucas.) Beautiful golden yellow foliage; grand for single specimen plants planted in masses by themselves or to contrast with other shrubs. 30c each; $\$ 3.00$ doz.
Hleagnus t pants................... each; $\$ 5.00 \mathrm{doz}$ shrub, with foliage, which is silvered on the under surface. Its creamy white blossoms open in April or May; the scarlet edible fruits hang thickly along its branches and are ripe in July. They make excellent sauces. 35c each; $\$ 3.50$ doz. Strong plants. . 50c each; $\$ 5.00$ doz.
Euonymus इuropaeus. (Burning Bush.) A conspicuous shrub in the autumn and winter, when loaded with scarlet seed pods, from which the orange-colored berries hang on slender threads, 3 teet. 30c each; $\$ 3.00$ doz.
Strong plants.............50c each; $\$ 5.00 \mathrm{doz}$.
Bxochorda Grandifiora... (Pearl Bush.) A vigorousgrowing shrub, bearing white flowers in slender racemes in early spring; very graceful; userul for cut flowers. 30 c each; $\$ 3.00$ doz. Forsythia Fortunei. (Golden Bell.) Of upright growth, deep green foliage and bright yellow flowers in April. 30c each; $\$ 3.00$ doz.
Strong plants............50c each; 05.00 doz.
Forsythia Suspensa. (Weeping Golden Bell.) Willowy growth, the branches gracefully arching,
covered with golden-yellow bells in early spring. 30c each; $\$ 3.00$ doz. Strong plants.............50c each; $\$ 5.00$ doz. Forsythia Viridissima. (Golden Bell.) Foliage deep green; flowers bright yellow, a fine hardy shrub and one of the earliest to flower in spring. 30 c each; $\$ 3.00 \mathrm{doz}$.
Strong plants
(Rhus Cotinus) doz
Fringe, Purple or Smoke Tree, (Rhus Cotinus.) Has very curious bloom, which when covered with dew, resembles a cloud of smoke or mist. 30c each; $\$ 3.00$ doz. Strong plants.
Fringe, white. (Chionanthus Virginica.) A tallgrowing shrub, blooming profusely in June. white silken fringe hung gracefully among the foliage. 50c each; $\$ 5.00 \mathrm{doz}$.
Strong plants............60c each; $\$ 6.00 \mathrm{doz}$ Halesia Tetraptera. (Silver Bell.) A beautiful large shrub, with pretty white, bell-shaped flowers in May. It is distinguished by its four winged fruit, which is from one to two inches long; 3 feet. 30c each; $\$ 3.00$ doz. Strong plants.............. 50c each; $\$ 5.00$ doz.
Eydrangea Arborescens Sterilis. Introduced as the (Snowball Hydrangea.) It is perfectly hardy and will flower for fully three months making it one of the most valuable of hardy shrubs with large snowy white blooms. 35c each;
Hydrangea Paniculata Grandiflora. This is the finest shrub in cultivation, and endures heat and cold extremely well. The flowers, which are borne in dense pyramidal panicles in the greatest profusion, are white when they first open, but gradually change to rose and remain in good condition for weeks. 30c each; $\$ 3.00$ doz. Strong plants...50c each; $\$ 5.00$ doz. Hydrangea Paniculata Grandifiora Standard or Tree Shaped Plants. These are fine specimen plants, four and five years old, trained to tree shape with about three feet of straight stem and nicely shaped heads, should bloom profusely the first year...(Mo.......75c each; $\$ 7.50$ doz Kalmia Iatifolia. (Mountain Laurel.) Bushy shrubs, with elongated oblong leaves, which are always fresh and glossy, in early spring, they bloom profusely. Delicate pink and white flowers. They are useful for massing with Rhododendrons or for wooded effects. $\$ 1.00$ each; $\$ 10.00 \mathrm{doz}$

Lilac, Charles $X$. Rapid grower, reddish, purple flower
Lilac, Josikaea. Blooms in June, flowers lilac purple.
Lilac, Iudwig spaeth. Long panicles of purplish-red flowers.
Lilac, Madame Iemoine. Double white flowers
工ilac, Marie Iegrave. Flowers pure white, extra.
Lilac, Michael Buchner. Double pale lilac
Lilac, Named Varieties. In bush and standard or tree shaped Lilacs,
Lilac, Purple. (Syringa Vulgaris.)............................... to $\$ 1.50$ each purple species, and one of the best. 30c each; $\$ 3.00$ doz.
 fragrant. 30c each; $\$ 3.00$ doz. Strong plants 50 c each; $\$ 5.00$ very Magnolia Alba Superba. Its superb pure white flowers cover the tree Magnolia Alexandrina. A Chinese species of great beauty. The tree is of medium size, shrub-like in growth while young. The flowers are large pure white, very numerous, and appear before the leaves.
$\$ 2.50$ each. Extra strong plants $\$ 4.00$ to $\$ 5.00$ each.
Magnolia Halleana. (Stellata.) A pretty dwarf form that opens its snowy, semi-double flowers in April; earlier than any other Magnolia. Their fragrance is pronounced and delicate.
Magnolia Iennei. The flowers are of a deep rose color, $\$ 2.50$ each. large, vigorous and profuse bloomer, flowering at intervals through the summer.
Magnolia Soulangeana each. Extra strong plants $\$ 4.00$ to $\$ 5.00$ each. Magnolias Its boreign Magnolias. Its blossoms are from 3 to 5 inches across, cup-
shaped, white and rosy violet, opening before its leaves, which shaped, white and rosy
are massive and glossy.
$\$ 2.50$ each. Extra strong plants $\$ 4.00$ to $\$ 5.00$ each.
Mahonia Aquafolia. (Holly-leaved Mahonia.) A native species of medium size, with purplish, shining leaves, and showy, bright yellow fowers succeeded by bluish berries. Its handsome glossy foliage and neat habit, render it very popular for deco-


## Lilac.

 rative planting.............18 to 24 inches, 40 c each; $\$ 4.00 \mathrm{doz}$2 to 3 feet, 60c each; $\$ 6.00$ doz. flowers. One of the first to flower...........30c each; $\$ 3.00$ doz. Strong plants 50 c each; $\$ 5.00 \mathrm{doz}$ Philadelphus Coronarius Aurea. (Golden-leaved Mock Orange.) Fine golden yellow foliage. Philadelphus Grandiflorus. Showy white flowers.....30c each; $\$ 3.00$ doz. Strong plants 50c each: $\$ 5.00$ doz. Strong plants 50 c each $\$ 5.00 \mathrm{doz}$ dit Philadelphus Iemoineii Erecta. A charming variety of upright growth; flowers small. yellowish white Ehododendron. Named hardy Hंbrids. \$1.25 each; for $\$ 3.50$. Fxtra strong plants $\$ 2.00$ each; 3 for $\$ 5.00$ Rhodotypus Kerrioides (White Kerria). A very ornamental Japanese shrub of medium size, with pretty foliage and large single white flowers the latter part of May. Strong plants 50 c each; $\$ 5.00$ doz.

## ORNAMENTAL FLOWERING SHRUBS-continued.

Ribes Aureum. (Yellow-flowered or Missouri Currant.) A native species with glabrous, shining leaves and yellow flowers; the flowering currants are beautiful shrubs in early spring, and of easiest culture. ..............................................................each; $\$ 3.00$ doz. Strong plants $50 c$ each; $\$ 5.00$ doz Robinia Hispida. (Rose Acacia.) A native species of the Locust, of spreading, irregular growth, with long, elegant clusters of rose-colored flowers in June and at intervals throughout the season.
Snowberry White Fruited. A well known shrub with small pink flowers and large 75c each; \$7.50 doz. Spirea hang on the plant the greater part of the winter..................................30c each; $\$ 3.00 \mathrm{doz}$. Anthony Waterer. A valuable and distinct variety; color bright crimson; it is of dwarf, dense growth never exceeding 24 inches in height, and a profuse bloomer in spring and fall. 25c each; $\$ 2.50$ doz. Strong plants.............35c each; \$4.00 doz


## Spiraea Van Houttei.

the drooping stems. Perfectly hardy and an early bloomer
25c each; \$2.50 doz. Strong plants 50c each; $\$ 5.00{ }^{\circ} \mathrm{doz}$.
Tamarix, Africana. Of graceful spreading growth, covered with pink flowers in early spring.
40c each; $\$ 4.00$ doz.
Viburnum Opulus. (High Bush Cranberry.) Both ornamental and useful. Its red berries resembling cranberries, esteemed by many, hang until destroyed by frost late in the fall.

Viburnum Sterilis. (Snowball.) A favorite shrub of Sterile flowers the latter part of May. 25 c each; $\$ \mathbf{2} .50 \mathrm{doz}$. Strong plants 50 c each; $\$ 5.00 \mathrm{doz}$. Viburnum Plicatum. (Snowball, Japan.) One of the most valuable hardy shrubs. It forms an erect, compact shrub six to eight feet high; blooms in early June, and for a long time is a solid mass of
 Vitex Agnus Castus. A graceful shrub, growing from 5 to 6 feet high with dense spikes 6 to 8 inches Wioling of liac colored fowers........................... each; $\$ 3.00$ doz. strong plants $50 c$ each; $\$ 5.00$ doz. Weigelia Candida. Flowers pure white and produced in great profusion in June and the plants continue保 and abundant bloome each; $\$ 3.00$ doz. Strong plants 50 c each; $\$ 5.00$ doz. inches in diameter. Blooms at intervals during the summer.

30c each; $\$ 3.00$ doz. Strong plants 50c each; $\$ 5.00$ doz.
Weigelia Desboisii. A beautiful variety, with deep rose colored flowers, one of the best.
30c each; $\$ 3.00$ doz. Strong plants 50 c each; $\$ 5.00 \mathrm{doz}$. Weigelia Eva Rathke. A charming variety, flowers brilliant crimson; a beautiful distinct clear shade. Weigelia Rosea Nana Vareigata. Leaves beautiful margined creamy white; flowers pink. It is a dwarf grower, and adapted to small lawns or gardens; 3 feet.

30c each; $\$ 3.00$ doz. Strong plants 50c each; $\$ 5.00$ doz.

## HEDGE PLANTS.

Berberis Thunbergii. Where a low, dwarf, deciduous hedge is wanted nothing equals this beautiful Barberry. It is of spreading habit, growing extremely thick right from the base, and requires


California Privet Fedge
with Catalpa Bungei on Terrace. but little pruning to keep it in shape. The leaves are small light green, and toward fall assume rich, brilliant colors the fruit or berries becoming scarlet..................... $\mathbf{\$ 1 . 7 5}$ per doz.; \$12.00 per 100 California Privet. (Ligustrum Ovalifolium.) Of all ornamental hedge plants this is the most popular, and more of it is planted than all others combined. Its foliage is a rich dark green, and is nearly evergreen, remaining on the plant until mid-winter. It is of free growth and succeeds under the most adverse conditions, such as under dense shade of trees, where other plants would not exist. The most advantageous manner of planting is in double rows, the two rows being about 8 inches apart. The plants should be set 12 to 15 inches apart in the row, alternating the plants. In order to secure a dense hedge from the base up, the plants should be severely pruned the first two seasons.
2 Year Old Plants 75 c dozen; $\$ 4.00$ per 100.
3 Year Old Plants $\$ 1.00$ dozen; $\$ 6.00$ per 100.
Extra Large Bushy Plants $\$ 1.50$ dozen; $\$ 10.00$ per 100. Privet Amurense. (Amoor River.) A hardy variety with
large, oblong, glossy green foliage. Extra heavy plants. ............... $\$ 1.50$ per doz.; $\mathbf{\$ 1 0 . 0 0}$ per 100 We do not guarantee to replace Trees or Shrubs at prices quoted.

## HARDY CLIMBING PLANTS.

Ampelopsis Veitchii. (Japan Creeper or Boston Ivy.) The leaves are small on young plants, which at first are an olive green color, changing to red in the autumn. As the plant acquires age the leaves increase in size. Without question one of the very best climbing plants for covering brick or stone walls that can be grown.

25c each; $\$ 2.50$ doz.; by mail, 30c each. Ampelopsis Robusta. A strong vigorous grower. It will make double the growth of the Veitchii and is just as hardy.

25c each; $\$ 2.50$ doz; by mail, 30c each.
Ampelopsis Quinquefolia. (Virginia Creeper or American Ivy.) For covering walls, verandas and trunks of trees. A rapid grower with beautiful leaves that become rich crimson in autumn.
25c each; \$2.50 doz.; by mail, 30c each.
Aristolochia Sipho. (Dutchman's Pipe.) A magnificent hardy vine of rapid growth, with very large heart-shaped leaves, and brownish flowers, resembling a pipe.

50c each; $\$ 5.00$ doz.; by mail, 60c each. Bignonia Radicans. (Trumpet Vine.) An oldtime favorite. Flowers trumpet-shaped, bright scarlet. A rapid grower.
25c each; $\$ 2.50$ doz.; by mail, 30c each. rus Scandens. (Climbing Bitter Sweet.) Of rapid growth, light green foliage and yellow flowers during June, which are followed in the autumn with orange fruit.

25c each; $\$ 2.50$ per doz. Honeysuckle-Aurea Reticulata. Foliage beautifully variegated yellow and green with yellowish white fragrant flowers
Honeysuckle-Monthly Fragrant or Dutch. Blooms all summer.
Ampelopsis Veitchii. (The Japan or Boston Ivy.)
Honeysuckle-Common Woodbine. A strong, rapid grower; flowers very showy; red outside, buff within.
Honeysuckle-Halleana. Nearly evergreen; flowers pure white, produced abundantly; fragrant.
Foneysuckle-Scarlet Trumpet. A rapid grower and produces scarlet inodorous flowers all summer. Honeysuckle Plants, 25c each; $\$ 2.50$ dozen. By mail, 30c each.
Ivy English. A valuable evergreen, used for covering walls, etc., also used for covering graves, espe-

 Heterophylla Variegata. A beautiful climber with dark green foliage, variegated with white and
pink. Useful for trailing over rocks or for a low trellis ........................................ to $\$ 1.00$ each.

30c to $\$ 1.00$ each.

## CLEMATIS, LARGE-FLOWERING.

Duchess of mainburgh. A free-flowering double white variety.
Gipsy Queen. One of the finest of the dark purple varieties. A strong grower.
Eenryii. Fine large, creamy white flowers. A strong grower and very hardy.
Jackmanii. The flowers, when fully expanded are from four to six inches in diameter intense violet purple, with a rich velvety appearance, distinctly veined.
Jackmanii Rubra. Bright carmine, the best red in cultivation.
Madame Ed Andre. Crimson; strong vigorous grower, and free bloomer.
Miss Bateman. White, with chocolate-red anthers.
Seiboldi. Silvery lavender; a most beautiful shade.
The above named Clematis, 50c each; $\$ 5.00$ doz.
Paniculata. The flowers are pure white, very fragrant, borne in large clusters. A Coccinmall flowering variety..................... c each; $\$ 3.00$ doz.; by mail, 40 c each. frost. A small flowering variety........25c each; $\$ 2.50$ doz.; by mail, 30c each.

CHINESE WISTARIA.
Wistaria Sinensis. The favorite variety, producing thousands of pendulous clusters wi of delicate violet blue blossoms richly perfumed. .............50c each; $\$ 5.00$ doz. Wistaria Sinensis Alba. Of similar habit to Sinensis with pure white flowers. 50 c each; $\$ 5.00$ doz.

## BAK TREE. (Laurus Nobilis.)

There is nothing so effective for decorating entrance halls, piazzas, hotels. Standard or Tree Shaped-30 to 36 inches Diameter of Crown.
...24 inches....................10.00 each
28 inches inches...........10.12.00 each

## Specimen Trees, $\$ 20.00$ to $\$ 25.00$ each.

## BOXWOOD TREES.

Plants in beautiful pyramidal specimens and also in standard, or tree form.

Pyramid Shaped.



Globe Shaped.
Bush Shaped.
$\begin{array}{lll}\text { " } & \text { " } & 1 \\ \text { " } & \text { " } & 2 \\ \text { " } & \text { " } & 2\end{array}$
Standard or Tree feet.
Box Dwarf. Useful principally for borders and edging. 6 inches $\$ 3.50$ to $\$ 15.00$ each. 100 . Extra strong bushy plants................................. doz.; $\$ 10.00$ per 100 .


## EVERGREEN TREES.

Iarge-Sized Specimen Evergreens.
We offer the following which have been grown in ample space and transplanted and are in the best condition to plant for immediate effect.
Abies Balsamea. (Balsam Fir.) A regular symmetrical tree assuming the cone shape when quite young. Leaves dark green,

lighter beneath.
Abies 3 to 3 f., 5 c : 3 to 4 ft . $\$ 1.00$ to $\$ 3.00$ A magnificent Japanese fir, with erect stem regularly whorled horizontal branches.
Specimen trees, 2 to $3 \mathrm{ft} . . . . \mathbf{\$ 2 . 5 0}$ to $\$ 3.00$
Abies Nordmanniana, (Nordmann's Fir.) A thick dense tree. The needles are wide dark green, with a silvery under surface. One of the best evergreens. Specimen Trees, $2 \mathrm{ft},. \$ 2.50$; 3 ft ., $\$ 4.00$; 4 to 5 ft ., $\$ 5.00$ to $\$ 6.00 ; 6 \mathrm{ft} ., \$ 12.00$ to $\$ 15.00$.
Abies
veitchii. A magnificent tree of splendid habit. The needles are dark green above and silvery white beneath... $\$ 5.00$ to $\$ 8.00$ Juniperus, Pfitzeriana. Specimen Trees.
n Junip $\$ 5.00$ to $\$ 10.00$ branched dwarf spreading shrub with dark green foliage; 2 to $21 / 2 \mathrm{ft} ., \$ 2.00$.
Specimen trees.......... $\$ 5.00$ to $\$ 10.00$
Juniperus, Sabina Tamaricifolia.
Tamarax Leaved Savin.) 4 to $5 \mathrm{ft} . . . . \$ 3.00$ to $\$ 6.00$
Juniperus, Virginia Cannarti....... $\$ 5.00$ to $\$ 7.00$
Juniperus, Virginia Glauca. (Blue Virginia Cedar.) Beautiful blue glaucous foliage.
Juniperus, Virginia Shottei. A distinct variety of pyramidal habit, with light green foliage, 2 to 3 ft ., 75 c .
Specimen trees.................. $\$ 1.50$ to $\$ 8.00$
Picea Fxcelsa. (Norway Spruce.) A rapid vigorous growing tree, with dark green foliage. One of the most popular evergreen trees. 2 to $3 \mathrm{ft}, 75 \mathrm{c} ; 3$ to $4 \mathrm{ft}, \mathbf{\$ 1 . 0 0}$; 4 to 5 ft ., $\$ 1.50$ to $\$ 2.50$.
Picea Excelsia Compacta. Very attractive, com-
Picea pact and distinct. Specimen trees.... $\$ 4.00$
riety, 1 to $2 \mathrm{ft} . . . . . . . . . . \begin{aligned} & \\ & \$ 1.50\end{aligned}$ to $\$ 4.00$
Picea Orientalis. Habit compact and symmetrical, with short dark green needles
Specimen trees................. $\$ 2.50$ to $\$ 5.00$
Picea Ppruens Glauca isosteriana. grown .) The foliage is ornamental evergreen cimen trees, 2 to $21 / 2 \mathrm{ft}$., $\$ 2.00$ to $\$ 4.00 ; 3$ to $31 / 2 \mathrm{ft}$., $\$ 5.00$ to $\$ 7.50 ; 4$ to $41 / 2 \mathrm{ft}$., $\$ 10.00$.
Picea Pungens Glauca Pendula (Koster's Weeping Blue Spruce.) Specimen trees, $21 / 2$ to 3 ft ., $\$ 7.00$; 4 ft ., $\$ 10.00$.
Pinus Austriaca. (Austrian Pine.) A tall tree, with spreading branches heavily plumed with
Pinus Cembra. (Swiss Stone Pine.) A hardy slow
Pinus growing tree of distinct habit. 2 ft ., $\$ 2.00$ Mughus. (Mugho Pine.) A unique alpine species; broader than its height, and sometimes almost prostrate.
10 to 12 in., $\$ 1.00$; 18 to 24 in., $\$ 1.50$ to $\$ 2.50$
Pinus Strobus. (White Pine.) A beautiful ornamental tree, also used for shade and shelter belts. . ................................ 3 ft., $\$ 1.00$
Pinus Sylvestris. (Scotch Pine.) A strong growetr, with spreading branches and short stiff needles.............. 2 to $3 \mathrm{ft} ., 75 \mathrm{c}$; 3 to $4 \mathrm{ft} ., \$ 1.00$
Retinospora Filifera. A broad bushy tree, with dark green foliage in pendulous thread-like strings. 2 to $21 / 2 \mathrm{ft}$., ... $\$ 2.00 ; 31 / 2 \mathrm{ft} . . . . \$ 4.00$
Retinospora Pisifera. The slender branches are open and graceful. Foliage light green
Retinospora Pisifera Aurea. Golden evergreen,

Retinospora Plumosa. Light green feathery foliage,

Retinospora Plumosa Aurea. A dense small sized graceful tree. The young growth is a bright golden yellow. $11 / 2$ to 2 ft ., $\$ 1.00 ; 21 / 2$ to 3 ft ., \$1.50.
Specimen plants....... 3 ft., $\$ 3.50 ; 5 \mathrm{ft} ., \$ 5.00$
Retinospora Plumosa Aurea Globe-Shaped.
Specimen plants. . ................ \$2.00 to $\$ 5.00$
Retinospora Squarrosa Veitchii. Dense growth soft beautiful silvery blue foliage, arranged in spirals. Specimen trees...... $\$ 1.50$ to $\$ 5.00$
Taxus Cuspidata. A large handsome bush with numerous spreading branches; foliage deep glossy green above, pale yellowish green beneath. Specimen plants, $11 / 2$ to 2 ft ., $\$ 4.00$


## Koster's Blue Spruce.

Thuya Occidentalis. (American Arbor Vitae.) Well known screen and hedge plant. 2 to $3 \mathrm{ft} ., 60 \mathrm{c} ; 3$ to 4 ft ., $\$ 1.00 ; 5$ to $6 \mathrm{ft} ., \$ 2.00$ Thuya Occidentalis Columbia.

Specimen plants...................... 4 ft., \$5.00
Thuya Occidentalis Globosa Nova. Very dwarf and compact, grows naturally into a rounded al-

Thuya Occidentalis Wareana. A valuable species for cold climates, dense and shapely, medium height.
. $\$ 2.50$ to $\$ 5.00$ Thuya Pyramidalis. Very shapely, suitable for Thuya Species Rivers. Specimen plants, $4 \mathrm{ft} ., \$ 3.00$ Thuya Standishii. A pyramidal tree of graceful drooping habit. ${ }_{3} \mathrm{ft}$.,...................... $\$ 3.00$
Tsuga Canadensis. (Hemlock Spruce.) A magnificent native tree that grows rapidly, and is very hardy. 2 to 3 ft ., $\$ 1.50$.
Specimen trees, 2 to $21 / 2 \mathrm{ft}$., $\$ 2.50$; 3 ft ., $\$ 3.00$

## ORNAMENTAL TREES.

Catalpa Bungei. (Umbrella Catalpa.) 6 to 7 ft ., $\$ 1.50$ each; specimen trees $\$ 2.50$ to $\$ 5.00$ each. Cercis Canadensis. (Red Bud.) 5 to $6 \mathrm{ft} . . \$ 1.00$ each. Cercis Canadensis. (Red Bud.) 6 to $8 \mathrm{ft} . . . \$ 1.25$ each. Chestnut. Dwarf. 2 to 3 ft............... $\$ 1.25$ each. Cherry, James Veitch
Crab Apple.
ABechtell's."
Double flowering.

4 to 5 ft ., $\$ 1.00$ each. Cornus Florida. (Dogwood.) White flowering.

5 to $6 \mathrm{ft} ., \$ 1.00$ each; 6 to $8 \mathrm{ft} ., \$ 1.25$ each. Cornus Florida. Red flowering.
to $3 \mathrm{ft} ., \$ 1.25$ each Polymorphum Atropurpureum. (Japanese Maple.) Leaves deep blood red. $\$ 1.50$ to $\$ 5.00$ each. Polymorphum Atropurpureum Dissectum. (Cutleaved Purple.) Dark maroon, deeply serrated thread-like leaves. $\$ 1.50$ to $\$ 5.00$ each. Prunus Triloba. (Double-flowered Plum.)..75c each. Prunus Pissardi. Purple Leaf Plum.

Maiden Hair or Gin to 6 ft ., 75c each
8 to 10 ft , $\$ 1.00$ each.

## SMALL FRUITS, GRAPE VINES, ETC.

Express or Freight at Expense of Purchaser.

## BLACKBERRIES.

50c per dozen; $\$ 3.50$ per 100 .
Ancient Briton. Large fruit, stems loaded with good sized berries of fine quality; vigorous grower; one of the best.
Blower. Large berries. One of the most produc-
Early Harvest. Compact dwarf grower, productive; fruit medium size of fine quality. One of the first to ripen.
Eldorado. Large fruit, borne in large clusters and ripen well together, fine quality, good keeper and shipper.
Mersereau. Extremely hardy, berries large; extra quality, sweet, rich and melting without core, good keeper and shipper, strong vigorous grower.
Eathbun. A strong erect grower with strong stem branching freely. Fruit very large, sweet and luscious, without hard core, heavy cropper.
Snyder. Medium size sweet and juicy, extremely hardy and very productive.
Haylor. Medium size fruit of fine flavor, extremely ward hardy and very productive; ripens late. A strong vigorous grower, producing fine large fruit of excellent quality, hardy and very productive.

## CURRANTS.

The following are the very best sorts, and are supplied in strong two-year-old plants
Cherry. Deep red..................100 each; $\$ 1.00 \mathrm{doz}$ Fay's Prolific. Color rich red; the leading variety Black prome use................each; $\$ 1.25 \mathrm{doz}$ 15c each; $\$ 1.25 \mathrm{doz}$ Perfection. A new red variety which promises to eclipse all other sorts, combining size, color, high quality and productiveness.

20c each; $\$ 2.00 \mathrm{doz}$ White Grape. Best white variety

15 c each; $\$ 1.50$ doz.

## DEWBERRY.

Iucretia. One of the low-growing, trailing blackberries. It has proved highly satisfactory wherever tried, and many say it is the best of all the blackberry family.

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

## GOOSEBERRIES.

Downing. Large, pale green, and of splendid quality for both cooking and table use.

20c each; $\$ 2.00$ doz.
Eoughton's. Small to medium; roundish, oval, pale red, sweet, tender, very good.
Industry Berries of largest 15c each; $\$ 1.50$ doz. pleasant and rion dize, excellent flavor ripe. Strong upright grower, an immense cropper....................25c each; $\$ 2.50$ doz.
Smith's Improved. Large, pale greenish yellow skin thin, of excellent quality, being unsurpassed by any other variety for table use or cooking.

GRAPE VINES.
AI工 TWO-YEAR OLD SELECTED STOCK.
Black or Purple Grapes.
Campbell's Barly. Bunch and berry large, and juicy; fine qual25c each; $\$ 2.50$ doz. *Concord. Large, black grape, hardy and productive; juicy and 10c each; $\$ 1.00$
Eaton. very large, skin black and finest quality.
*Ives' Seed ple, sweet. 10 c each; $\$ 1.00$ doz.
Moore's Early. Ripens ten days earlier than Concord; bunch and
Worden excellent flavor.............15c each; $\$ 1.50$ doz.

Brighton. Bunch large, GRAPES.
excellent flavor.............. 5 c . *Catawba. Berries large, round; when ripe a dark Delaper color; sweet, rich..10c each; $\$ 1.00 \mathrm{doz}$ Delaware. Small, light red, thin skin, very juicy, Vergennes. Clusters and berries; large amber colored fruit, rich...........15c each; $\$ 1.50$ doz WHITE OR YELIOW GRAPES.
Green's Farly. Nearly as large as Niagara, of fine
 Concord..................... 15 c each; $\$ 1.50 \mathrm{doz}$. *Moore's Diamond. White, good sized berries, juicy Niagara. Vine remarkabiy hardy and strong grower; bunches very laroe and compact; berries large, light greenish white, slightly ambered in the sun...............10c each; $\$ 1.00$ doz. Pocklington. Bunch and berry very large; attractive golden yellow color...15c each; $\$ 1.25 \mathrm{doz}$
Varieties marked with a ${ }^{*}$ are best for arbors.

## RASPBERREES.

50c per dozen; $\$ 2.50$ per 100, except where noted. Brandywine. Large size, light crimson color, good Columbiality and firm, vigorous and productive. red, almost purplish color, rich sprightly flavor; unrivalled for canning, making jam, etc. Cumberland. The largest black cap; a healthy, vigorous grower; very productive.
Cuthbert. Large, firm, deep rich crimson, of excellent quality, tall, strong and vigorous. . Hardy and strong grower, berries red, large, handsome, firm and highest quality, solid.
Golden Queen. Berries large, golden yellow, bright and firm, and of fine, rich flavor; vigorous.

10 c each; $\$ 1.00 \mathrm{doz}$.
Gregg. A large black variety, fruit firm
Haymaker. A purple cap variety, berries large and King. The The earliest Red Raspberry; berries round, medium size, light crimson and excellent quality.
Kansas. The hardiest black cap; strong, vigorous. Loudon. The best red, mid-season berry; fruit large, of a beautiful, rich, dark crimson color. Euby. Fruit large, bright red, exceedingly firm, ex-

## STRAWBERRIES.

The blossoms of those marked with (P) are destitute of stamens and are termed pistillate, and unless a row of perfect flowering variety is planted at intervals not exceeding about a rod, they will produce imperfect fruit and but little of it; but when properly fertilized as a rule they are more prolific than those with perfect flowers.

Dip the plants in water as soon as received, and bury the roots in moist, shady ground till you are ready to set them out. Neglect for an hour or so is often fatal.

25c per dozen; $\$ 1.00$ per 100; $\$ 7.50$ per 1,000.
Brandywine. A fine, large, late, handsome, productive berry of excellent quality; regular conical form; dark, glossy red.
Bubach's No. 5 (P). Large and uniform size, fine Cardinal (P). This Strawberry surpasses all in size of plant and abundance of runners; fruit stalks tall and robust, bearing fruit well off the ground; color, beautiful cardinal red.
Clyde. Large, light scarlet color; conical shape; very productive, good quality.
Gandy. One of the best late varieties. Berries Glen Mary, Large to verv large, sometimes flattened; sweet, rich, delightful. large, conical berries that are of medium to lar, mildly sub-acid.
Jessie. Berries large, handsome, dark red. The plant is vigorous, healthy, with strongly staminate blooms; a good pollenizer for im-perfect-flowering sorts.
Nick Ohmer, A fine, fancy market berry and always Senator Dunlap. Exceedingly vigorous. Fruit regular and attractive in form. Fruit large, the center. Firm in substancm, deep red to eld (P). Great beauty, firmness, earliness, productiveness and vigor make this berry most popular.
Wm. Belt. Berries very large, conical, bright red, of good flavor. The plant is strong, healthy very fruitful. Season medium to Iate.

## FERTILIZERS

## PRICES SUBJECT TO MARKET CHANGES.

## MCCUTIOUGH'S TI PASO SHEEP MANURE.

## ESPECLALLX VALUABLE FOR IAWNS.

This is a pure, natural manure, and nutritious food for plants: Its effect is immediate. It is the best of all manure for mixing with the soil for green-house plants. It makes the richest, safest and quickest liquid manure. Nothing equals it for use on flower beds or for the vegetable garden. Especially valuable for lawns, contains all the constituents for promoting a quick, luxuriant growth, and a rich green color. Is pulverized by machinery, making it very convenient to use. No raking off required. No seeds of foul weeds in it! No offensive odor! It is clean to handle! Absolutely safe to use in any manner.
Directions-For lawn, use at the rate of from 500 to 600 pounds per acre. For pot plants, mix one part of sheep manure to six parts of soil. For use in the vegetable garden, spread over the surface and dig in. Being soluble it readily makes a safe liquid manure-one pound to five gallons of water per day can be safely used. 2 lbs., 10c; 6 $1 \mathrm{bs.}$,25 c ; $13 \mathrm{lbs.}$,50 c ; $25 \mathrm{lbs.} 75 \mathrm{c} ;$,50 lbs., $\$ 1.25$; 100 lbs., $\$ 2.00$; per ton, $\$ 30.00$.


EXCFISTOR PLANT FOOD.
An odorless preparation, combining in a concentrated and soluble form every element required in plants and flowers to produce vigorous growth and a profusion of flowers and fruit. Wonderful results are obtained, after one or two applications. It is immediatelv soluble in water, and available to plant water, and available to plant plication.
It assists in retaining moisture, will mature plants from two to three weeks earlier.
Small package making 10 gallons, 20c; by mail 30 c , postpaid.

Large package, making 20 gallons, 35c; by mail, 50 c , postpaid.

5-pound package making 100 gallons, \$1.75.
AMMONIA AND POTASE.
The leading fertilizer, and is especially valuable for plants, potatoes and grain. ANALYSIS

Nitrogen
Percent
Ammonia
Available Phosphoric Acid. 6 to 8 5 lbs., 25c; 25 lbs., 75c; 50 ibs., $\$ 1.25 ; 100$ lbs. $\$ 2.00$; $200-1 \mathrm{~b}$. bag, $\$ 3.00$; half ton, $\$ 13.25$; per ton, $\$ 25.50$.

PACIEIC NOBSQUE, GENERAI CROP.
For several years we have been handling this fertilizer, and the universal verdict from all who use it is "It is the best fertilizer we have ever used." ANALYSIS-Ammonia $\underset{\text { Phos....................... } 11 / 4 \text { to } 21 / 4}{1 / 4}$ Available Phos. Acid........ 2 to 10
 $\$ 2.00$; $167-1 \mathrm{~b}$. bag, $\$ 2.50$; per half ton, $\$ 13.00$; per ton, \$24.50.

Pure Bone Meal. This finely pulverized ground bone is excellent for rose culture and lawns. It decomposes rapidly and is more quickly effective than the coarser grade. It is excellent for mixing with soil for potting. 2 lbs., $10 \mathrm{c} ; 10 \mathrm{lbs} ., 45 \mathrm{c} ; 25$ lbs., \$1.00; 50 lbs., \$1.50; 100 lbs., $\$ 2.50$; 200-lb. bag, \$4.00; per ton, \$35.00.

For lawns, use at the rate of at least 500 lbs . per acre.
Muriate of Potash. Apply 100 to 150 lbs. per acre, usually with other fertilizers. This must be used with great care as it is very powerful. Excellent for potatoes, corn, grain, etc. Lb., 10c; 25 lbs., \$1.10; 50 lbs., $\$ 2.00$; 100 lbs., $\$ 3.50$.
Nitrate of Soda. A natural product of the mines of Chili, South America. Contains 16 percent Nitrogen, equal to 20 percent ammonia. Per 1b., 10c; $31 \mathrm{bs}$. , $25 \mathrm{c} ; 10 \mathrm{lbs} ., 60 \mathrm{c} ; 25 \mathrm{lbs} ., \$ 1.25 ; 50 \mathrm{lbs} .$, , $\$ 2.25$; 100 lbs., $\$ 4.00$.

Ashes-Hard Wood. Drive away insects and improve the texture of the soil; indispensible for all crops requiring potash; very beneficial for garden and field crops, grass lands and lawns. Apply 1 to 2 tons per acre. 100 lbs.. $\$ 1.35$; barrels, about 200 lbs., \$2.00; 10 barrels, \$i7.50.
Iand Plaster. If applied as a top dressing for grass or clover crops in the spring, it greatiy increases the growth and yield of same; sprinkled in stables, poultry houses and on manure piles it will prevent ammonia from vaporizing thereby greatly increasing the value of farm manure. On account of its economical usefulness and effectiveness it should be liberally used on every farm. 200-1b. bag, \$1.30.

Sulphate of Ammonia. Apply 100 lbs. per acre only with other fertilizers deficient in nitrogen. It will stimulate growth almost immediately. 10 c 1 lb .; 5 lbs., 35c; 10 lbs., 60c; $25 \mathrm{lbs} ., \$ 1.25$; 100 ibs., $\$ 4.50$.
Sulphate of Potash. Apply 100 to 150 lbs. per acre, usually with other fertilizers. Valuable for root and grain crops. 10 c lb.; $5 \mathrm{lbs} ., 35 \mathrm{c} ; 10 \mathrm{lbs} .$, 60c; 25 lbs., $\$ 1.25$; $100 \mathrm{lbs} ., \$ 4.00$.

Apterite. A scientifically prepared powder for the fumigation of the soil.

To the fruit grower the benefits to be derived from Apterite are enormous. Many of his worst pests hibernate in the soil, beyond the reach of the Winter Spray Fluids

Among these may be mentioned Wooly Aphis, Wireworms, Codling and other Moths and various Flies and Midges.

These can now be destroyed in the soil during the winter and their depredations prevented.
$1 \mathrm{lb} ., 25 \mathrm{c} ; 5 \mathrm{lbs} ., 75 \mathrm{c}$; $112 \mathrm{lbs} ., \$ 6.00$.

## MOSS, PEAT, ETC.

Moss, Green Sheet. For hanging baskets, etc
Per bale, 40 c ; bundle of 5 bales, $\$ 1.50$; bag, $\$ 1.50$. moss, Sphagnum. For packing plants and growing Orchids, etc. Per lb., 10c; per bale, \$2.00. Peat Jersey. Rotted. Per bu., \$1.25; per bbl,, \$2.75. Potting Soil. This is a mixture specially prepared by us, and such as used at our own green houses. It is suitable for all ordinary plants and bulbs. Peck, 25c; bushel, 75c; bbl., \$1.50.


Pat. March 16 and Nov. 9, 8897。 Plants, Melons, Rose Bushes, Currants and Potatoes. Also for house plants. No necessity for "Beware-Poison" signs when Bug Death is used around the premises. It drives ants from lawns and won't injure the grass. Full directions on each package. $1 \mathrm{lb} ., 15 \mathrm{c}$; $3 \mathrm{lbs} ., 35 \mathrm{c}$; $5 \mathrm{lbs}$. . 50c; 12 lbs., \$1.00.

Postage must be added if wanted by mail.


Dickey Bug Death Duster. 25 c each.
Postage extra.

## INSECTICIDES AND FUNGICIDES-Continued.

## Arsenate of Lead. The most effective poisonous in-

 secticide for leaf eating insects. It will not scorch, burn nor injure the most delicate foliage, but at the same time kills all kinds of leaf and fruit-eating insects. It sticks to the foliage to which it is applied throughout the season no matter how frequently rain occurs. 1 lb. jar, 25c; 2 lbs , $40 \mathrm{c} ; 5 \mathrm{lbs}$., 75c; 10 lbs., $\$ 1.25$; 20 lbs., $\$ 2.40$; 50 lbs., $\$ 5.50 ; 100$ lbs., \$10.50; 300 lbs., $\$ 27.00$; 600 lbs., $\$ 51.00$.Bordeaux Mixture. (Paste.) A fungicide for curing and preventing black rot, mildew, blight, leaf curl, scab, or other fungoid diseases on fruits and plants, ready for use by simply adding water. 1 lb., 20 c ; 5 lbs., 60c; $121 / 2$ lbs., \$1.00; 25 lbs., \$2.00; 40 lbs., \$3.00; 100 lbs., \$6.50.
Bordeaux Jead Arsenate Mixture. (Paste.) An insecticide and fungicide combined in one, very effective product. Sticks well to the foliage, will not wash off by ordinary rains, and in this way the sprayer saves the expense in many instances of respraying. 11 lb ., jar, 25 c ; $2 \mathrm{lbs} ., 40 \mathrm{c} ; 5$ lbs., 75c; $10 \mathrm{lbs}$. . $\$ 1.40 ; 20 \mathrm{lbs}$., \$2.70; $40 \mathrm{lbs} ., \$ 4.50 ; 100 \mathrm{lbs} ., \$ 10.50 ; 500$ lbs., $\$ 47.50$.
Copper Sulphate For early spraying and making Bordeaux mixture.

Per lb., $10 \mathrm{c} ; 10 \mathrm{lbs} ., 80 \mathrm{c} ; 100 \mathrm{lbs.}, \mathbf{1 0} \mathbf{\$ 6 . 5 0 .}$
Fir Tree Oil. It frees plants of the following insects: Mealy Bug, Scale, Red Spider, Aphis, Thrip, Blight Worms and Slugs.
Fir Tree Oil Soap. This article pt., 75c; qt., \$1.25. yet is quite effective in destroying Red Spider, Mealy Bug, Aphis, etc.
Fish Oil Soap. For destroying insects on pinc. trees, vines, etc., for washing down the bark of trees, grape vines, etc. $1 / 2-1 \mathrm{~b}$., 10c; 1b., 15c; $5 \mathrm{lbs} .$, to $50 \mathrm{lbs} ., 121 / 2 \mathrm{c} 1 \mathrm{~b} . ; 50 \mathrm{lbs}$. or over, 9 c lb.
Fungine. A remedy for mildew, rust and other fungus diseases. Its chief constituent is sulphur, but it is so treated that it is free from the disagreeable features of most sulphur solutions, and is a clean, safe and easily applied fungicide which does not stain the foliage. ............................, 75c; gal., \$2.00
Grape Dust. A non-poisonous powder for the remedy and control of mildew and rot on grapes, gooseberries, roses, etc.

Per 1b., 10c; 5 lbs., 40c; 10 lbs., 70c
Eellebore Powder White. For destruction of Slugs, Worms, Caterpillars, etc. $1 / 2 \mathrm{lb}, 15 \mathrm{c} ; 1 \mathrm{lb} ., 25 \mathrm{c}$
Kerosene Fmulsion. One of the best insecticides for all soft bodied sucking insects, feeding openly so as to be within reach of actual contact, such as plant Lice, Flea, Beetles, Aphis, Green Fly, Mealy Bug, also for insects on fruit trees..... 1 qt., 40 c ; gal., $\$ 1.00$ Lemon Oil. For all insects and soft scales. One of the best known insecticides, and having a pleasant odor, is highly recommended for house plants. Dilute 30 to 50 parts of water. $1 / 2$ pt., 25c; pt., 40c; qt., 75c; 1/2 gal., \$1.25; 1/2 2 ., $\$ 2.00$.
Lime-Sulphur Solution. For Fall, Winter and early Spring spray. Destroys San Jose Scale, Peach Leaf Curl, Bud Moth, Apple Aphis, Blister Mite, any Scale insects or bark Lice. Lime and Sulphur Solution-If not exposed to air will remain in solution a long time; will not clog the spray pumps because it is free from sediment. 1 gallon will make 12 gallons spraying liquid. 1 qt., 25c; $1 / 2$ gal., 30; 1 gal., 50c; 5. gal., \$2.00; $1 / 2$ barrel, 25 gal., $\$ 6.25$;
1 barrel, 50 gal., $\$ 10.00$.

Lime, Prepared. It is thoroughly slacked, will not Ne heat, swell or change.......... 2 lb. pkg., 10c Fume Paper. Strips of paper strongly saturated with Nicotine. These, when suspended and lighted, make one of the best and simplest methods of fumigating greenhouses. Use 4 to 6 sheets for ordinary house 100 ft . long by 20 ft . wide. Price, air-tight cans, 24 sheets, 75c; postpaid, 90c; 144 sheets, \$3.50; 288 sheets, $\$ 6.50$.
Nico-Fume Tiquid. One of the best compounds on the market, contains 40 percent nicotine.
Nicoticide Fumigating Compound. Used for deStroying Green and Black Fly, Thrip, Mealy Bug, Red Spider, etc. Does not hurt the most tender plants in full bloom.
$4 \mathrm{oz}, 70 \mathrm{c}$; $1 / 2 \mathrm{pt} ., \$ 1.25$; 1 pt ., $\$ 2.50$ Fumigating Pan and Lamp.........60c each.
Paris Green. Warranted strictly pure.
Persian Insect Powder 10c; Worms; 5 lbs., $\$ 1.25$ and almost all kinds of insects.
slug Shot. A non-poisonous powder and lb., 50c popular insecticide. Very effectual in destroying Caterpillars, Currant, Gooseberry and Cabbage Worms, Potato, Melon, Squash and Cucumber Bugs, Rose Slugs, Rose Lice, etc. Per lb., $10 \mathrm{c} ; 2$ lbs., 15 c ; $51 \mathrm{bs} ., 35 \mathrm{c} ; 10$ lbs., 60c
Sulphur, Powdered. Used to prevent and cure mildew on plants. $1 \mathrm{lb} ., 10 \mathrm{c} ; 2 \mathrm{lbs} ., 15 \mathrm{c} ; 5 \mathrm{lbs} .$, 35c: 10 lbs., 60c.
Sulpho-Tobacco Soap. Destroys Cabbage, Squash and Potato Bugs, Currant Worms, Lice, Green Fly, Mealy Bug, Red Spider, etc.
3-0z. cake, 10c. Mailed, postpaid, 13c.
8-oz. cake, 20c. Mailed, postpaid, 28c.
Tobacco Dust. A sure remedy for Green Fly, Aphis, Fleas, Beetles, etc. Preventative for insects in the ground and around the roots.

$$
1 \mathrm{lb}, 10 \mathrm{c} ; 5 \mathrm{lbs}, 25 \mathrm{c} ; 100 \text { lbs., } \$ 3.00
$$

Tobacco Dust for Fumigating. 10 c lb.; 3 lbs., 25c; 10 lbs., 60c; 25 lbs ., $\$ 1.25$; 100 lbs., $\$ 4.00$.
Tobacco Dust and Sulphur. Will prevent and cure mildew on grape vines and rose bushes. It will destroy the Green and Black Fly, Grubs, Cutworms, Lice, Mealy Bug and Red Spider, Per 1b., 10c; 5 lbs., 30c; 10 1bs., 50 c Tobacco Extract, Black Leaf. A perfectly pure, highly concentrated extract of Tobacco, always uniform in strength of nicotine poison. Destroys Green Fly, Mealy Bug, Thrip and Red Spider.

Pt., 25c; qt., 40c; gal., \$1.25; 5 gal., $\$ 5.00$ robacco Stems. Used for fumigating plants to kill insects. Invaluable as a mulch for rose beds, lettuce beds, etc., where insects frequently do much injury to roots and foliage.
Tree Tanglefoot. For protecting trees against climbing insect pests in a simple, economical and effective way; put a band of tree tanglefoot, from 3 to 5 inches wide completely around the tree. A perfect safeguard against Gypsy, Brown-Tail and Tussock Moth, Canker Worms and Ants, and other creeping insects. 1 Ib., 30c; 3 lbs., $85 \mathrm{c} ; 10$ lbs., $\$ 2.65$; 20 lbs., $\$ 4.80$.
Weed Killer, Target Brand. A highly concentrated solution which dilutes one part to 50 parts of water. It is effective within 12 hours after application and one application will keep paths and roadways free from weeds for an entire season. 1 qt., 40c; $1 / 2$ gal., 65c; 1 gal., $\$ 1.00$; 5 gal., $\$ 4.00$; 10 gal., $\$ 7.50$.

## SCALE DESTROYER, TARGET BRAND

It has the advantage of not alone destroying the scale but it cleans off the bark of the tree thoroughly; increases to a large extent the foliage and general vitality of the same. One Gallon Target Brand Scale Destroyer makes Iwenty Gallons Dilution ready to apply.

1 qt., 35c; $1 / 2$ gal., 65c; 1 gal., $\$ 1.00$; 5 gal., $\$ 3.75$; 25 gal., $\$ 13.75$; 50 gal., $\$ 25.00$.

## COOPER'S TREE SPRAY FLUIDS

VI FruID is a Winter and Spring Spray only while the trees are dormant. It kills the eggs of the insects and the spores of fungi, mosses and lichens with which it comes in contact. It removes loose bark, lichens and mosses from the trees of every description, invigorates and cleanses the trees, leaving the trunks and branches clean and healthy......... 1 qt., $\$ 1.00$; $1 / 2$ gal., $\$ 1.75$; 1 gal., $\$ 3.00 ; 5 \mathrm{gal}$., $\$ 14.00$. V2 Fluid is for a summer spray only, when the trees are in bud and leaf. It kills instantly Aphis, Psylla, and scale insects. Does not injure leaf or blossom.

Qt., $\$ 1.00$; $1 / 2$ gal., $\$ 1.75$; 1 gal., $\$ 3.00$; 5 gal., \$14.00.
V3 rluid. For leaf eating insects-especially valuable for protecting and invigorating the growth of


## HOW AND WHEN TO SPRAY

| Plant | 1st Application | 2d Application | 3d Application | 4th Application | 5th Application |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Apple-(Scab, codling, bud moth, canker worm, tent caterpillar, aphis.) | Spray before buds start, using copper sulphate solution. For San Jose Scale, see bottom of page. | After the blossoms have formed, but before they open, spray with Bordeaux mixture and an arsenical.* | Within a week after the blossoms fall, Bordeaux and an arsenical.* | 12-18 days later, Bordeaux and an arsenical. Repeat if necessary. | Spray fall and winter varieties with Bordeaux and an arsenical about the first of August. |
| $\begin{gathered} \text { Cabbage-(Worms } \\ \text { aphis and flea } \\ \text { beetle.) } \end{gathered}$ | When worms are first seen, an arsenical. For flea beetles, plaster and turpentine, or tobacco dust. | If worms reappear, repeat if plants are not heading. | After heads form use hot water, pyrethrum (or saltpeter, a teaspoonful to a gallon of water). | Repeat if worms reappear. For aphis use kerosene and water mixture. |  |
| ```Cherry-(Rot, aphis, cure lio, slug and leaf blight.)``` | Before the buds open, spray with copper sulphate.* | When the fruit has set, spray with Bordeaux mixture and an arsenical.* | 10-14 days later, if slugs or signs of rot appear, repeat. | 10-14 days later, weak copper sulphate solution if necessary, or soda Bordeaux. | For leaf-blight use Bordeaux mixture after the crop has been gathered. |
| $\begin{aligned} & \text { Currant-(M ill Mew } \\ & \text { worms, borers and } \\ & \text { leaf blight.) } \end{aligned}$ | When pruning, cut all stems that contain borers. As soon as worms are found on lower and inner leaves spray with an arsenical.* | If worms reappear, repeat, adding Bordeaux for mildew and leaf spot. | If worms still trouble, pyrethrum or hellebore. | After fruit is picked, Bordeaux for leaf spot. |  |
| Gooseberry dew, leaf blight and dew, leaf blight and worms.) | As leaves open, Bordeaux and an arsenical.* | In ten to fourteen days repeat with both. | 10-14 days later use sulphide of potassium on English varieties. | 10-14 days later, repeat. | If mildew persists after crop is gathered, repeat. |
| Grape-Rot, Mildew anthracnose flea per.) | Before buds burst, spray with copper sulphate solution. Add an arsenical for flea beetles. | When first leaves are half grown, Bordeaux and an arsenical. For leaf-hoppers, use kerosene emulsion. | When fruit is set, use Bordeaux and an arsenical. | If necessary, use Bordeaux at intervals of 10 to 14 days. | For powdery mildew, use sulphide of potassium. |
| Peach-, Apricot(Leaf curl, curculio, mildew and rot.) | Before April 1 spray with copper sulphate solution.* | When fruit has set, use Bordeaux mixture and an arsenical, onehalf strength. | 10-14 days later repeat. | If rot reappears, use weak copper sulphate solution. | Repeat if necessary. |
| Pear-(Leaf blight, scab, slug and codling moth.) | Before buds open copper sulphate solution.* | When the blossoms have formed, but before they open, Bordeaux and an arsenical. | Within a week after the blossoms fall, Bordeaux and an arsenical.* | Repeat in 10 or 12 days if necessary. | Use weak copper sulphate solution or Soda Bordeaux. |
| Plum-(Curculio, rot, shot-hole fungus, black-knot.) | Cut and burn black knots whenever found. Before buds open, spray with copper sulphate solution.* | As soon as the blossoms have fallen, use Bordeaux mixture and an arsenical. | 10-14 days later re- | Repeat if necessary at intervals of $15-20$ days, or use soda Bordeaux.* | After fruit begins to color, use weak copper sulphate soIution should rot appear. |
| Potato-(Blight, beetles and scab.) | Soak seed for scab, in corrosive sublimate (two ounces to sixteen gallons of water), for ninety minutes. | When beetles or their larvae appear, an arsenical and lime water, or Bordeaux mixture. | $\left\lvert\, \begin{gathered} \text { Repeat } \\ \text { necessary. } \end{gathered} \quad\right. \text { whenever } \mid$ | For leaf blight use Bordeaux, beginning when the plants are eight inches high. | Repeat every week or ten days if necessary. |
| $\underset{\text { Qruit spots, slug.) }}{\substack{\text { Quince } \\ \text { - (Leaf and }}}$ | Before the buds open, spray with copper sulphate.* | When the fruit has set, Bordeaux and an arsenical. | 10-12 days later repeat. | 10-20 days later, Bordeaux. |  |
| Raspberry, <br> Blackberry - (Anthracnose, rust, cricket, slug and galls.) | Cut out galls, crickets and canes badly diseased with anthracnose. Before buds open, spray with copper sulphate solution. | When new canes are one foot high, Bordeaux and an arsenical. | 10-14 days later repeat. | After crop is gathered, remove old canes, thin new ones and spray with Bordeaux if necessary | (Note-If red rust appears, the entire stool affected should be grubbed out and burned.) |
| $\begin{gathered} \text { Strawberry }-\underset{\text { and }}{\text { leaf-eating in }} \\ \text { sects.) } \end{gathered}$ | Just before the blossoms open, Bordeaux and an arsenical. | After the fruit has set, use Bordeaux mixture. | As soon as berries are harvested, Bordeaux (if to be kept | (Note-Young plantations should receive first and third treat- | (After harvesting, mow and burn over the bed, if leaf rollers |
| $\underset{\text { blight.) }}{\text { Tomato }} \text { (Rot and }$ | If either disease appears, Bordeaux. | Repeat if the disease continues. | Repeat if necessary. |  |  |

*For the San Jose and other Scales upon apple and other trees, use the sulphur and lime mixture, or Target Brand Scale Destroyer. These are the best remedies for all scale insects, peach leaf-curl, aphides on fruit trees, twig borers, pear blister mite, etc.

Don't fail to spray every season. It is impossible to determine in advance whether or not the plant or tree will be attacked. Proper spraying is never injurious.

Don't spray once in the season and expect to see much result.

Spray repeatedly and you will be sure to appreciate the result when you gather the crop.

Don't wait until the fungi have attacked plant or tree; the fungicides are merely preventives, and should be used early in the spring. After the disease has developed, it may be too late to save the tree.

Don't spray on the top of the leaves only; spray the under sides where the pests hide, and be particular to keep your fluid thoroughly agitated.

## SPRAYING PUMPS AND APPLIANCES

Spraying is of such importance that the Experiment Stations all over this country have given much of their attention to it, and their findings have been of incalculable value. Diseases and insects can no longer exist if the proper insecticide is applied through the medium of an up-to-date spray apparatus.

## PARAGON SPRAYERS

These Sprayers are strongly constructed and can be easily operated by one man.
They can be brought in close proximity to the work, thereby eliminating the use of a long expensive hose. Our patented self cleaning strainer prevents the necessity of first straining the liquid to be sprayed. The agitator also keeps the liquid thoroughly stirred:

The spray nozzle has only a $1-32$-inch outlet and spreads the liquid well, thereby covering a large surface with a small amount of liquid, making it a rery economical sprayer

All parts of the machine are made of the best material obtainable. The reservoir is made of heavy galvanized iron. All essential fittings and valves are made of brass, making it strong and durable. The body of pump is cast iron, well ribbed to prevent breakage. The screen is of heavy perforated brass and will last many years.

The pump frame can easily be removed from tank when it needs cleaning and by running water through machine after using, the entire machinery can be easily and thoroughly cleaned.

Suitable for spraying insecticides and fungicides on trees, shrubs and vines, as well as the application of whitewash and cold water paints.


No. 0. 3 Gal. Net Price, $\$ 7.50$. Equipment
4 feet $6-$ ply Hose. 3 feet Spray Pipe. 2 Spray Nozzles.

No. 1. 6 Gal. Net Price $\$ 10.00$. Fquipment
5 feet 6-ply Hose. 5 feet Spray Pipe.

are now in use and giving best of satisfaction.
Nos. 1 and 3 Sprayers can be furnished with solid all cast brass pumps for $\$ 4.00$ additional.


No. 5.
Capacity, 50 Gal. Net Price, $\$ 25.00$

## Bquipment

25 ft . 6-ply spray hose. 10 ft spray pipe. One 3-way spray nozzle. One single spray nozzle.

This sprayer has solid cast brass pump and large air chamber. It is positively the very best hand power sprayer made for tree spraying.

## SPRAYING PUMPS AND APPLIANCES-continued.

Auto Compressed Air Spray. Can be suspended from the shoulder allowing the free use of the arms. A few strokes of plunger in air chamber will compress enough air to discharge the entire contents and make a continuous spray for nine minutes. Also used for spraying disinfectants. A practical machine for potatoes, tobacco, small fruits, vineyards, poultry houses, green houses, etc. Extension pipes useful for spraying tall trees.
 $\$ 6.75$
4.50 4.50
.40 Lowell Fountain Compressed Air Spray. The tank has a capacity of 3 gallons and is tested to an air pressure of 50 lbs . to the square inch, which obviates any danger of bursting. One charge sufficient to expel entire contents of tank. The machine is carried in one hand like a satchel, and the spray can be started or stopped, by a thumb lever operated by the same hand that carries the sprayer. Galvanized Tank Brass Tank

## Glass Tank Sprayer. For

 applying insecticides in the form of a mist or vapor. The reservoir of this sprayer is made of glass, which ento see ingredients mixing just how they are working. The glass sprayer will not corrode or rust, and if accidentally broken can be replaced at once with a Mason Fruit Jar.Each 75c; 3 for $\$ 2.00$


Auto Spray.

Tin Tank Sprayer. Only high-grade material used in construction. Strong, durable and satisfactory. Each 50c; 3 for $\$ 1.25$
Glass Tank Sprayer.

## THE BRANDT SPRAYER

It holds three gallons. The pressure is maintained uniform at all times by an occasional stroke of the pump. This also keeps the spray uniform and distributes it in a finely beaded solid cone of mist.

The pump is carried in the hands in a convenient position for operation and for directing the spray on to the plants or vines. It is connected to the tank by two rubber tubes, one of which carries the air to the tank, the other delivers the liquid to the nozzle where it is mixed with air from the air reservoir on pump and made into a finely beaded mist and delivered on the plants.

## No. 2. Galvanized Steel Tank. <br> No. 3. Brass Tank 6.75 1.50 <br> Double Nozzle, for spraying two rows at one time.



## Tree Nozzle, for spraying trees, etc

No. 4. Bordeaux Spray Cap for spraying Bordeaux Mixture and Whitewash

## Continuous Spray. Made of brass. Each $\$ 1.00$; three for $\$ 2.75$

 Champion Dry Powder Duster. Adjustable to any width of row. Dusts two rows at a time. Weighs about 6 lbs . Comprising 4 tubes, 6 nozzles, 2 straps and oil can. The reservoir holds over a quart of powder............Each $\$ 8.00$Little Giant Dry Powder Duster. For Farm, Garden, Vineyard. Tobacco Fields, etc. Machine weighs about 6 lbs.; furnished with 3 tubes, 5 nozzles and strap. Distributes any dry powder, Paris Green, etc. Dusts two rows at a time. The reservoir holds one quart. Run entirely by gear .......................................................Each \$6.00
Acme Powder Gun. The simplest tool for applying poison to growing crops. No poison is left about the fields to kill stock. It requires no base of supplies; all you need carry is a can of dry insecticide and the gun. Without stoop-ing-the elbow does it-it applies any powdered poison on any plant in any desired quantity, any time of the day. The elbow may be detached if desired. The bellows sides are painted a bright vermilion, and the handles Acme Powder Gun.
finished bright. The leather is a fine russet. We also furnish a spreader for distributing the blast.
 Dry Powder Sprayer. Easy to operate, strong and durable. Made of heavy tin. Can holds one quart. Dickey Bug Death Duster. Practical and effective; for applying Bug Death dry to garden ver for $\$ 1.80$ Hoe and Edge Trimmer Combined-Hough Patent. The only five-edged hoe on the market. The invention is an improved form of hoe, and provides a simple, inexpensive tool which may be conveniently used for trimming the edges of lawns walks and flower beds, and which may also be used as a weeding scuffle hoe and as a sod cutter around fruits and other garden truck............ Each $\$ 1.00$ Champion Sod Cutter. The sides and bottom are made of one piece of steel, so that there are no openings that can get choked. A roller just over the knife regulates the thickness of the sod. The only sod cutter that will cut both ways. A whole field may be cut without removing any sod.

## FLOWER POTS AND SAUCERS.

Our Flower Pots and Saucers are standard make, of extra fine finish, and bear shipping well. No charge for packias


|  | each | doz. | $\begin{aligned} & \text { per } \\ & 100 \end{aligned}$ |  | each | doz. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-inch | .2c | 15 c | \$0 80 | 5-inch | . 5 c | \$0 40 |
| 21/2" | 2c | 20c | 100 | 6 | 6c | 60 |
|  | 3c | 25 c | 125 | 7 " | 8 c | 90 |
| $31 / 2{ }^{\prime \prime}$ | 3c | 25c | 150 | 8 " | 12c | 125 |
| 4 " | .5c | 30c | 200 | 9 " | 15c | 175 |



## FLOWER POT SAUCERS.



## AZALEA FLOWER POTS.

These are the same style as our standard Flower Pots, but not so deep. Suitable for Azaleas, Bulbs, Ferns, Spireas, etc.

|  | each | doz. |  | each | doz. |  | each | doz. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 -inch | 6 c | 60c | 7-inch | 10c | \$100 | 10-inch | 25 c | \$2 50 |
| 6 ' | 8 c | 70c | 8 " | 12c | 125 | 12 " | 40 c | 450 |

## ROUND SEED PANS.

These are the same style as our standard Pots, but not so deep, and are suitable for Cacti, Begonias, Tulips, stc.


FERN PANS.
These Pans are especially adapted for linings to Porcelain and Silver Fern Pans.

| each | doz. |  | each | doz. |  | each | doz |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 c | 60 c | 7 -inch | 10c | \$100 | 9-inch | 15c | 8160 |
| 7 c | 80c | $8{ }^{\prime}$ | 12c | 130 | 10 " | 20 c | 200 |

## FIBROTTA SAUCERS.

Male of Indurated Fibre; no moisture goes through to injure table, floor or carpet, light and not easily broken, far cheaper in the end and better every way than earthen ware.

| 4-inch | Each, | 11c | Doz., |  | 30 | 10-1 | nch | Each, | 16c | Doz., \$1 90 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 |  | 11c |  |  | 35 | 12 |  |  | 20c | 225 |
| 6 " | " | 12c | " |  | 40 | 14 | " | " | 25 c | " 300 |
| 7 " | 6 | 13c | " |  | 50 | 16 | " | ، | 45 c | " 525 |
| 8 " | " | 15c | " |  | 65 | 18 | " | " | 50c | 600 |

## FIBROTTA ROLLING STANDS.



Fibrotta Rolling Stand.

For heavy plants and Palms, will not soak or rust. Casters have ball bearings and have hardwood rollers. Rolling stands all have heavy deep saucers and will carry all the weight usually put in large pots for Palms, Rubber Plants, etc.

| inches casters | each | doz. | inches | casters | each | $\$ 0$ | $\$ 1000$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 12 | 4 | 55 c | $\$ 600$ | 18 | 4 | $\$ 090$ | 12 | 00 |
| 14 | 4 | 65 c | 720 | 20 | 4 | 10 | 10 | 12 |
| 16 | 4 | $80 c$ | 900 | 22 | 4 | 15 | 1500 |  |

Florist Vases for Displaying Cut Flowers.
Indurated Fibre Florists' Vases for cut flower displays and storage purposes cannot be excelled for richness, beauty and economy.

We have always a large stock of our regular plain finish-a rich mahogany color. We can ship green enameled Vases at short notice.


GET OUR ESTIMATES. THEY COST YOU NOTHING, AND MAY RESULT IN SAVING TIME, EXPENSE AND ANNOYANCE.

## AMERICAN PLANT TUBS.



An excellent new tub, cheap, neat and durable. Made from $3 / 4$ inch Cypress, with iron handles, 3 iron hoops and 2 coats of green paint.


## CEDAR PLANT TUBS.

Made of seasoned selected Virginia White Cedar, bound with flat steel hoops at bottom, and galvanized wire hoops in middle and at top.

Painted green, inside and out, and top edge finished with round bevel. No handles.
No. 5. 10 inches diameter 9 inches high
\$0 45
No. 7. 12 inches diameter 11 inches high 65
95
No. 9. 14 inches diameter 13 inches high
No. 11. 16 inches diameter 15 inches high
115
No. 2. Pail Size. $103 / 4$ inches diameter $83 / 4$ inches high......... 30

## MISSION PLANT BOXES.

The best plant boxes in the market for large Palms, Boxwoods, Bay Trees and large shrubs or trees. Suitable for either out-door or indoor use; attractive in design, strong and durable. Bottoms and insides are painted with waterproof paint. Outside painted Mission Brown. Made of Cypress.
$14 \times 14$ inches, $\$ 2.75$.
$18 \times 18$ inches, $\$ 3.50$.
$22 \times 22$ inches, $\$ 4.50$


Mission Plant Boxes.

## FIBROTTA PLANT TUBS.

Plant Tubs of Indurated Fibre Ware are useful in Parlors, Corridors, Hotel Lobbies; etc. Drainage holes in the bottom prevent earth souring and afford perfect ventilationPlants kept in these tubs will flourish as readily as grown out of doors. They are furnished in the plain brown and also enameled green.

Their glossy beauty remains-simply wash them off in clear water.
Plain Brown. Enam. Green $\mid$ Plain Brown Enam. Green. 10 in. Pot and Saucer.. $\$ 060$ \$0 9014 in . Pot and Saucer... $\$ 145$. $\$ 195$ 12 in. Pot and Saucer.. $70 \quad 110 \mid 18$ in. Pot and Saucer... 375

## ASH SIFTER--"HUSTLER"

The sifter is made of galvanized iron with heavy galvanized wire cylinder sieve, and is made in two sizes.

No. 1, holds a hodful of ashes, and is designed for stove and small furnace use. It is made to fit an 18 -inch iron can or flour barrel. Price................................ $\$ 450$ No. 2, for large furnace use in private residences, stores or public buildings, is mad to fit a 20 -inch can or sugar barrel. Price................................................. $\$ 675$


## HILLS "CHAMPION" DRYER FOR THE LAWN.

The Reel is made of best material throughout. It is self-fastening and locks to post when in use, and being made separate, can be easily removed when not in use. The post sets in a socket in the ground and can also be removed, thus leaving no obstruction at all in lawn between wash days. All castings of best refined malleable iron and galvanized. They are fitted with either wood post painted or steel tubing post galvanized.
No. 1-4 arms, 6 feet long, 100 feet line, wood post............ . . $\$ 600$
No. 3-5 arms, 7 feet long, 150 feet line, wood post.............. . . 800
No. 3-5 arms, 7 feet long, 150 feet line, steel post............... . 950
Hills Champion Dryer.


## THE BUTLER STEEL HAND CART.

Of unlimited usefulness about the lawn, garden, orchard, stable, etc.; built low down, it Is easily loaded and unloaded with barrels, cans, baskets, stones, etc. The detachable box is
 for vegetables, leaves, fruit, litter, etc. The cart turns clear over for dumping load if desired. Wheels 36 inches high; from out to out of hubs, 42 in. Platform $28 \times 32$ in. Boxboards 15 in. high. Capacity 6 cubic feet. Flaring Hopper 12 in. above box makes capacity 11 bushels for leaves, litter, etc.

No. 2-With detachable box, steel wheels.
1000
1450
$\begin{array}{ll}0 & 00 \\ 200\end{array}$
No. 3-With Flaring Hopper sides, steel wheels.

## HORTICULTURAL TOƠLLS AND SUNDRIES.

BARROWS GARDEN, No. 2, small...
No. 3, medium
.$\$ 325$ 350 No. $\mathbf{~ N , ~ l a r g e . ~}$ 400
RAILROAD, patent wheel and bolted 175

BASKETS, WIRE HANGING. 8 inch 12 c , 10 inch, 15 c 12 inch $20 \mathrm{c} ; 14$ inch, $25 \mathrm{c} ; 16$ inch, $30 \mathrm{c} ; 18$ inch, 40 c ; 20 inch, 50 c ; 22 inch, $75 \mathrm{c} ; 24$ inch, $\$ 1.00$.
BELLOWS ACME. Is well made, with a solid hardwood head block, hardwood handles, best leather for the bellows, an extra elbow is furnished to tilt the funnel for getting under the leaves of plants and shrubs, $\$ 1.00$ each, 3 for $\$ 2.70$
BELLOWS, WOODASON'S. Single cone-small........... $\$ 100$ Single cone-small............. 21100
Single cone-large........... 150
Sulphur.................... 150
BOXES, PORCH. Galvanized and Painted. $30 \times 7 \times 7 \mathrm{in} . \$ 1.25$ BRACKET FLOWER POTS. Made of steel, strong and durable. Flower Pots and Saucers are held securely in place by the spring clasp. 2A. For 6 inch Flower Pots

30 cts.
3A. For 7 inch Flower Pots........................... 40 cts
CULTIVATOR, NORCROSS HAND GARDEN. The Prongs, are square spring steel bent Corner wise, with forged shovels at ends. The Socket Frame and Clamping Bar are made of toughest malleable. Handle best grade of White Ash.

CUTTER, FODDER, TONY. 2 knives can be regulated to cut in lengths from $3 / 4$ to $11 / 2 \mathrm{in}$. Capacity 75 to 100 bushels of Cut Hay per hour. .
$\$ 1250$
CANES. 7 to 9 feet long for plant stakes, per 100.
DANDELION EXTERMINATOR, LIGHTNING
The only quick, sure and easy way to rid
your lawn of Dandelions and keep it free
The exterminator is charged with gasoline or kerozene and in operation cuts the weed and deposits a few drops of the liquid on the root at the same time. Weeds once properly treated with the exterminator, never grows again, the root being eaten up or rotted by the liquid in a few hours, while if cut with a knife in the ordinary way and not treated, its growth is stimulated, and it grows stronger than ever................... $\$ 200$
DIBBLES. Iron, for transplanting plants, 50 c EDGING KNIFE. For cutting edges of walks and beds.......................
FORKS, DIGGING OR SPADING

## HAY. 6 foot handle, 3 -tine

MANURE. Cast steel, oval. 5 -tine............
Cast
steel, tine, extra heavy 125


## " Long Handle. <br> $\begin{array}{cl}\text { HAND-WEEDING. GEM........................ } \\ \text { ". } & \text { Imported; size. } \\ \text { Imported; large size.. }\end{array}$ <br> $\begin{array}{cl}\text { HAND-WEEDING. GEM............................ } \\ \text { " } & \text { Imported; small size. }\end{array}$

 7525
(Hand Weeding Forks, by mail, 10 c each extra.) FRUIT PICKERS. Made of galvanized steel wire; attaches to pole of any length; price, without pole. es to
.30 c FUMIGATOR, PERFECTION. Made with water tank, which prevents over heating; the vapor assists in the destruction of insect; No. 1-Capacity, 8 quarts $\qquad$ $\$ 300$
375 No. 3-

24
450

## GARDEN REELS. Iron, painted..

LINES. About 250 feet
75

GLASS CUTTERS, ECLIPSE. The best cheap cutter on the market. For all around usefulness we prefer it to a diamond.

15 c each; $\$ 1.50 \mathrm{doz}$.
GLAZING POINTS-PEERLESS. Will stop your glass from sliding, made of galvanized steel wire. No rights or lefts; can be used on either side.


No. 1-For small single-thick glass. No. 2-For large single-thick glass. No. $21 / 2$-For double-thick glass. Per $1,000,60 \mathrm{c}$. By mail, 75 c
PINCERS. For driving the points, 50c. By mail
60c
GLAZING POINTS, SEIBERT'S ZINC. Are positively the best; last forever; a sure preventative of glass slipping. Effective on large or small glass; easy to drive easy to extract....40c per 1 b . (By mail, 16c per lb. extra.)


EnS 40
GUNS, INSECT POWDER. CYCLONE
HOES. ACME WEEDING AND CULTIVATING......... 20
 STANDARD SOCKET GARDEN.. LADIES' LIGHT GARDEN.
ONION. One end square; opposite end 1 prong. ONION. One end square; opposite end 2 prongs. GRUBBING. With handle.
SANDUSKY OR GERMAN
WEEDING. With 4 tooth rake..
WEEDING. With 6 tooth rake.

## KNIVES

 PRUNING...BUDDING 125 to

ASPARAGUS. American.
100 to
ABELS. For pots, painted. 4x $5 / 8$-inch, per 100,15 c; . . . . . . per 1000... . . . . . . . . . . . $\$ 100$ $5 \times 5 / 8$-inch, per $100,15 c \ldots . .$.
 $8 \times 3 / 4$-inch, per $100,30 \mathrm{c} ; . . . .$. . . per $1000 . .$. . . . . . . . . . . . . . . . . . 2120 $10 \mathrm{x} 3 / 4$-inch, per $100,40 \mathrm{c}$. . . . per $1000 .$. $12 \times 1$ is -inch, per $100,70 \mathrm{c}$;

LABLLS. Tree notched, copper wired, per 100, 20c; per $1000 \$ 1.50$ AWN FENCE, UNION. Has the neatness, strength and durability of wrought iron fence and only costs about one-fourth as much. It fits uneven ground and will follow an incline as well as a level surface. It does not obstruct the view.

37 in. high, 8 c per foot; $\$ 7.00$ per 100 feet
LAMP DEFIANCE-FUMIGATING. (For use in Greenhouses) It burns kerosene. It is made of heavy tin throughout. The oil fount is drawn in one piece so it cannot leak. The cup that holds the Nicoticide (or similar preparation) is also drawn in one piece and cannot leak. No glass about the lamp to be broken. Used by prominent Market Gardeners all over the Country. 50 cents each; $\$ 5.00$ per dozen.


MASTICA. For glazing green houses. The use of Mastica avoids the necessity of repeatedly reglazing the house, saving much time and expense. With Mastica can bed in or use outside, with a machine. Broken glass can be easily removed and replaced by new without the breakage of other glass, which usually occurs with hard putty. One gallon will cover about 300 running feet (one side).
1/4-gallon
.$\$ 040$
$1 / 2$-gallon
75
-gall.
MASTICA GLAZING MACHINE
see cut................... 125

Mastica Machine.


MATS, HOT-BED STRONG BURLAP. Indestructible, cheap and warm. These are made of strong Burlap, warmly lined with waste wool and cotton, which is quilted to hold in position. Warmer than straw, and more easily handled. Do not retain moisture freeze rot, mildew, or harbor vermin, as straw does.

MATS, BURLAP. 76x76 inches. Price, $\$ 1.25$ each.
MATS, WATER-PROOF DUCK.
$76 \times 76$ inches.... Price, $\$ 1.75$ each.
MATTOCK, LONG CUTTER. With handle..
\$1 00
MATTOCK, CRONK'S GARDEN.

MOLE TRAP-REDDICK. The best trap on the market. No mole can pass under this trap and live. ... 75 c

OIL, LAWN MOWER. This is a handy can filled with fine oil, manufatured expressly for lawn mowers, bicycles, etc............ . per can 15c

PLIERS WIRE. For cutting wire..40c POST HOLE DIGGERS, HERCULES

POTATO HOOKS. 4 tine....... 60c

## HORTICULTURAL TOOLS AND SUNDRIES--Continued.

PLANT BED CLOTH. A cheap substitute for glass, answering many uses equally well. Light and easily shipped. It is of stout, tarred muslin that sheds water, protects against weather, etc.


PLANT BEDCiLUIH-LIGHI GKADE. ter yard. . -MEDIUM GRADE. per yard....6c -HEAVY GRADE. Per yard.......14c Write for special prices on large lots.
PRUNERS-LITTLE GIANT TREE. To use on a pole. . . $\$ 100$ -WATERS' TREE. With pole, $4 \mathrm{ft} ., 60 \mathrm{c} ; 6 \mathrm{ft} ., 70 \mathrm{c}$; $8 \mathrm{ft} ., 80 \mathrm{c}$; $10 \mathrm{ft} ., 90 \mathrm{c} ; 12 \mathrm{ft} ., \$ 1.00$. Extra knives, 25c; by mail, 30c.


The best Pruning Shears; quality unsurpassed. The celebrated Draw Cut. Is hand forged from the best quality of shear steel. This shear has a slot in blade whereby we get a sliding cut, and the shank of the blade is so constructed as to have a hinge movement, enabling the operator to get a powerful leverage, and to cut a 2 inch limb with comparative ease.
PRUNING SHEARS, TIP TOP
No. 2, \$1.75.


PRUNING SHEARS, HAND.
German, $81 / 2$ inch
French, 8 inch
Wiss, heavy, extra fine quality, 9 inch
$\$ 075$

## PUTTY-TWEMLOW'SLIOUID

GLAZING. For bedding glass in sash or for filling cracks or seams in roof joints or frames of greenhouses or hotbeds. It makes a solid bed, impervious to moisture and holds glass in its place, and will stop any crevice or fault. It is applied with machine, bulb or brush. One gallon will cover about 600 running feet (one side.)
Gallon.
$\$ 150$
PUTTY BULB. A useful tool for applying liquid putty and glazing greenhouses. \$1.00. By mail.
RAFFIA. The best tying material for plants, also used for making hats, baskets, etc. Per lb., 25c; 5 lbs., for $\$ 1.00$ If sent by mail 15 c per 1 b . extra.

## 

RAFFIA COLORED. For making baskets and fancy work in following colors; Black, Blue, Brown, Green, Orange, Pink, Red and Yellow................... 2 oz., $10 \mathrm{c} ; 1 \mathrm{lb} ., 60 \mathrm{c}$. If sent by mail 15 c per pound extra.

## REEDS (RATTAN.) For basket making, etc.



If sent by mail add 2 c per $\mathrm{oz} . ; 5 \mathrm{c}$ for $1 / 4 \mathrm{lb} . ; 15 \mathrm{c}$ for 1 b . for postage. STRAW BRAID. An excellent basket and hat making material, and may be combined with Raffia with charming effects, in following colors: Natural, Bleached, Pink, Green, Old Gold and Red. 4 c per yard; 10 yards $30 \mathrm{c} ; 25$ yards 50 c . Full piece of 120 yards $\$ 1.50$. If by mail add 1 c per yard for postage.
RAKES-STEEL GARDEN. 8 teeth 35 c ; 10 teeth, 40c 12 teeth, $45 \mathrm{c} ; 14$ teeth, $50 \mathrm{c} ; 16$ teeth, 55 c ENGLISH DAISY. For running over lawns tearing off Daisy and Dandelion flowers. 1 AUTOMATIC SELF-CLEANING. LAWN. Made of best hickory; 26 teeth. OLE OLSEN. Made of best hickory LAWN QUEEN. WIRE. 24 teeth. LAWN KING. WOODEN, 22 teeth. WOODEN LAWN. 20 teeth WOODEN HAY

SAWS, HAND. Finest steel
$\$ 1.00$ tn $\$ 1.2$
SAWS-PRUNING. 16-inch, 60c; 18-inch
75
Double Edge
SCISSORS-VINE. English, for thinning grapes:
in

75

$$
7:
$$

$\$ 125$
BOW Pocket pruning, small, 50 c - large
FLOWER GATHERERS. English, for hold ing fowers. Small size, 50c; large size. ..... 125
? SASH HOT-BED UNGLAZED. Mad
 from strictly clear cypress lumber, and warranted perfect. White lead used on the tendons, and Iron Dowell Pins at the corners.
No. 1-3x6 ft., 3 rows, 10 inch glass each..... $\$ 155$ doz.......... 1700 No. 2-4x6 ft. 5 rows 8 -inch glass, SASH HOT-BED GLAZED, $3 \times 6 \mathrm{ft}$., $\$ 3.10$ SCYTHES-AMERICAN ......... $\$ 090$ Need or Brush 90 to 36 inh Lawn. 30 to STONES. TALACRE English round 15 STONES. Flat 5 c ; round 10


SEED SOWER-CAHOON. The difficulty in sowing is entirely overcome by the use of the Cahoon Broadcast Seed Sower, which can be handled with ease by an entirely inexperienced person and will sow much more evenly than can be sown hy hand. . . . . . . . . . . ........................................... . $\$ 300$ SEED SOWER-LITTLE GIANT. For sowing wheat, oats, rye rice, flax, grass seed, clover seed, etc., in fact any kind of seed broadcast. They will save their cost almost daily in saving of seed, to say nothing about saving of time and more even distribution, which will have a great effect on the crop. It weighs but three pounds, is cheap and always in order........\$150 SEED TRYERS-Steel-pointed pocket, nickel-plated, with

Large, for sampling Orchard Grass. Blue Grass, Coffee, etc. ......................... SHEARS-GARDEN OR HEDGE. With notch English.will not fade or break. Two oz, spool.20

## SPADES-Steel polished. <br> 100

 NURSERY. Steel extra heavy strapped.150
## SPRINKLER, RUBBER-SCOLLAY'S.

Indispensable for floral work and window gardening.

Large size $\$ 1.00$. By mail $\$ 1.10$. Medium size, 75c. By mail, 82c. Small size, 50 c. By mail, 55 c .
THISTLE OR DOCK CUTTERS. Narrow blade, with handle for removing thistles or weeds from lawns; with foot rest. . 50c
TINFOIL-FLORIST'S FOIL. Strictly first-class. Will run more sheets to the poond than any other make. .Per lb. 15 c

## HORTICULTURAL TOOLS AND SUNDRIES-Continued.

TROWELS-ENGLISH. The best trowel in the world. It is of one solid piece of steel and will outwear several of the ordinary sort.

6-inch, 60c; 7-inch, 75c
TROWELS-AMERICAN.
Solid shank .
. . . 40c

Ordinary...6-inch, 10 c ; 7 -inch, 15 c


TROWELS-TRANSPLANTING. 6 -inch, $15 \mathrm{c} ; 7$-inch 20 c THERMOMETERS-JAPANNED. Tin case.

Common Grade . . . . . . . . 8-inch, $15 \mathrm{c} ; 10$-inch, 20 c Medium Grade . . . ........ 8-inch, 60c; 10-inch, 75 c Standard Grade. Made with scasoned tubes; mounted by clasps on heavy metal; very accurate. 8 -inch, $75 \mathrm{c} ; 10$-inch, $\$ 1.00$; 12 -inch, $\$ 1.25$.

By mail, 10 cents each extra.
Maximum and Miniumum Self Registering
$\$ 300$
Hot-Bed or Mushroom
200
Dairy. 10 -inch glasses . .............................. 25 c Dairy, Standard Grade. Hand graduated and very accurate. The tube is magnifying, and the entire Thermometer is exposed to view, as it floats in the cream at the middle bulb. . . . . . . . . . . . . . . . . . 50c
Incubator. High-grade ......... . 50c By mail ô0c. Brooder. High-grade........... 40c By mail 45 c . TREE GUARDS.-Made of No. 8 Galvanized Wire-reinforced by 7 bands of Galvanized Wires-fitted with coil spring6 feet high, 11 inches in diameter. $\$ 1.25$ each; $\$ 12.50$ per doz.

VASES, Earthenware-For cemeteries
Watering Pots-Galvanized Short $=$ Spout, 4 -qts. 45 c : 6 -qts., 55 c ; 8 -qts., 65 c 10 -qts., 75 c ; 12 -qts., 80 c Galvanized,
LongSpout, Made from best quality of iron, and heavily


16-qts., 81.60 galvanized

16 -qts., $\$ 1.00$. for roses with each pot for fine and coarse watering 6 qt. $\$ 1.85 ; 8$ qt. $\$ 2.00$ WAX, GRAFTING. $1 / 4 \mathrm{lb} ., 10 \mathrm{c}$ 1/2lb. $15 \mathrm{c} ; 1 \mathrm{lb} . . \mathrm{B}^{3}$....... 25 c WEEDERS-CLEVELAND LAWN

The best and simplest weeder. Removes the weeds without disturbing the sod or disfiguring the


EUREKA." The best hand weeder; thin forged steel fingers. . . . 250 c EUREKA. With 2 foot wood handle....... . . . . . . . . . . . 30 r HAZLETINE. One of the best; solid steel; good size and durable 25 c ; by mail, 30 c
EXCELSIOR. A very useful little tool for weeding seed beds Stirring the ground, etc . . . . . . . . . ........ 10 c ; by mail, 15 c LANG'S. Allows use of hands in working ....25c ; by mail, 30 c
NOYE'S HAND. NOYE'S HAND . . . . . . . . . . . . . . . . . . . . . . . . . . 25 c ; by mail, 30 c

## WIRE FOLDING PLANT STANDS.

The most compact, strong durable Plant Stands. They pack closer than any other plant stand for shipment. The ends are made of flat steel and have porcelain castors. Can be opened or folded in a few seconds time by simply spreading the stand apart at the bottom, and dropping the cross bars into their places.

The construction of the shelves or trays are such that there is more room for the pots and foliage than any other plant stand that takes the same amount of room on the pots
${ }_{2}$ Tray Wire Stand-Trays $71 / 2$ inches wide $x 30$ inches long,


## BLUE GRASS STRIPPER.

The only Hand Blue Grass Stripper in the market. It well made, nicely painted ano varnished. A man can strip twenty bushels of seed per day with it. Weight, 4 pounds... $\$ 12 \xi$

## GOLD FISH.

We carry in stock the following varieties of Gold Fish, all selected with greatest care to secure best qualities only, so that purchasers may rely on receiving best values for prices charged.
TELESCOPE FISH- $\$ 1.00$ to $\$ 2.00$ each.
JAPANESE FRINGE TAILS-Two and three years old, $\$ 1.00$ to $\$ 3.00$ each. JAPANESE FANTAILS-50c to $\$ 1.00$ each.
COMETS-25c to 50 c each.
AMERICAN FANTAILS- 25 c to 50 c each.
PEARL FISH-25c to 50c each.
EXTRA COLORED AND SIZE COMMON FISH-Two for $25 \mathrm{c}, \$ 1.25$ per doz.
SMALL GOLD FISH-Assorted colors, three for $25 \mathrm{c}, 90 \mathrm{c}$ per dozen.
TIN BUCKETS FOR SHIPPING FISH-Small size 10 c each,
Large size 15 c each, extra.


Gold Fish shipped by express only at purchasers risk.


Hanging Fish Globes. AQUARIUM MOSS.


Each Doz. Size

Each Doz. EO $60 \quad \$ 650$ $\begin{array}{rrr}100 & 10 & 00\end{array}$
Chains for gold fish globes, 10 cents each.
FOOTED FISH GLOBES-Pressed Foot.



| 1 | 50 | 17 |
| :--- | :--- | :--- |

# LAWN REQUISITES. 



The Dunham Two Section "Water-Weight" Roller with counter-balancing handle weights. ing axles and are easier to operate than any other. The only Lawn Roller made with roller bearings, and cost no more than the ordinary rollers.
The handle weights on Dunham roller bearing rollers not only keep the handle upright when not in use, but also add speed and ease of operation.

Dunham Water Weight Rollers are electric weldedno rivets are used-the drum cannot possibly leak.
THE DUNHAM. Water Weight Lawn Roller No. HW-10. 2 section, 24 incheslong and 18 inches in diameter. Weight, empty 160 lbs. Weight filled with water, 360 lbs. Weight filled with 160 lbs. Weight filled with w
and, 560 lbs. Price $\$ 15.50$. 32 inches long and 24 inches in diameter. Weight empty, 230 lbs. Weight filled, with water, 710 lbs. Weight filled with sand, 1060 lbs. Price, $\$ 20.40$.
DUNHAM ROLLER BEARING LAWN ROLLER. The rollers are smooth on the face, and finished in aluminum. The outer edges are rounded to avoid cutting the lawn.
No. 401-2 Section. 16 inches long and 15 inches in diameter, weight 150 lbs..

DUNHAM ROLLER BEARING<br>LAWN<br>ROLLER.

If you wish a fine lawn, you must use a Lawn Roller. In no other manner can a smooth compact surface be maintained. It packs the soil, thus retaining the moisture throughout the season, enabling young and tender grass to secure the necessary nourishment.

Dunham Lawn Rollers ile roller bear-

## CALIFORNIA LAWN

 SPRINKLER. Four Arm Lawn Sprinkler which can be operated with a moderate pressure, covers a wide area and distributes the water evenly. The revolving arm throw the water in a fine spray into the air and the motion produces a finemist. Height about 1 foot, $\$ 1.50$.

Rainmaker Lawn Sprinkler.
With revolving wings, strongly made, It throws a beautiful spray. Solid brass; nicely finished; base japanned. The sled enables the sprinkler to be moved about the lawn by the the lawn by the attached to hole at rear of sled.

$$
\text { Price } \$ 1.00
$$



## Rainmaker.

## LAWN RAKES.

AUTOMATIC. Self-cleaning, made of best hickory, 26 teeth. 60 c ENGLISH DAISY. For lawns, for tearing off daisy and dandeLAWN heads................................................... 2.75 or leaves, 24 teeth............................................... 50 c
 OLE OLSEN. Made of best hickory, 26 teeth. ........................ . 50 c Wooden. 20 teeth.................30c

## HORSE BOOTS.

For use on lawn. They are made of strong leather fastened with copper strong leather fastened with copper
rivets, and will wear a long time. Per set of 4 , riveted, heavy flat soles, $\$ 12.00$
HOSE RUBBER, ROXBORO. Non-kinkable. Best hose on the market, finest quality of rubber being used in its manufacture. Will not kink and will last for years. We can supply in any length.......... $1 / 2$ in., 16 cts. per ft., $3 / 4$ in. 18 cts . per ft . HOSE REEL. Wooden 75c. HOSE REEL, iron. ..... $\$ 2.25$ NOZZLE-GEM. Throwing all variations from fine spray " to stream for $3 / 4$-inch hose $\qquad$ 5 c each, 50 c doz.
 HUDSON'S Hose Mending outfits. Furnishes a complete outfit consisting of 6 menders or connections, 20 bands or fasteners and a pair of pliers for fastening bands. 60 c , by mail 70 c
HOSE MENDERS, HUDSON. Separate 50c doz.
bands 20 c doz.
HOSE MENDERS. PERFECT CLINCHING. A one-piece article which does the work of the mender tube and two clamps ordinarily used. A smooth mend with no projecting parts. A solid joint which cannot pull, apart or leak.

10 c each; $\$ 1.00 \mathrm{doz}$.
HOSE COUPLINGS.
10c each; $\$ 1.00$ doz.
COUPLING BANDS, SHERMAN SINGLE 5 c each; 50 c doz.
DOUBLE 10c each; $\$ 1.00 \mathrm{doz}$.
THE SNAP HOSE COUPLER. Best hose coupler, being simple durable and always water tight for $3 / 4$-inch hose.
No. 1-Screws on the hydrant or the old threaded coupling and stays there. .20 c each; $\$ 2.00$ doz.
No. 2-Screws into the old threaded coupling or into the nozzle and sprinkler and stays there. .......... . 10 c each; $\$ 1.00 \mathrm{doz}$.
No. 4-Used on nozzle end of hose and can be connected with any nozzle by using No. 2 as an intermediate. Used with No. 5 for connecting two lengths of hose.......10c earh; $\$ 1.00$ doz.
No. 5-Goes on end of hose that attaches to either faucet or ground pipe. It is used with No. 4 for connecting two lengths of hose. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20c each; $\$ 2.00$ doz.
ROYLE HYDRANT ATTACHMENT. To be used for attaching hose to smooth faucets.
U-N-I-T SPRAYER. A simple, practical device, made of Brass, to be attached to any garden hose, and for the purpose of ar plying any desired soluti onf or Fertilizing the lawns, shrubbery, plants. etc., or for spray.ng insecticide or soap solutions, for washing of windows, etc.

The sprayer screws to the hose in the place of the nozzle, and the nozzle is attached to the other end oi the coupling.

The substance can be used either in dry pow-
der or solution. Price, $\$ 3.50$.


## COLDWELL'S DEMOUNTABLE CUTTER UNIT MOWER <br> It has many unique and patented features which will appeal strongly to the professional Golfer, the Green Committee and all those interested in exceedingly fine and close cut lawns. <br> This CUTTER UNIT consists of the Revolving Cutter, the bottom or Stationary Knife and the parts necessary for adjusting the same to each other. It is set in the main frame of the mower and held in position by three thumb screws. It can be attached or removed in less than a minute. This cutter unit being separate and independent is not affected by any twisting or straining to which the main frame may be subjected in passing over rough and uneven ground. <br> 

16 -inch, $\$ 25.00 ; 18$-inch, $\$ 30.00$, including an extra cutting unit.


## COLDWELL'S REGAL BALL-BEARING

The drive wheels of Coldwell's Regal mower are locked fast to the opposite ends of a steel shaft, which is supported near its ends by ball bearings. The ball bearings are fitted with adjustable cones, by means of which the wheels can always be made to run true, no matter how much the machine is worn.
The ratchets of Coldwell's Regal Mowers consist of three large malleable iron pawls located in each of the two drive gears. These are the largest and slowest moving gears in the machine, thus providing ample room for a suitable ratchet. (These pawls are guaranteed indestructible through wear.)
The stationery knife of Coldwell's Regal mower is channel shape, being double edged and reversible, which not only prevents its springing or saging, but also provides it with two cutting edges. When one edge is worn down, it can be reversed, Another important feature of this channel shaped knife over the ordinary flat knife is that there is no flat surface presented to the revolving cutter for it to wear a long dragging surface in.
16 in., $\$ 8.50 ; 18$ in., $\$ 9.50 ; 20$ in., $\$ 10.50$.

## COLDWELL'S GRAND BALL-BEARING

This is a strictly high grade Ball-Bearing Lawn Mower of first grade material throughout. It has large driving wheels (10 inches high) thus insuring lightness of draft. The large diameter revolving cutter, makes it an exceptionally good high grass Lawn Mower, and the five blades insure fineness of cut.
16 in., $\$ 7.50 ; 18$ in., $\$ 8.50 ; 20$ in., $\$ 9.25$

## COLDWELL'S IMPERIAL HIGH WHEEL

We claim that the Four-Blade High Wheel Imperial is just the mower for use on 90 percent of our lawns. The workmanship upon it is superior to that of any other make 16 in., $\$ 7.25$; 18 in., $\$ 8.25$; 20 in., $\$ 9.00$


## Coldwell's Demountable Cutter Unit Horse Lawn Mower

The Demountable Cutter Unit Horse Mower is constructed upon an entirely new principle and is a wide departure from anything of the kind ever made. The cutter section, which is the vital part of a lawn mower, is made into a unit and is independent and removable from the main frame of the mower. This unit consists of a simple frame containing the revolving cutter, the bottom or stationary knife and parts necessary for adjusting the same to each other. It is attached to the main frame of the mower by four locking screws and can be attached or removed in less than a minute. It being separate and independent of the main or larger frame, it relieves the knives from the twisting and strain that usually occurs in the frame of the ordinary horse mower when in use on rough ground.

This unit, being the cutter section of the mower, is the only part necessary to send in to the factory for sharpening or adjusting. The great convenience in handling and the saving in freight and cartage charges between shipping an entire mower and the unit only, will be fully appreciated by all users of horse mowers. 30 in., $\$ 100.00$; 35 in., $\$ 125.00$, including an extrá cutting unit.

## GEARED ROLLER OR GOLF MOWER

This mower is made to meet the demand for a machine that will more perfectly cut borders, verges, etc., and yet retain all the other features necessary in a mower for general work. Coldwell's Roller Mower has brass bushings and triple pawl ratchets. The roller tends to make a smooth and ratchets. The roller tends to make a smooth and dampness and worms. The machine with six blades
is highly recommended by most of the leading golf clubs in America for work on putting-greens. $\$ 13.50$ $\begin{array}{ll}18-\text { inch, } \\ 18 \text { including grass box, } & 15.50\end{array}$

## COLDWELL IMPROVED HORSE LAWN MOWER

This well known standard Mower has side draft attachments, to enable the horse to walk on the cut grass. only, and caster rollers, which will not mark the lawn. Evenness of cut is assured by an adjustment which raises or lowers the two sides at the same time by means of a simple lever movement; the same lever serves the purpose of raising the knives from the ground when driving over the knives from the ground when driving over with steel shafting and composition split bushings, and great care is taken to have the workmanship perfect.
EACE MOWER IS GUARANTERD TO GIVE ENTIRE SATISFACTION TO THE PURCEASER.
30-inch, complete, with shaft and seat, \$65.00.
35-inch, complete, with shaft and seat, $\$ 78.00$.
Coldwell Pony Mower, with grass box, no shafts, $25-\mathrm{inch}, \$ 42.00$.

## COLDWELL'S LAWN EDGER

It is equipped with fine cut gears, sliding-pawl ratchet, the best tool steel bottom knife and is made to meet the demands of a really first class lawn trimmer. Price, $\$ 5.00$.

## NOX ALL GRASS CATCHERS

[^1]
## "PLANET JR." FARM AND GARDEN TOOLS.

Space will not permit our showing and describing all of the "Planet Jr." tools, but wel will send a fully illustrated catalogue iree to any one who desire it. "Planet Jr." goods are standard machines, the best, and you can rely on getting bottom pricesfrom us.

No. 3. Planet Jr. Hill and Drill Seeder. 15 inch steel drivb.g wheel, holds 3 quarts. The favorite among onion growers, market gardeners, etc.... . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1000$

"Planet Jr." No. 6 Hill and Drill Seeder and Single Wheel Hoe. .
................................................................ . $\$ 1300$
This new tool drops in hills and sows in drills all garden seeds with the greatest regularity, in a narrow line, to any exact depth required; covers, rolls down and marks the next row, all at one passage.

Can readily be changed to a Single Wheel Hoe.
"Planet Jr." No. 6 Hill and Drill Seeder, without Cultivator Attachments................................................ $\$ 1050$


This combined machine is intended for gardeners who have a large enough acreage in crops for a Double Wheel Hoe to be used to good advantage, and prefer not to buy separate machines.

As a seeder it is practically the same as the No. 4 ; will sow In drills any thickness or drop in hills and is thoroughly substantial and accurate in sowing all kinds of garden seeds in hills or drills.

As a Wheel Hoe it is identical with the No. 12, Double Wheel Aloe, the best machine on the market. The change from Drill to Wheel Hoe takes but a moment, and the whole combination is one we can heartily recommend and guarantee satisfactorily.

Price $\$ 13.00$
No. 18, Single Wheel Hoe, with Two 6-inch Hoes $\$ 325$ No. 36, Single Wheel Hoe, Cultivator and Plow. Wheel $161 / 2$ inches high, making it easy running . ...... $\$ 575$


This is the most popular combined tool made. It combines in a single implement a first-class hill-dropping seeder, a continuous row seeder, a Single Wheel Hoe, a cultivator and a plow: The hopper holds two quarts of seed, which can be sown in continuous rows, or dropped in hills at $4,6,8,12$, or 24 inches apart.

The drill is detached and the tool frame substituted by removing but one bolt. It then becomes a single wheel hoe. It is useful almost every day of the season, at every stage of the garden work. With this one implement the small farmer can do practically all the work in his small crops.

Price, $\$ 10.50$
No. 4 as a Hill and Drill Seeder, only, $\$ 8.50$.


For easy gardening, and at the same time clean and perfect gardening, the kind that will make your garden the talk of the neighborhood, and cause your face to glow with honest pride, nothing is quite the equal of this No. 17, Wheel Hoe. It is suited to all kinds of garden cultivation and all garden crops. You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The No. 17 , has a pair of 6 -inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work.

Other attachments can be added at any time.
Price, $\$ 4.50$
No. 16. Single Wheel Hoe, Cultivator, Rake and Plow, Two 6-inch Hoes, Three Cultivator Teeth, One 7 -inch and one 4 -inch Rake, A large Garden Plow and Leaf Guard. Price, $\$ 5.35$.

## FIREFLY GARDEN PLOW

 \$2.35

Cultivator Teeth.

No. 19. Farmer's Single Wheel Hoe, Cultivator and Plow. A cheap and effective wheel Hoe, high wheel and standard, slotted for depth regulation..
No. 38. Single Wheel Disc Hoe, Cultivator and Plow. $\frac{1}{\text { set }}$ discs, 1 pair 3 prong cultivator teeth, 1 plow, 1 leaf lifter. . $\$ 650$
The disc and cultivator teeth attachments will fit the other single and double wheel hoes (except No. 19) and are sold separately

Discs, per pair
225
Cultivator teeth, per pair.
130


# "PLANET JR." FARM AND GARDEN TOOLS. Continued. 



Two acres a day can easily be worked with this implement, and when it is done it will be a better job than three men could have done in the same time with hand hoes. The No. 12 runs either astride or between the rows; kills all the weeds and leaves the earth in fine shape. Then too, its so easy to work. Twelve-year-old girls work gardens with them with ease and success.

The No. 12 has one pair of 6-inch hoes, one pair of plows for opening or covering, and a set of 4 all steel cultivator teeth, and one pair of leaf lifters. The tools shown are what gardeners use most, and others can be added as wanted............ Price, $\$ 6.50$
No. 11 Double Wheel Hoe. Has one pair of 6 -inch hoes, one pair $41 / 2$-inch hoes, two pairs hollow steel cultivator teeth, one pair plows, two 3 -tooth rakes, two 5 tooth rakes and two leaf lifters. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Price, $\$ 8.50$.


This new tool will give excellent satisfaction There are three discs, oil tempered, which may all be used at once or two on a side, as preferred. With the leaf lifters the work can be done withoat danger of cutting off the leaves and injuring the plants. The discs are also adjustable for depth and to throw to or from the row as desired.

The set of prong cultivator teeth will be found invaluable in general cultivation. The tooth next to the row is narrow and is arranged to run shallow, the middle tooth is wider and runs deeper, while the outside tooth is much wider and runs deeper still, so that the work is finer and more delicate next to the row, to avoid injury to the roots of plants, and deeper in the center. The teeth are also set out of line from front to back, which makes them work with greater freedom.

This new combination is sure to prove popular in all sections. Price.

## NO. 81.-Horse Hoe Cultivator and Hiller Combined.

Thelatest and best tool of the kind. Has six 3 -inch cultivator teeth, two 6 -inch side plows and a 12 -inch furrowing tooth, making an admirable equipment for all widths of cultivationand for hilling crops up to four feet apart.

It is very compact, and strong, and is sure to give entire satisfaction. It runs steadily, is the finest and best braced of ail our one horse tools and leaves the crop just as you want it. Is an admirable hiller and furrower. . . . . . . . . . . . . . . . . . . . . . . . $\$ 950$


Probably no other cultivating machine is so widely known as the Planet Jr. Combined Horse Hoe and Cultivator, for it is in use throughout the civilized world. It is so strongly built as to withstand incredible strain, yet it is light and easy to handle. You can do almost anything you want with it in the garden or field. It opens and closes furrows, hoes right up to the plants without danger of injuring, throws dirt to or from the row and throws back from center again. You can set the hoes at any angle or reverse altogether, cultivate to any depth desired, and adjust for any width. Every part is perfected to make the tool acceptable to the intelligent farmer who knows the best is the cheapest. Price.

8850
No. 7, HORSE HOE AND CULTIVATOR.
Same as the No. 8, without the depth regulator. It work. the same as No. 8, in every way, except that it lacks the steadis ness and control of depth made possible by the depth regulator-



This tool has a plain wheel instead of the lever wheel. It has the high frame, patented hollow steel standards, patent lever, star wheel, new lever expander, and new hollow steel wheel arms. Price, with wheel.
.$\$ 725$ Without wheel.

650

## No. 4, PLAIN CULTIVATOR.

This popular cultivator, has been much stiffened and improved by our patent braces and expanders, identical to those used on No. 4 Horse Hoe. Has pressed steel wheel arms and standards.

Price with wheel, $\$ 4.75$; without wheel, $\$ 4.00$.

## PLANET JR. TWELVE-TOOTH HARROW. CULTIVATOR AND PULVERIZER.

Gardeners cultivate better than formerly. It has been found to pay best. The farmer or gardener is most likely to cultivate best who has the tool best adapted to this purpose. With the Twelve-Tooth Harrow here shown, you go as deep or shallow as you like, come up close to row without injuring plants, cut out all the weeds, stir the soil, mellow and fine it as with a garden rake You widen and narrow as you please between 12 and 32 inches. It is a special favorite with strawberry growers, market gardeners and truckers.

Price without Pulverizer or wheel. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 970
Without Pulverizer.............. 90

A strawberry runner attachment consisting of a 10 -inch flat steel disc mounted on an outrigger........ Extra. Price, $\$ 1.85$.


## PRAIRIE STATE SAND TRAY INCUBATORS

If you are in search of the best Incubator manufactured, the one that will hatch the largest number of strong, vigorous chicks, the Prairie State is the machine to buy.


## PRICE ITST,

No. 0. -100 hen eggs; 135 lbs. crated. . . . . . . . . . . . . . . . . . . . . $\$ 18.00$
No. 1.-150 hen eggs; 160 lbs. crated. . . . . . . . . . . . . . . . . . . . . 22.50
No. 2.- 240 hen eggs; 240 lbs. crated. . . . . . . . . . . . . . . . . . . . 32.00
NTO. 3.-390 hen eggs; 275 lbs. crated. . . . . . . . . . . . . . . . . . . . . 38.00

## PRAIRIE STATE KEYSTONE SAND TRAY INCUBATORS

No. O.- 60 hen eggs; 55 lbs. crated. .............................. 8.00 NO. 1.-100 hen eggs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12.00

Lack of space prevents us giving detailed information concerning the Prairie State Sand Tray Incubators, Brooders and Universal Hovers, but will be pleased to send descriptive catalogue of these goods on request.

## PRAIRIE STATE COMBINATION COLONY BROODERS

No. I-(Outdoor.) Combination Colony House Brooder. Size 3 feet wide, 6 feet long, divided by a movable partition into two compartments. Weight, crated 300 lbs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 20.00$
No. 2-(Outdoor.) Combination Colony House Brooder. Size $21 / 2$ feet wide, 5 feet long, divided by a movable partition into two compartments. Weight crated, 208 10s. .................................. \$16.00 No. 3-(Outdoor.) Combination Colony Brooder. Size 27 inches wide, 48 inches long. Weight, crated, 150 lbs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 12.00$
Heat regulator attached to any of the above brooders,



## Universal Hover.

The No. $5-\mathrm{C}$, No, 5 B , and No. 5B M, do not have the split hinged cylinder $\$ 10$ No. 7-For flocks of 75 to 150 hens. Weight, 107 lbs. Price......... $\$ 12.00$ No. $71 / 2$-Capacity, 50 to 100 lbs. per hour. Weight, 150 lbs. " Price... $\$ 16.00$ No. $9-$ For flocks of 200 to 300 hens. Weight, 170 Ibs. Price. $\$ 18.00$ ENO. 11 -Capacity, 100 lbs. and upwards per hour. Weight, 215 lbs. Price No. 12-Capacity, 150 lbs. per hour. Weight, 260 lbs. Price.. $\$ 30.00$ Every Hand-Power Mann Bone Cutter is warranted by us against breakage for one year, and we hereby agree to replace, free of charge, any breakage which occurs while cutting bone within one year from date of purchase, provided purchaser pays express charges on broken part. This insures the purchaser a first-class article.

Send for Free Descriptive Catalogue.

## INTERNATIONAL SANITARY HOVER

The only brooding device in existence warmer at the curtain than near the center. This causes the chicks to distribute themselves near the curtain, where there is abundant fresh air instead of crowding to the center to trample one another or suffocate. The hover can be carried around with ease and used anywhere. It is well suited to portable brooders or colony houses, but can be used in a hen house, barn or cow's stall, a piano or organ case, in some place sheltered from wind and rain. It is circular in shape, and there is no corner for chicks to crowd into. It is metal throughout and fireproof, no solder being used in making it. There are no crevices nor seams for vermin to gather in. It provides larger hovering space than any other standard hover. No carpenter work is required to set it up. No cutting of holes nor building of platforms. The hover and the surrounding floor space are always on the same level. The lamp can be lifted out through the top by the operator while standing up, which makes it unnecessary to kneel in dust or mud to attend to the lamp. There is no possibility of gases or fumes from the lamp getting into the air breathed by the chicks. During the fall and winter months the Sanitary Hover can be used to sprout oats and so provide a winter supply of green food. Twelve quarts of Oats sprouted under the Sanitary Hover will give in 8 days. $21 / 2$ bushels of green food-enough to feed 500 hens, 3 days. Price.........\$8.50


## "RED CHIEF"

## RAPID GRINDING FEED AND GRIST MILL

TO. 10-Capacity 2 to 4 bushels per hour. Weight 35 lbs . No. $5 \frac{\text { Price }}{\text { Capacity }} 11 / 2$ to 2 bushels per hour. Weight, 25 lbs .


Sanitary Elover.

No. 1-Crice $\ldots \ldots \ldots \ldots \ldots \ldots . .$.
with crank. Price.............................................. $\$ 3.00$ Nos. 1 and 5 Mills Clamps or bolts to box as desired. Has hooks on which to hang a bucket.
"RED CHIEF" HAND CORN SHELIER. Price................ $\$ 2.00$
NEW MODEL CLOVER CUTTER FOR POULTRY
Removable steel knives, adjustable cutter bar; runs easy; cuts fine; is durable.

The "New Model" Clover Cutter is designed for cutting either green or dry, such growths as clover, alfalfa, vegetable tops, etc., into $1 / 8$ inch lengths.

Weight, 60 lbs. Price. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 8.00$

## BLACK HAWK GRIST MILL

With a Black Hawk Grist Mill you can crack the corn or grind any kind of grain to whatever degree of fineness you desire or whichever will best suit the age or condition of your chickens. Weight of Mill, 17 lbs. Price, complete, $\$ 3.00$. Extra grinders, per pair, 40c.

## THE MODEL GRINDING MILL

Grinds all kinds of feed for chickens and other domestic fowls and animals. Adjusted to grind fine or course. The burrs are made of Steel-Alloy metal, and are the most durable grinding surfaces made.

No. 1, capacity $1 / 2$ to 1 bu. per hour. ..........\$ 2.50 | No. 2, capacity |  |
| :--- | :--- |
| No. $3 / 4$ | to $11 / 2$ bu. per hour......... |
| $\mathbf{7 . 0 0}$ |  | No. 3, capacity 1 to 2 bu. per hour.................. pulley in addition to fly wheel, if desired. Price complete

10.00

## DAVIS ANTI-LOUSE ROOST BRACKETS

PREVENT MIDGE LOUSE OR RED MITE RAVAGES.
No. 1. Single Roost Style; per pair, 75c; 3 pairs, $\$ 2.00$; 6 pairs, $\$ 3.50$; 12 pairs, $\$ 6.25$.

No. 2. Multiple Roost Style; per set, \$1.25; 3 sets, $\$ 3.25$; 6 sets, $\$ 6.00$; 12 sets, $\$ 11.50$.

## BLACK HAWK CORN SHELLER

This Sheller is simple, easily adjusted, and will shell clean all kinds of field corn. Its construction is such that it can not choke. Everything is furnished with the sheller necessary to clamp it to the box or board. Price............................ $\$ 2.00$

## PONY CORN SHELEER

This is a good, cheap Corn Sheller, made to meet the demands of the trade where an expensive corn sheller is not required, and where great durability is not necessary. Price...................................25

## LIGHTNING LICE KILLING MACHINE

The Lice Killing Machine works on the same principle as a thorough dust bath. You put 8 to 10 full grown fowls or 30 to 50 chicks in it at a time and sprinkle only one teaspoonful of Lice Powder over them. The drum of the machine is then revolved slowly 8 or 10 times. No other work is required. When the chickens are taken
 out they will sprawl on the ground, shaking the Lice Powder with dead and dying insects from their feathers, just as though enjoying a fine dust bath. To be successful in getting winter eggs, keep your fowls free from lice by using Lightning Lice Killing Machine.

It is best when the first time to give the chickens a special treatment in it ten days after the first, in order to kill the insects which hatch from nits (insect eggs) deposited on the feathers.
Nosited on the feathers.
Nachine, suitable for young chicks or pigeons
$\$ 2.50$
No. 2 Machine, suitable for either young chicks
or pigeons, or to clean 8 Leghorns or 4 fowls the size of Plymouth Rocks at a time
No. 3 Machine, suitable for chickens of the Mediterranean class and birds, such as Turkeys, Cochins and Brahmas. This size is not suitable for young chicks. or pigeons
4.00

## FREE.

With each machine one-half pound of special Lice Powder for use in the machine is given free

## Banner Root Cutter. No. 7

It quickly cuts vegetables in long, round, ribbonlike slices, which fowls eat up to the last morsel. It is a valuable addition to the poultry house and highly recommended by the best poultry experts in the country. Price.

## McCullough Exhibition Coops

In
In offering these Coops we pearance with first-class material and workmanship, insuring durability. Quarter-inch iron rods in front and heavy canvas on ends, back and top; also fitted with a curtain at the top for closing down. Door is large and rises full height of coop, while in front a small door at the bottom permits cleaning readily. Being put together with screws, can readily be taken apart for storing when not in use. Single, pair or trio size, $\$ 2.00$ each; pen size, $\$ 2.50$ each.

## Humpty Dumpty Egg Carrier

The Best, Cheapest and Most Convenient Egg Carrier in Fxistence.
The Original Folding Egg Crate has outclassed everything in its line. Made in 6 and 12 dozen size. Price: 6 doz. size, $25 c$ each; $\$ 2.50$ per doz. 12 doz., 35c each; $\$ 3.00$ per doz.
Egg Bozes, Paper. 1 doz. size, 25c doz., $\$ 1.00$ per
$100, \$ 6.50$ per 1000 . 2 doz. size, 45 c doz., $\$ 1.75$ per $100, \$ 12.00$ per 1000 .

## Wood's Revolving Egg Cabinets

Eggs intended for hatching should be turned daily; the warmer the temperature the more necessary that they be turned. Eggs for market should be turned every two or three days, if kept any be turned every two or three days, if kept any length of tirne. We recommend these cabinets very
highly. Prices: 150 -egg size, $\$ 3.50 ; 288-\mathrm{egg}$ size, highly.
Wood's Pony Cabinet. 72-egg size. . . . . . . . . $\$ 1.00$

## Eyrie Egg Box

The handle, when put in place, locks the box, and can not be tampered with in transit. The eggs are completely surrounded by double-faced corrugated paper, which provides a dead air space, effectually preventing their chilling in the coldest weather.
Prices: No. 1, 15-egg size, 15c each, \$1.25 per doz; No. 2, $30-\mathrm{egg}$ size, 20 c each, $\$ 1.90$ per doz. Prices Subject to Change Without Notice.

## Zero Safety Lamp

The Zero Safety Lamp carries off the heat as fast as it forms.
All the air used by the lamp is drawn up the sides, across the top of the oil tank, up the entire length of the collar and burner, thus carrying off the heat as fast as formed and keeping the oil cool. The Zero Lamp and chimney are made of the very best quality of galvanized iron, and the lamp is fitted with a heavy brass burner. Price $\$ 1.00$ each. By mail, 25c extra.
Incubator Lamps. No. 1-For No. 0 Incubator, 60 c .
Incubator Lamps. No. 2-For No. 1 Incubator and all sizes of Colony Brooders and Universal Hover, 65c.
Incubator Iamps. No. 3-For No. 2 and 3 Incubators, 75 c .
Lamp Burners. Sun Hinge Burner, No. 1, using $1 / 2-i n$. Wick, 25 c ; No. 2, using $1-\mathrm{in}$. wick, 35c; No. 3, using $11 / 2-i n$. wick, 50 c .

Lamp Wicks. No, 1 and No. 2 wicks, 15 c doz.;

## Model Blue Flame Gas Burner

This burner was designed to supply the demand for a blue flame burner suitable for Incubator and Brooder work. This burner may be turned low without popping out and may be regulated and set to meet the varying pressures of gas and may be used satisfactorily with manufactured or natural sas. Price

## Poultry Markers

The best way to keep a record of the chickens is by punching the web in the chick's foot soon after

[^2]
## The Jersey Pigeon Perch

Made of seasoned maple and coppered steel wire. of the loft. Will last a life time.
3 inches in diameter, 7c each; by mail, 10c; 50, \$3.25; 100 , \$6.00.
$31 / 2$ inches in diameter. 8c

each, by mail, 10c; 50, \$3.50; 100, \$6.50.

## X-Ray Egg Tester

The X-Ray Egg Tester used on an ordinary hand lamp and fits over any style of burner with a diameter approximating that of the tester. Price of X-Ray Egg Tester 30c each; postpaid, 40c.

## Union Lock Poultry Fencing

12-in. bale of 10 rods................................... $\$ 1.50$

24-in. bale of 10 rods. . . . . . . . . . . . . . . . . . . . . . . . . 3.00

$60-\mathrm{in}$. bale of 10 rods......................................... 5.00
72 -in. bale of 10 rods. . . . . . . . . . . . . . . . . . . . . . . . 5.50
48-in. extra heavy wire, bale of 10 rods....... 6.75
$60-i n$. extra heavy wire, bale of 10 rods........ 8.30
47 -in. Hog Fence, bale of 10 rods.
$55-\mathrm{in}$. Hog Fence, bale of 10 rods...................... 5.50

## Staples, per lb............................................. 10

## Hexagon Poultry Fencing

We also carry in stock for those desiring a cheaper

$$
\text { 2-inch Mesh, No. } 19 \text { wire. }
$$

Per bale, 150 ft . long, 3 ft . Wide................. $\mathbf{\$ 2 . 6 0}$
Per bale, 150 ft long, 4 ft . wide....................... 3.40
Per bale, 150 ft. long, 5 ft . wide................ . . . 4.20
Per bale, 150 ft . long, 6 ft . wide. . . . . . . . . . . . . . 5.00
Less than full bales, 75c per 100 square feet.

## Hexagon Poultry Fencing

## 1 -inch Mesh. No. 20 wire.

Per bale, 150 ft . long, 1 ft. wide............... $\$ 2.00$
Per bale, 150 ft . long, $11 / 2 \mathrm{ft}$. wide............... 3.00
Per bale, $150 \mathrm{ft}$. long, ${ }_{2} \mathrm{ft}$ wide................ 4.00
Per bale, 150 ft . long, $21 / 2 \mathrm{ft}$. wide................. 5.00
Per bale, 150 ft long, 3 ft . wide....................... 60
Less than full bales $\$ 1.50$ per 100 square feet.

## Wire Nests

Made from heavy japanned steel wire, and will last a life time. Prices 15 c each; $\$ 1.50$ per doz.

## Poultry Killing Knife

Every poultry raiser who kills and dresses for market should own one of these Knives. This knife penetrates the brain in such a manner that the feathers loosen and come off easy. Price.............................................. . 50 c

## Gape Worm Extractor

This instrument is especially constructed for the purpose, and is the best Gape Worm Extractor manufactured, Postpaid ..............................25c

## Pigeon Nests

Molded from clay, and are easily cleaned. Prices: 8 in., 10 c each, 3 for 25c; 10 in., 15c each, 2 for 25 c .

## Pillings' Caponizing Instruments

Any one purchasing a set of these caponizing instruments will find he is making no mistake. Price, complete with full instructions in paper box, \$2.50; in velvet-lined case, \$2.75. We will send with each set of caponizing instruments a booklet entitled, "Complete Guide for Caponizing" fully illustrated.

## Tycos Incubator Hygrometer

For determining the relative humidity in the egg chamber of any and all incubators. A practical and satisfactory device for this purpose. Direct readings are obtained instantly without the use of reables or calculations. Price....................... $\$ 1.50$

Thermometers-Brooder. High grade, tested, 40c; y mail, 45 c .
Thermometers-Incubator. High grade, tested 50 c ; by mail, 60c.

Coop Seals-Per doz., 30c; 25 for 50c; 60 for $\$ 1.00$; 100 for $\$ 1.50$.

## FEEDING DEVICES FOR POULTRY



## Chanticleer Feed-Exerciser

The Chanticleer is sparrow, rat, mouse and rain proof. It is practically indestructible and will last many years. Will feed any kind of feed, coarse, fine or mixed. Adjustable to feed lavishly or only a grain or two at a time. You may sleep late, but the hens will begin their exercise at day-break.
No. 1. 12-quart hopper, weight $15 \mathrm{lbs} . . . . . \$ 3.50$ No. 2. 24-quart hopper, weight $20 \mathrm{lbs} . . . .{ }^{2} .25$

## DOUBLE QUICK GRAIN SPROUTER

No. 1, for 25 to 40 hens, 1-5 bu. or more dry No. 2, for 50 to 75 hens, $1-3$ bu. or more dry grain, 12 to 14 qts..
No. 3 , for 100 to 150 hens, $3 / 4$ bu. or more dry
No. 4 , for 200 to 300 hens, $11 / 2$ bu. or more dry
No. 5 , frain, 400 to 600 hens, 3 bu. or more dry
Ko. 6, for 800 to 1,200 hens, 6 bu. or more dry grain, 192 to 224 qts........................

Furnished complete with lamp, thermometer and directions.

## SIEFS AND WFIGETS APPROXIMATELY

No. 1 is $14 \times 12$ and 27 inches high, has 3 trays, and weighs 30 lbs .

No. 2 is $16 \times 14$ and 31 inches high, has 4 trays, and weighs 40 lbs .

No. 3 is $21 \times 16$ and 38 inches high, has 5 trays, and weighs 50 lbs.
No. 4 is $23 \times 18$ and 44 inches high, has 6 trays, and weighs 70 lbs.
No. 5 is $27 \times 23$ and 50 inches high, has 7 trays, and weighs 100 lbs .

No. 6 is $37 \times 27$ and 60 inches high, has 8 trays. and weighs 200 lbs .


## WALL FEED PANS

These wall pans are manufactured from galvanized iron so they can be hung upon the wall of the house at any height desired. Price, 35c each; $\$ 3.50$ doz.


## The 20th Century Dry Mash Feeder

Designed for feeding all kinds of dry ground feed, such as bran, chop middlings, meat meal and beef scraps, either single or mixed; and to supply the urgent needs and demands for a hopper that would feed this class of feed without waste. This is the only hopper that will successfully open when the hen desires food and close when she is through eating.
No. $1,1 / 2$ bushel.
No. 2, 1 bushel.

## 20th Century Poultry Feeder and Exerciser

makes it possible to reduce the labor one half or more, for when the rounds of filling the hoppers has been made, the work of grain feeding is complete for several days, depending on the size of machine and flock to be fed; $\inf _{\mathrm{f}} \mathrm{fact}$, the labor is reduced to filling the hens do the rest.
 The 20th Century Poultry Feeder and Exerciser will feed your flocks and do it better than the old way; and the beauty of it all is they never over feed. The hen can get little by little as her system requires. The crops are not gorged at any time and the birds are always alert, strong, healthy and vigorous, from the fact that the food is thoroughly assimilated.


Poultry Feeder-1-2-3


PoultryFeeder, 1-2-3
For Dry Mash, Scraps, Shells, Grit, Charcoal or any poultry feed. When used for one kind of feed only take out separator; for two kinds put separator in one end; when used for three kinds, say scraps, three kils and grit, put separator in the middle and you have three separate feeders. 75 c each; $\$ 8.00$ doz.

## FEEDING DEVICES FOR POULTRY-continued.

## NATIONAL ADJUSTABLE FEEDER

WASTE-PROOF, RAT-PROOF,

The No. 0 and No. 1 feeder has two compartments, the No. 2 has three compartments, divided by two partitions in the hopper, and as many different kinds of feed may be fed without mixing as there are compartments in the feeder; or the feed may be mixed as desired.

## SIZES AND PRICES.

No. 0. Total length, 16 in., capacity, 1 peck, shipping weight, 10 No. 1. Total length, ${ }^{2}$ ft., capacity, $1 / 2$ bushel, shipping weight 15 lbs. Price.......................................................... $\$ 3.00$ No. 2. Total length, 3 ft ., capacity, 1 bushel, shipping weight.


Chick Servers.

## CHICK SERVERS

These chick servers give out pure food and water at all times until the supply is consumed. They are made of galvanized iron in two parts, cone and basin. Price 25 c each; $\$ 2.75$ dozen.

## Atsatt's Feeder

Atsatt's Fe e der meets a long standing want. Chicks can not get into it to dirty the food. The top removes to fill or clean. Equally good for water or food comfort for the poultry, is very little trouble. No expense and no danger.
Chick size...........25c. Poultry size............ 50 c

## HUB CHICKEN FEEDER

is sanitary,
 keeps the feed clean and dry. ${ }_{C} \mathrm{C}_{\mathrm{h}} \mathrm{i}$ c c kC h
ens can not
not ens can not
get into it, get into it, waste the feed. It will pay to use th $\theta$ Hub Feeder for S mar a 1 At nis
At night turn the feeder over backwards until face down and nothing can get into it. 9 -in. Feeder.........35c 15 -in. Feeder.


Prairie State Grit and Shell Box.-This box is made of heavy galvanized iron, with 3 compartments, for grit, oyster shell and charcoal. It is provided with a cover or lid, which protects the contents.

50 c each; $\$ 5.00$ doz.
Prairie State Beef Scrap and Dry Eood Hopper. This hopper is made of heavy galvanized iron, with lid, handle, sloping bottom and extra deep apron with guard. Taper is from the top down, being larger at the bottom. It will feed beef, scrap and dry mash. and will not clog. Capacity, 10 pounds scrap.

$$
50 \mathrm{c} \text { each; } \$ 5.00 \text { doz. }
$$

Dry Food Hopper: Two compartment. Dry feeding has become very popular as it is an economical and labor-saving method of feeding poultry. We recommend poultry. hopper for all who desire to use this method. It has two compartments, one for dry mash, holding about six quarts and the other about three quarts for beef scrap, being made of heavy galvanized iron of heavy galvanized more lasting than wood. The hinged lid protects the grain. 60c ea.; $\$ 6.50 \mathrm{doz}$.


## DRINKING FOUNTAINS FOR POULTRY AND PIGEONS



## McCULLOUGH'S WALL FOUNTAIN

These fountains are equally serviceable for young chicks or adult fowls, and especially useful.
Brooder size ................35c
1 gallon .................... 50c
2 gallons ....................75c

## Peerless Drinking Fountain

Easy to clean and fill and fowl can not injure their combs when drinking. Simple in construction, durable and practical.

PEERLESS HEATER


The water will never freeze or become too warm. Easy to care for Costs but little to run. The lamp holds one pint kerosene. Will last one week (daytime). An air space between oil well and heat chamber makes it impossible for gas to form. Price . . . . . . . . . . . . . . . . . . . . . $\$ 1.00$

Peerless Combination 5 qt . Fountain and Heater complete......\$1.50
Galvanized Sanitary Drinking Fountains
Made of heavy galvanized iron and not injured by freezing. Price, 1 gal.,

## Galvanized Sanitary Fountain Heaters

For use on Galvanized Sanitary Drinking Fountain. Lamp burns 24 hours. Little expense and no danger. Great comfort for the poultry; promotes growth and increases eggs. Price, 1 gal. size, 50c.

## DRINKING FOUNTAINS FOR POULTRY AND PIGEONS-continued.

## FOOD OR WATER CUPS

Made of iron, strong and durable. Hold $1 / 2$ pint each; enough for all ordinary purposes. The wires can be bent to secure them to any style coop and they will soon save their cost in preventing waste of food. Price, each, 15c; per doz., $\$ 1.50$.


Sanitary Stoneware Fountain.

## W. R. Poultry Fountain

This fountain is made in one piece, strongly built; largely used for Pigeons. Prices: $1 / 2$ gal., 25c; 1 gal., 35c; 2 gal., 50c.

## Sanitary Stoneware Fountain

The top is removable allowing the fount to be thoroughly cleaned inside. The proper thing to use where medicine is given in the drinking water. 1-qt., 20 c each. $\$ 2.00 \mathrm{doz}$. $\begin{array}{lll}\text { 2-qt., } & 25 \mathrm{c} \text { each. } & 2.50 \\ \text { doz. } \\ \text { 4-qt., } & 35 \mathrm{c} \text { each. } & 3.50 \mathrm{doz} .\end{array}$ $\begin{array}{ll}\text { 8-qt., } 45 \mathrm{c} \text { each. } & 4.50 \mathrm{doz} \text {. }\end{array}$

## Galvanized Prairie State Drinking Fountains



These tountains are light, non-breakable, and easily cleaned.

$$
1 \text { qt., 20c each; } 2 \text { qt., 25c; } 4 \text { qt., 35c; } 8 \text { qt., } 50 \mathrm{c} .
$$

Prairie State Open Top Duck Fountain, 2 gallon size, $\$ 1.00$ each.

## Banty Sanitary

 Drinking Fountains The only sanitary fountain $t h a t$ can be filled quickly and after filling at house can easily be carried to poultry yard, It $p r o t e c t s$$w a t e r ~ a t ~ a l l ~$ Water at all
times, can not times, can not wading or roostgalvanized iron: is extremely simple and can not get out of order. $1 / 2$ gal. 50c; 1 gal. 75c; 2 gal. $\$ 1.00$.


Patent Applied For.
N.W.AUTOMATIC FEEDER AND FOUNTAIN
Made to fit any half gallon, quart or pint Mason jar. We do not furnish jars. Two Sizes: No. 5, having 5 inch pan, 10 c
each, 3 for 25 c . No. 6, having 6 inch pan, 15 c

## Leg Bands for Poultry and Pigeons

 Know Your Hens on Sight SPIR-OLO LEGBANDSBlack, White, Blue, Pink, Amber and Ruby

25 c a aozen, 50 c for $25,85 \mathrm{c}$ for $50, \$ 1.50$ for 100.
The bands are the cheapest on the market. First cost is the only outlay. They will last a lifetime. In ordering be sure to specify your breed. 25, 60 c for 50 , $\$ 1.00$ Pigeon Bands, 20c a doz., 35c for

## $25,60 c$ for $50, \$ 1.00$ for 100 . <br> The Smith Double

## Clinch Leg Bands

Fastens with two clinches passing through the band in such manner as to form a protection to themselves, making it at once the best open band on . dor. 75 c for 30 c ; 50 for 50c; 100 Clinch Leg Bands. for 75 c .

## Leader Adjustable Leg Bands

Made of aluminum in 2 sizes, which are adjustable to fit any fowl, large or small. Impossible for them to come off, being held by a double lock.
No. ${ }^{1}$ size for Bantams and Leghorns. No. 2 size for all larger breeds and Turkeys. 15c per doz.; for all 12 cger breeds and Turkeys.
$250 \mathrm{c} ; 50$ for $50 \mathrm{c} ; 100$ for 75 c .

## Leg Bands For Pigeons

OPEN BANDS-One size only, suitable for any breed and any number desired. Price: per doz., 15c; $\$ 1.00$ per 100 ; postpaid, $\$ 1.10$.

## ROOFING PAPERS

Rex Flintkote Roofing. $1 / 2$ ply, \$2.00; 1 ply, $\$ 2.25$; 2 ply, $\$ 3.25$; 3 ply, $\$ 4.25$; all per square of 108 ft . Ibex Waterproof Insulating, Building and Sheathing Paper. 1 ply, $\$ 2.50 ; 2$ ply, $\$ 4.00$; all per roll of 1,000 square feet.
Red Rosin Sheathing Paper. No. 1, 60c; No. 2, $75 \mathrm{c} ; \mathrm{No}, 3, \$ 1.00$; all per roll.
Tarred Felt Roofing. 2 ply, 80 c ; 3 ply, $\$ 1.00$; all per roll.

Tin Roofing Caps. 10c. per lb.
Roofing Nails, 8c per lb.
Rex Roof Paint. Per gallon, 75c; 5 to 10 gal. ots. 60 c per gallon.
Flintkote plastic. 1 qt., 40c; 1 gallon, $\$ 1.25$.

## EGGS FOR HATCHING <br> FROM THOROUGHBRED STOCK.

We can furnish eggs from any standard bred poultry, also of ducks, geese or turkeys. We can also furnish Incubator Eggs by the hundred or thousand. almost any variety, on short notice. Write for special prices.

## MISCELLANEOUS SUPPLIES

## Lice Expelling Nest Egg

The Lice expelling Nest Egg is the standard combined nest egg and lice killer. The use of this nest egg insures absolute freedom from all kinds of insect pests in the nests. Being prepared with great care for this special purpose, they last a long time and always retain their effectiveness. Prices: 5 c each; 50c per dozen.

PORCEIAAIN NEST EGGS.
These eggs are made of first-class flint glass, and should last a life-time. Prices: 2 for 5 c ; per dozen. 20 c .
McCullough's Roup Cure. Small size package, 50 c ; large size package, \$1.00.

Iee's Germozone. Bottles, 50c each; Tablets, 50c per box.
Lee's Insect Powder. $11 / 4 \mathrm{lb}$. box, 20 c .
Iree's Iiquid Lice Killer. 1 qt. can, $35 \mathrm{c} ; 1 / 2$ gal. can, 50c; 1 gal. can, 75c.
Iee's Egg Maker. 21/2 1b. package. 20c.
Cypher's Iice Paint. 1 qt. can, $30 \mathrm{c} ; 1 / 2$ gal. can, 50 c : 1 gal. can, 75 c .

Napcreol, disinfectant, 1 gal. can, \$1.00.
Fssex Model Nutrine Chick Salts. 2 lb. package, 50c; 5 lb. package, \$1.00.

## CONKEY'S POULTRY REMEDIES

Conkey's Roup Remedy. 25c, 50c and $\$ 1.00$ per pkg. Conkey's Bronchitis Remedy. 50 c per package. Conkey's Cholera Remedy. 25c and 50c per pkg. Conkey's Chicken Pox Remedy. 50c per package. Conkey's Limber Neck Remedy. 50c per package. Conkey's Scaly Ieg Remedy. 25c per package. Conkey's Gape Remedy. 50 c per package.
Conkey's White Diarrhoea Remedy. 50 c per pkg. Conkey's Poultry Tonic. 25c per package.
Conkey's Blackhead Remedy. 50c per package. Conkey's Rheumatic Remedy. 50c per package. Conkey's Poultry Worm Remedy. 50c per pkg. Conkey's Poultry Laxative. 25c per package.
Conkey's Healing Salve. 25c per package. Conkey's Hea
Conkey's Iice Powder. 5 oz. package, 10c; 15 oz . package, 25c; 48 oz. package, $50 \mathrm{c} ; 100$ oz. package, $\$ 1.00$.

Conkey's Lice Liquid. 1 qt., 35c; 2 qts., 60c; 1 gal., \$1.00.

Conkey's Laying Tonic. $11 / 2 \mathrm{lb}$. package, 25c; $31 / 4$ lb. package, $50 \mathrm{c} ; 7 \mathrm{lb}$. package, $\$ 1.00$; 25 lb. pail, $\$ 3.00$

Conkey's Noxicide. Small size, 35c; 1 qt., 60c; $1 / 2$ gal., 90c; 1 gal., $\$ 1.50$.

Conkey's Sulphur Fumigating Candles. 10c each, 3 for 25c; 1 doz., $\$ 1.00$.
Conkey's rly Knocker. Per gt., 35c; $1 / 2$ gal., 60c; per gal., $\$ 1.00$; 5 gal. can (Jacketed) $\$ 4.00$.

## PRATT'S POULTRY AND STOCK REMEDIES

Pratt's Poultry Regulator. 26 oz. package, 25c; 4 lb . package, 50c; 12 lb. package, \$1.25; 25 lb . pails, $\$ 2.50$; 100 1b. bag, $\$ 9.00$

Pratt's Roup Cure. 25c, 50c and \$1.00.
Pratt's Fead Lice Ointment. 10c and 25c.
Pratt's Gape Remedy. 25c and 50c.
Pratt's Gape Remedy. 25 c and 50c. 25 c and 50 c .
Pratt's White Diarrhoea Remedy. 25c and 50c.
Pratt's Lice Killer (powdered form). Trial size,
10c; 1 1b. package, 25c; $21 / 2 \mathrm{lb}$. package, 50 c .
Pratt's Liquid Iice Killer. 1 qt. can, 35c; 2 qt. can, 60c; 1 gal. can, $\$ 1.00$.
Pratt's Cholera Remedy. 25c and 50c.
Pratt's Animal Regulator. 24 oz. package, 25c; 50 oz . package, 50 c . Can also furnish $25 \mathrm{lb} ., 50 \mathrm{lb}$., and 100 lb . bags. Prices on application.
 bag, 75c. Can also furnish in 25

Pratt's Ereave, Cough \& Cold Cure. 1 lb. package, 50c.
Pratt's Veterinary Colic Cure. 50c and $\$ 1.00$ per bottle.

Pratt's Spavin Paste. ${ }^{50 \mathrm{c}}$ per box.
Pratt's $\operatorname{Liquid}$ Spavin Remedy. $\quad 50 \mathrm{c}$ and $\$ 1.00$ per bottle. Distemper and Pink Eye Cure. 50c per bottle.

Pratt's Dip and Disinfectant. 1 gal. can, \$1.00. Can also furnish in 5 and 10 gal. cans, also in 30 and 50 gal. barrels. Prices on application.

Pratt's Iiniment. 25c, 50 c and $\$ 1.00$ bottles.
Pratt's Bag Ointment. 25 c and 50 c boxes.
Pratt's Peerless Hoof Ointment. 25c and 50c boxes. Condition Powder. 25c, 50c and $\$ 1.00$ per package.
Pratt's Healing Ointment (for man or beast). 25c and 50c boxes. Powder. 4 oz . sifting top can, 25 c .
 Pratt's Cow Tonic. 25 Per package, 1 bs in pails.
12 lbs. and $\$ 3.50$ for
Pratt's Calf Tonic. Per package, $50 \mathrm{c} ; 12 \mathrm{lb}$.
12 Pratt's Calf Tonic. Per package, 50c; 12 lb.
pails, $\$ 2.00$.
Pratt's Hog Cholera Specific. Per package, 50c;
12 1b. pails, $\$ 2.00 ; 25 \mathrm{lb}$. pails, $\$ 3.50$
Pratt's Germ-a-thol. $25 \mathrm{c}, 50 \mathrm{c}$ and $\$ 1.00$ per bottle. Can. also furnish in 1, 5 and 10 gallon cans and 50 gallon barrels. Prices on application.

## DR. HESS \& CLARK REMEDIES

## Poultry Panacea. $11 / 2 \mathrm{lb}$. package, 25c; 5 lb . pack-

 age, 60c; 12 lb . package, $\$ 1.25 ; 25 \mathrm{lb}$. pails. $\$ 2.50$. Instant Touse Killer. 1 lb. package, 25c; 3 lb . package, 60c.tock Tonic. $21 / 2$ lb. package, 25c; 7 lb. package, $50 \mathrm{c}, 12 \mathrm{lb}$ bags, 75c. Can also furnish in 25 lb ., 50 1b, and 100 lb . bags. Prices on application.

Fealing Powder. 4 oz. pkg., 25c; 10 oz. pkg., 50 c .
Worm Powder. $11 / 2 \mathrm{lb}$. package, 50 c .
Heave Powder. $11 / 2$ lb. package, 50c.

SPRATT'S POULTRY AND GAME FOODS
Spratt's Patent Poultry Food. Per lb., 10c; 3 lbs., 25c; 10 lbs., 75c; 25 lbs., $\$ 1.75$; 50 lbs., $\$ 3.25$; 100 1 bs ., $\$ 5.50$.
Spratt's Patent Chick Meal. Per lb., 10c; 3 lbs., 25c; 10 lbs., 75c; $25 \mathrm{lbs} ., \$ 1.75$; $50 \mathrm{lbs} ., \$ 3.25 ; 100$ lbs., \$5.50.
Spratt's Game Food. Per lb., 10c; 3 lbs., 25c; 10 Ibs., 75c; 25 lbs., \$1.75; 50 lbs., \$3.25; 100 lbs., \$5.50.

Spratt's Pheasant Meal. Per lb., 10c; 3 lbs., 25c; 10 lbs., 75c; 25 lbs., $\$ 1.75$; 50 lbs., $\$ 3.25$; 100 lbs., $\$ 5.50$.

Spratt's Turkey Meal. Per 1b., 10c; 3 lbs., 25c; 10 ibs., 75

## Spratt's Foods For Dogs, Puppies And Cats

Spratt's Patent Dog Cakes. Per lb, 10c; 3 lbs. 25c; 10 lbs., 75c; 50 lbs., $\$ 3.50$; 100 lbs., $\$ 6.50$.

Spratt's Patent Puppy Cakes. Per lb., 10c; 3 lbs ,
$25 \mathrm{c} ; 10 \mathrm{lbs} ., 75 \mathrm{c} ; 50 \mathrm{lbs}$., $\$ 3.50$; $100 \mathrm{lbs} .$, , $\$ 7.00$.
We offer the following Dog Foods in cartons.
Larger quantities, prices on application.
Spratt's Cod Liver Oil Dog Biscuits. $25 c$ each.
Spratt's Meat Fibrine "Terrier" Cakes. 25c each
Spratt's "Pet Dog", Biscuits. Cartons, 25c each
Spratt's "Toy Pet" Biscuits. Cartons, 25c each.
Spratt's Malt and Cod Liver Oil Biscuits. 25c ea
Spratt's Charcoal Dog Cakes. Cartons, 25c each.
Spratt's Plain Puppy Meal. Cartons, ioc each.
Spratt's Pepsinated Puppy Meal. Tins, 25c each
Spratt's Cat Food. Cartons, 25c each.
Spratt's Malted Kitten Food. Tins, $25 c$ each.
Spratt's Dog Remedies
Spratt's Alterative Cooling Tablets. 50c postpaid.
Spratt's Anti-Rickets Tablets. 50c postpaid.
Spratt's Anti-Vomit Tablets. 50c postpaid.
Spratt's Chorea Tablets. 50c postpaid.
Spratt's Digestive Tablets. 50c postpaid.
Spratt's Diarrhoea Tablets. 50c postpaid.
Spratt's Distemper Tablets. 75c postpaid
Spratt's Eczema and Sarcoptic Mange Remedy.
50c postpaid.
Spratt's Kidney Tablets. 50c postpaid.
Spratt's Liniment. 50c postpaid.
Spratt's Liver Tablets. 50c postpaid.
Spratt's Mange Remedy. 50c postpaid.
Spratt's Purgative Tablets. 50c postpaid.
Spratt's Rheumatism Tablets. 50 c postpaid
Spratt's Worm Capsules. 50 c postpaid.
Spratt's Worm Capsules for Puppies. 50 p postpaid.
Spratt's Tonic and Condition Tablets for Toy
Dogs and Puppies. 50c postpaid.
Spratt's Distemper Tablets for Toy Dogs and Puppies. 50c postpaid.

Spratt's Vermifuge Capsules for Toy Dogs and Puppies. 50c postpaid

Spratt's Dog Soap (white). 25c per tablet, post-

## paid

## RUST'S POULTRY REMEDIES

## EGG PRODUCER.


Box of 50 pills.
Box of 112 pills. ..... 25
Box of 250 pills. ..... 1.00

SOLUBIE ROUP POWDER.
4 oz. size........... $\$$. 25 oz. size. . . . . . . . . 50 c 20 oz. size. . . . . . . . . 1.00

## RUST'S HAVENS CLIMAX POWDER.

3 oz. box.............25c 5 lb. box.............. $\$ 1.00$
 IICE KILIING POWDER.
5 oz. box, $10 \mathrm{c} ; 16$ oz. box, 25c; 48 oz. box, 50c; 112 oz. box, \$1.00.

## IIQUID TICE KILIER.

Quart can, 35c; half gallon can, 60c. $\$ 4.00$.
QUIGK HEALING POWDĖR.
$3 / 4$ oz. size, 25 c .

## Lambert's Death To Lice Remedies

Death to Lice Powder. 5 oz . size, 10c; 15 oz. size,
25c; 48 oz. size, 50c; 100 oz. size, $\$ 1.00$.
Death to Lice Ointment. 10 c and 25c.
Death to Lice Special. 4 oz . Size, 10c; 16 oz. size, 25 c.

Valuable books, giving complete descriptions of all the above Remedies, and other information,


## FEEDS FOR POULTRY, PIGEONS AND BIRDS

PRICES SUBJECT TO MARKET CHANGES.

## FEEDS FOR POULTRY



Blatchford's Calf Meal. 1000 lbs. $\$ 35.00 \quad 500 \mathrm{lbs} . \$ 18.75100 \mathrm{lbs} . \$ 4.00 \quad 50 \mathrm{lbs} . \$ 2.25 \quad 25 \mathrm{lbs} . \$ 1.25$ ABOUT BAGS:-When $25-\mathrm{lb}$. or $50-\mathrm{lb}$. lots are ordered, there will be an extra charge of 10 c each for bags.

PIGEON FEEDS


## PURE SEEDS FOR BIRDS

[^3]Above quotations represent market values at time of going to press.
Send us an estimate of your wants in larger quantities for special prices.

## I N D E X

| Abutilon ............. 31 | Climbing Plants Page |
| :---: | :---: |
| Achillea ............... 31 | Clover . .............. 28 |
| Aconitum ............ 31 | Cobea ................ 37 |
| Acroclinium .......... 31 | Coleus ............37, 61 |
| Adlumia ............. ${ }^{31}$ | Collards ............. 9 |
| Ageratum ......31, 61 | Convolvulus Major...37 |
| Agrostemma .......... 31 | Coriander ........... 30 |
| Alfalfa . ${ }^{\text {a }}$............ 28 | Coreopsis . . . . . . . 35,64 |
| Alternanthera ........61 | Corn- |
| Alyssum | Sugar |
| Amaranthus .......... 32 | Field |
| Amaryllis . . . . . . . . . . 56 | Pop . . . . . . . . . . . . . 10 |
| Ammobium .......... 32 | Kaffir |
| Ampelopsis ..........32 | Salad ............... ${ }^{9}$ |
| Anemone .............64 | Shellers ............ 89 |
| Anthemis ..........64 | Cosmos |
| Antirrhinum .....34, 64 | Cotton Seed |
| Aquarium ............ 83 | Cow Peas ........... 29 |
| Aquilegia $\ldots . . .3 .32,64$ | Cress $\ldots$............... ${ }^{9}$ |
| Araucaria ...........61 | Cucumber |
| Arctotis Grandis.....32 | Currants |
| Aristolochia ..........71 | Cutters Clover |
| Artichoke ............ ${ }^{1}$ | Cuttle Bone |
| Ash Sifter ............ 80 | Cyclamen |
| Asparagus ....1, 24, 32 | Cyperus |
| Asparagus Sprengeri.61 | Cypress Vine |
| Asters ${ }_{\text {Azalea }}$ | Dahlia ... |
| Azalea ${ }_{\text {Balsam }}$ …............. 68 | Dandelion Extermi- |
|  | nator .......... ${ }^{\text {n9 }}$. 81 |
| Baptisia ............64 64 | Delphinium |
| Barley.... .......... ${ }_{81}^{29}$ | Dewberries |
|  | Dianthus ............ ${ }^{39}$ |
| Baskets, Wire ....... 81 | Dibbles |
| Bay Trees ........... 71 | Dielytra |
| Beans ............2, 3, 4 | Digitalis ........38, 64 |
|  | Dolichos |
| Bedding Plants ....61 | Dracaena |
| Begonia ......34, 56, $6^{4}$ | Dryer, Clothe |
| Bellis (Daisy) ......34 | Echinocystis (Wild |
| Bellows ..........78, 81 | Cucumber) ........ 40 |
| Berries ............. 73 | Edging Knife ........ 81 |
| Bignonia Radicans...71 | Egg Plant . .......12, 24 |
| Bird Seeds .......... 30 | Endive ............... 12 |
| Bird Gravel .......... ${ }^{30}$ | Eschscholtzia ........ 40 |
| Blackberries ..........73 | Euphorbia . . . . . . . . . ${ }^{40}$ |
| Blue Grass .......... ${ }^{27}$ | E'vergreens . . . . . . . 72 |
| Blue Grass Stripper.. 83 | Ferns . . . . . . . . . . . . 61 |
| Bocconia ............64 |  |
| Boltonia ............664 | Fibrotta Ware ...... 79 |
| Books..3d page of cover | Ficus ................ 81 |
| Boxes, Porch ........ 81 | Fish Food . . . . . . . . 83 |
| Boxwood Trees . . . . . 71 | Flax ............29, 30 |
| Bone Meal ........... 74 | Flower Pots ..........79 |
| Brachycome .......... 34 | Forks ................ 81 |
| Broccoli | Fruit Pickers ......... 81 |
| Brooders . . . . . . . . . . 88 | Fumigators ........... 81 |
| Broom Corn .......... 28 | Funkia ............... 64 |
| Browallia | Gaillardia ........ 40,64 |
| Brussels Sprouts | Garden Reels and |
| Bryonopsis ...........34 | Lines . ............. 81 |
| Buckwheat .......... 29 | Geraniums .......40, 61 |
| Bulbs..........56 to 60 | Gladiolus ............59 |
| Bug Death .......... 74 | Glass Cutters ........ 81 |
| Cabbage.......6, 7, 24 | Glazing Points ..... 81 |
| Cabbage Plants ...... 24 | Gloxinia ............ 60 |
| Caladium . . . . . . . . . . 56 | Gnaphaliv |
| Calceolaria ........... 35 | Godetia . . . . . . . . . . . 40 |
| Calendula ........... 35 | Gold Fish |
| Calliopsis ............ 35 | Gomphrena ........... 40 |
| Campanula ......35, 64 | Gooseberries .......... 73 |
| Candytuft ....... 35,43 | Gourds |
| Cane Stakes ........ 81 | Grape V |
| Canna ........35, 57, 61 | Grasses, |
| Caraway .............. 30 | Ornamental ....41, 67 |
| Cardiospermum ......35 | Grass Catchers |
| Carnation | Grass Hooks |
| Carrots $\ldots$............ $8^{8}$ | Grass Seeds......26, 27 |
| Castor Beans.....330, 50 | Gypsophila |
| Cart Butler, Hand.... 80 | Hand Cart |
| Catalpa Bungei ...... 72 | Hedge Plants ....... 70 |
| Cauliflower .......8, 24 | Helianthus . . . . . . 41,64 |
| Celeriac .............. ${ }^{9}$ | Helichrysum ........42 |
| Celery | Heliotrope . . . . . . 42,61 |
| Celosia . . . . . . . . . . . 36 | Hemp |
| Centaurea . . . . . . 3661 | Hemrocalis ..........64 |
| Centrosema . ........ 36 | Herbaceous Per- |
| Cherries, Japanese ..72 | ennial Plants...64, 67 |
| Chicory | Herb Seeds .......... 12 |
| Chives | Hibiscus .........42, 64 |
| Chrysanthemum ..37, ${ }^{\text {Cineraria }}$ | Hoes :..........78, 81 |
|  |  |
| Clematis | Honeysuckie ..........71 |


| Horse Radish Pa Page | Primula ............. Page |
| :---: | :---: |
| Hose, Rubber ......... 84 | Privet |
| Hose Couplers ...... 84 | Pruners . . . . . . . . . . . 82 |
| Humulus Japonicus.. 42 | Pumpkin $\ldots . . . . . .20,30$ |
| Hunnemannia ........42 | Pumps, Spray ....77, 78 |
| Ice Plant ............ 43 | Putty Twemlows |
| Impatiens ............ 43 | Putty Bulbs |
| Iucubators ........... 88 | Pyrethrum |
| Insecticides | Radish |
| Ipomea | Raffia |
| Iris | Rakes ....... |
| Kale | Rape, Dwarf |
| Knives . . . . . . . . . . . 81 | Raspberries ..........73 |
| Kochia Tricophylla... 43 | Reeds |
| Kohl Rabi . .......... 12 | Rhodanthe |
| Labels, Pot ......... 81 | Rhododendron |
|  | Rhubarb |
|  | Ricinus Rollers, L |
| Lavender .............43 | Roses ${ }^{\text {a }}$, . . . . . . . . 62,68 |
| Lawn Cleaner ........ 84 | Rudbeckia .......50, 67 |
| Lawn Fence . . . . . . . . 81 | Ruta Baga ${ }^{\text {R }}$, |
| Lawn Grass......25, ${ }^{26}$ | Salpiglossis |
| Lawn Mowers, etc..... 85 | Salsiry |
| Iettuce $. . . . . . . . . . .13,30$ | Sanseveri |
|  | Sash, Hot- |
| Lily of Valley .... ${ }^{\text {L }}$ | Saws ${ }_{\text {Scabiosa }}$ |
|  | Scale Destroy |
| Lupins . . . . . . . . . . . . 43 | Scissors |
| Lychnis ............64 | Scythes |
| Lythrum ........64, 67 | Seed Sow |
| Maderia Vine ........60 | Shasta Daisy |
| Mangel | Shears |
| Marigold ........44, 61 | Sheep Manure |
| Martynia ............. ${ }^{16}$ | Shovels ……..... 88 |
| Mastica ${ }^{\text {Mattock }}$. ${ }^{\text {a }}$.......... 81 | Shrubs, Flowening...68 |
| Mattock $\quad$ Mats, ${ }^{\text {Hot-bed }}$ :......... 81 | Silkaline <br> Smilax |
| Melon, Musk ........ 14 | Sod Cutter |
| Melon, Water ....15, 30 | Soja Beans |
| Mignonette ..........44 | Sorghum |
| Millet . . . . . . . . . . 28 , 30 | Spades |
| Mimosa . . . . . . . . . . . 44 | Speltz |
| Mimulus . . . . . . . . . . 44 | Spinach |
| Mole Traps .........81 | Sprayers |
| Momordica .......... 44 | Sprinklers ........82, |
| $\mathrm{Moon} \mathrm{Flower}_{\text {Mess }}$ | Squash |
| Mulberry Teas, ${ }^{\text {M }}$. ${ }^{\text {a }}$ | Stands, Plant |
| Weeping .......... 72 | Stocks |
| Mushroom Spawn .... 16 | Stokesia Cyanea..50, 64 |
| Mustard .........16, 30 | Strawberries $\because . . . . .73$ |
| Myosotis . . . . . . . . . . 44 | Sunflower ....29, 30, 41 |
| Nasturtium ....45, 46, ${ }^{\text {Oats }}$, ${ }^{\text {a }}$ | Sweet Peas $\ldots . . .52,53$ <br> Sweet William...53, <br> 10 |
| Oil, Lawn Mower.... 81 | Sweet Potato Plants.. 24 |
| Okra ................. ${ }^{16}$ | Teosinte |
| Onion seed and sets.. 17 | Thermometers |
| Ornamental Trees ...72 | Thistle or Dock |
| Osage Orange $\ldots$...... 30 Oxalis | Cutters |
| Palms …......6.60,61 | Tin Foil |
| Pandanus ........... 61 | Tobacco |
| Pansy ............47, 61 | Tomato |
| Paragon Sprayers ...77 | Torenia |
| Parsley . . . . ......... 19 | Tree Guard |
| Parsnip . . . . . . . . . . ${ }^{20}$ | Trees |
| Peas . . . . . . . 18, 19, 29 | Tritoma |
| Peas, Cow ........... ${ }^{29}$ | Trowels |
| Peas, Field . . . . . . . . . 29 | Tuberos |
| Peat, Jersey .........74 | Tubs, Pl |
| Pentstemon .........67 | Turnip |
| Pepper - .........20, 24 | Vases, Florists . ${ }_{5}$ |
|  |  |
| Pinks ................ 66 | Vinca . . . . . . .54, 61, 67 |
| Plant Bed Cloth..... 82 | Violet |
| Planet Jr. Tools. ${ }^{\text {P6, }} 87$ | Wallfower |
| Plants, Vegetable.... 24 | Watering Pots |
| Plants, Climbing. . . . 71 | Wax Grafting |
| Paeonies ............ 66 | Whitloof |
| Poppy …....30, 49, 67 | Wild Garden Flower.. 55 |
|  | White Clover |
| Potato Hooks . ....... 81 | Wisteria |
| Potting Soil ........74 | Xeranthemun |
| Poultry Supplies. 88 to 95 | Yucca ............ ${ }^{\text {¢ }}$. ${ }^{67}$ |
| Powder Guns ........ 81 | Zinnia ...........55, 61 |

## The J. M. McCullough's Sons CO., SEED MERCHANTS, No. 315 Walnut Street, CINCINNATI, OHIO.

# RURAL BOOKS AND PERIODICALS. 

## ALL BOOKS SENT POSTPAID AT PRICES GIVEN.

ALFALFA CLOVER. (F. D. Coburn). Illustrated, 160 pages.
ANIMALS, FARM, COW, HORSE, SHEEP, SWINE. (E. V. Wilcox). A valuable manual of how to breed, care for, use and doctor all the animals on the farm.
ASPARAGUS. (F. M. Hexamer). It's culture for home use and market. Illustrated, 174 pages..............

BEAN CULTURE. A practicai treatise. (Glenn C. Sevey) Illustrated, 144 pages.

BEE CULTURE, A B C of. (A. I. Root). A cyclopedia of matters pertaining to Bees..
BULBS AND TUBEROUS ROOTED PLANTS. (Allen). Full directions for their culture, indoors and outdoors. .

CABBAGE, CAULIFLOWER, AND ALLIED VEGETABLES. (Allen). Tells all about them from seed time to harvest.

CELERY CULTURE. (W. R. Beattie). Illustrated, 150 pages.
CEREALS THE, IN AMERICA. (Thomas F. Hunt). Illustrated, 449 pages
CRYSANTHEMUM THE. (A. Herrington). Illustrated, 160 pages.
CLOVERS AND HOW TO GROW THEM. (Thomas Shaw). Illustrated, 337 pages
CYCLOPEDIA OF AMERICAN AGRICULTURE. (Bailey). The complete work comprises 4 volumes $7 \times 10$ in. over 650 pages each, fully illustrated. Sold in sets only.

CYCLOPEDIA OF AMERICAN HORTICULTURE. (Bailey.) The complete work comprises 4 volumes $8 \times 11$ inches, over 500 pages each, substantially and handsomely bound in cloth and gold. Sold in sets only ...
EGG FARM, THE NEW. A practical, reliable manual. Illustrated, 331 pages.
FLORICULTURE, PRACTICAL. (Henderson). A guide to the successful cultivation of florists' flowers.

FORAGE AND FIBRE CROPS IN AMERICA. (Thomas F. Hunt). Illustrated, 428 pages.

FORAGE CROPS, OTHER THAN GRASSES. (Shaw) How to cultivate, harvest and use them. Illustrated.
FORCING BOOK, THE. (Bailey). The best book on forcing vegetables under glass.

FORESTRY, PRACTICAL. (A. S. Fuller). A treatise on propagation, planting and cultivating.
FRUIT CULTURE, SUCCESSFUL. (Samuel T. Maynard). A practical guide to the Cultivation and propagation of Fruits. Illustrated, 265 pages.
FRUIT CULTURIST, SMALL, (Fuller). This book covers the propagation and culture of small fruits.

FRUIT GARDEN, HOW TO MAKE A. (S, W. Fletcher). A practical work on the subject, illustrated...........

FRUIT GARDEN, THE. (Barry). A standard work in Fruit and Fruit Trees. Illustrated.
GARDEN MAKING. (Bailey). Suggestion for the culture of Flowers, Fruits and Vegetables.
GARDENING, LANDSCAPE. (Waugh). A treatise on general principles governing outdoor art. .

GARDENING FOR PLEASURE. (Henderson). A guide to the Amateur in Flower, Fruit and Vegetable Gardening.
GARDENING FOR PROFIT. (Henderson). The standard work on Market and Family Gardening.

GINSENG. (Kains.) Its cultivation, harvesting, marketing and market value.

GRASSES, FARM OF THE UNITED STATES. (W J.
Spillman). Illustrated, 248 pages....................... 1100
GREENHOUSE CONSTRUCTION. (Taft). A complete treatise on Greenhouse structures.
GREENHOUSE MANAGEMENT. (Taft). The latest book on this important branch of horticulture.
HANDBOOK OF PLANTS. (Henderson). A dictionary of plants with cultural hints for important sorts.

300
HEDGES, WINDBREAKS, SHELTERS AND LIVE FENCES. (Powell). A treatise on the pianting, growth and management of hedge plants
INSECTS AND INSECTICIDES. (Weed). A practical manual concerning noxious incesis

150
IRRIGATION FOR THE FARM, GARDEN AND ORCHARD. (Henry Stewart). Illustrated, 276 pages. . 100
MUSHROOMS, HOW TO GROW THEM. (Wm. Fal-
coner). The most practical work on the subject...... $\mathbf{1} 00$
MUSHROOM CULTURE. Treatise on.................. . . . $\mathbf{1 0}$
NURSERY BOOK, THE. (Bailey). A complete guide to the multiplication of plants
ONION CULTURE. (T. Greiner). Illustrated, 140 pages
POTATO, THE. Its Cultivation, Development, Harvesting, Storing, Marketing. (Samuel Fraser). Illustrated 180 pages.

75
POULTRY APPLIANCES AND HANDICRAFTS. (G. B. Fiske). Over 100 Illustrations.

50
POULTRY ARCHITECTURE. (G. B. Fiske). A treatise on poultry buildings of all grades. Illustrated, 150 pages

POULTRY FEEDING AND FATTENING. (G. B. Fiske). A handbook on the standard and improved methods of Feeding and Marketing. Illustrated, 160 pages...... 50
POULTRY PRODUCTION, PROFITABLE. (M. G. Kains). Illustrated, 288 pages.

POULTRY, THE AMERICAN STANDARD OF PERFECTION. It contains a complete description of all the recognized varieties of fowls, gives instruction to judges, etc. New edition, Illustrated.
PRUNING BOOK, THE . (Bailey). Principles and prac-
tice of pruning and training............................ 150.
RHUBARB CULTURE.
pages................................................... . . . . . 50
ROSE, THE, ITS CULTIVATION, VARIETIES. (Ellwanger). The standard American work on this subject 125
SILOS, ENSILAGE AND SILAGE. (Manly Mills)..... 50
STRAWBERRY CULTURIST. (A.S. Fuller). Illustrated 25
SPRAYING CROPS. (C. M. Weed). A treatise explaining
the prlnciples and practice. Illustrated, 140 pages...

TOBACCO CULTURE. Gives full practical details.... 25
TOMATO CULTURE. (W. W. Tracy). Illustrated, 150
pages. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50
TRUCK FARMING IN THE SOUTH. (A. Oemler). Il-
lustrated, 274 pages..................................... 100
VEGETABLE GARDENING. (Green). A manual on the
growing of vegetables for home use and market...... $\mathbf{1 0 0}$
VIOLET CULTURE, COMMERGIAL. (Galloway). The
only comprehensive work on the subject............... 150
WEEDS OF THE FARM AND GARDEN. (L. H. Pammel)
Illustrated, 300 pages............................... 150

Catalogue of
SEeds
Bulbs
Plants
Shrubbery
Fruit Trees
FERTILIZERS
Insecticides
Garden Tools
Poultry Supplies


The J.M.MCCulLough's Sons Co. 316 WALNUT ST. CINCINNATI, OHIO.


[^0]:    Postage Must be Added if Wanted by Mail. See Postal Rates, Second Page of Cover,

[^1]:    No. 500. Made to fit Mower, 12 to $16 \mathrm{in} .$. $\$ 0.75$
    No. 510.
    16 to 22 in. .75

[^2]:    hatching.
    Reliable Spring-lever Poultry Punch
    Petty's Poultry Punch.
    Model Lever Toe Marker.

[^3]:    Canary Seed, recleaned.....10c. per lb. 3 lbs. 25 c . Rape Seed, recleaned........10c. per lb. 3 lbs. 25c. Lettuce Seed, recleaned......20c. per lb. 3 lbs. 50 c . Cuttle Bone ................ 5c. per oz. perlb. 40c.

    ## Hemp Seed, recleaned.

    Hemp Seed, recleaned.......10c. per lb. 3 lbs .25 c .Sunflower Seed, recleaned...10c. per lb. $4 \mathrm{los.25c}$.
    Millet Seed, recleaned......10c per lb. 3 lbs 25 c .
    Bird Gravel ............... lb . package 10 c .

