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Horticulture.

Season
1929

Simpson Seed AND Floral Co.

1551 CHAMPA ST.

DENVER, COLO.

D. N. Shoemaker
Vegetable Seed Trials
MAR 10 1929

**O. K.
Sanitary**

**POULTRY
LITTER**

\$4.75 per 20 bushel bale F. O. B. Denver

**POULTRYMEN INSIST ON O. K. SANITARY
POULTRY LITTER**

IT IS A LABOR SAVER. It does not need to be changed often. Many poultrymen leave it down for a full year before replacing.

IT PREVENTS DAMPNES, because of its great absorbing power. It is dry and will absorb several times its own weight of water.

IT IS SANITARY. It appears to have certain germicidal properties. Laboratory tests have shown it to be remarkably free from bacterial and parasitic life.

IT PREVENTS THE SPREAD OF DISEASE, by keeping the house dry and clean.

IT ABSORBS OFFENSIVE ODORS, keeping the atmosphere of the house clean and pleasant.

IT KEEPS THE BIRDS CLEAN. It prevents droppings from sticking to them, and thus reduces the number of dirty eggs.

IT MAKES AN IDEAL DUST BATH. It has a tendency to reduce lice, probably by suffocation.

IT KEEPS THE HOUSE WARM IN WINTER, by acting as an insulator. It keeps the birds off the cold, damp floor.

IT IS ECONOMICAL. Though the original cost may be slightly higher, it outlasts other litter two or three times, and saves the labor of handling.

IT PREVENTS FIRE. It takes an intense heat to make O. K. Poultry Litter smolder, and it will never blaze.

IT MAKES A VALUABLE FERTILIZER. Not only does it preserve the plant-food value of the droppings, but the organic matter in peat moss itself is highly beneficial to the soil. Many poultrymen sell their O. K. POULTRY LITTER manure-mixture to gardeners, florists and nurserymen at a high price.

How to Compute Parcel Post Postage

Many items in this catalog are quoted "Postage Prepaid," and when so priced, we pay postage. We have endeavored to mark every item either "Postage Prepaid" or "Postage, Express, or Freight Extra" so that there may be no doubt in your mind whether or not you should include postage.

When postage is extra it is best to include same in your remittance as it costs you 12c plus a 5c return charge, to have parcel post matter sent C. O. D.

The following table offers a simple, convenient way to compute parcel post postage:

Local zone, Denver, 7c for first pound, 1c for each additional 2 pounds.

1st. and 2nd. zones, (within 150 miles from Denver). Number of pounds plus 6 cents.

3rd. zone, (150-300 miles from Denver). 2 times number of pounds plus 6 cents.

4th. zone, (300-600 miles from Denver). 4 times number of pounds plus 4 cents.

5th. zone, (600-1000 miles from Denver). 6 times number of pounds plus 3 cents.

6th. zone, (1000-1400 miles from Denver). 8 times number of pounds plus 2 cents.

7th. zone, (1400-1800 miles from Denver). 10 times number of pounds plus 2 cents.

8th. zone, (over 1800 miles from Denver). 12 times number of pounds plus 1 cent.

EXAMPLE:—You live 280 miles from Denver and are ordering merchandise weighing 12 pounds. You are in zone 3, and postage would be— $12 \times 2 = 24$ cents, plus 6 cents = 30 cents.

NOTE:—Limit of weight for delivery within the first, second and third zones is 70 pounds; to all other zones the limit is 50 pounds. If weight exceeds these figures it is necessary to make two or more packages and figure postage on each package.

GUARANTEE:—We offer only merchandise in which we have confidence, but can not be responsible for the results as there are too many circumstances over which we have no control, such as weather, insect pests, etc., etc.; therefore we give no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds, bulbs, plants we send out, and we will not be in any way responsible for the crop. Simpson Seed and Floral Co.

SEEDS

For the Vegetable Garden

There is pleasure as well as profit in a vegetable garden. Once you have eaten fresh pulled radishes from your own garden, you will never again be satisfied with the store or vegetable wagon product.

Radishes, Lettuce, Carrots, Beets, Beans, Peas, and many others, are easily grown and require little care. A comparatively small space will supply your table all through the spring and summer with healthful, succulent vegetables.

Resolve to have a garden in 1929 and prepare the soil just as soon as it can be worked in the spring. An occasional sprinkling with Swifts Vigoro, will work wonders in your vegetable and flower garden.

Palmetto Asparagus.

Palmetto. Earlier than Conover's. Of Southern origin, but suitable for the North also; large, productive. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 80c.

Asparagus Roots, any variety, 2 yr. old, 50c doz.; \$2.00 per 100. Postage extra, 5c doz.; 35c per 100.

Artichoke

One ounce will sow 100 feet of row, and produce about 500 plants. A deep, rich, sandy loam is best adapted to this plant. The seed should be sown thinly in drills 1½ in. deep, 1 ft. apart. When large enough transplant to permanent rows 3 feet apart, allowing 2 feet between the plants. They reach maturity the second year, and in the northern states should be protected in winter by covering of leaves or coarse manure. A bed will continue in bearing for several years.

Improved Large Green Globe. Heads large, fleshy and of rich flavor. Cooks up nicer than usual because of fine grained flesh. Pkt., 10c; ½ oz., 60c.

Asparagus

One ounce will sow 50 feet of row and produce about 800 plants. Sow the seed early in spring in drills 12 to 14 inches apart and when well started thin out to 3 inches apart. When 1 or 2 years old, transplant into permanent beds, thoroughly trenched, 2 feet or more in depth. Set the plants in rows 2 feet apart, and not less than 18 inches apart in the row. Care should be taken that the roots are well spread and set at a depth of 6 inches below the level of the bed. Cover only 2 or 3 inches, and fill in gradually as the plants grow. Very little, if any, should be cut the first year after transplanting, but a fair crop can be cut the second year. Every fall, after the tops have been cut down, apply a dressing of coarse manure, and in the spring fork it in. An occasional top-dressing of salt at the rate of ½ pound to the square yard is also beneficial and keeps down the weeds.

Conover's Colossal. A standard sort, green in color. Pkt., 5c; oz., 15c; ¼ lb., 30c; lb., 80c.

BEANS

One pound will plant 100 feet of drill.

CULTURE. No crop responds more readily than Beans to good soil and cultivation. A light, rich, well-drained loam which was manured for the previous crop is the most desirable. If too rank manure is used it is apt to make the plant run too much to vine.

Beans are very sensitive to both cold and wet and it is useless to plant them before the ground has become dry and

Burpee's Stringless Green Pod.

warm. The large returns will result from planting in drills from two to three feet apart. Cover the seed one and one-half to two inches deep and thin the young plants three to six inches apart in the row. If planted in hills, make the hills about two feet apart each way. For succession, plant at intervals of two weeks till mid-summer. The plants up to the time of blossoming should have frequent shallow cultivation, but any mutilation of the roots by cultivation after the plants come into bloom is likely to cause the blossoms to blast and so cut off the crop. Cultivation should always be very shallow and it is useless to expect a crop from a field so poorly prepared as to need deep stirring after planting.

Bush Green Pods

We pay postage on Beans.

Burpee's Stringless Green Pod. Earliest, most hardy and absolutely stringless. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 35c.

Long Yellow Six Weeks. Early, long podded variety, good producer, tender and brittle. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 35c.

Giant Stringless Green Pod. Extra long, brittle pods. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 35c.

Ex. Ea. Red Valentine. Round fleshy pods. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 30c.

Dwarf Horticultural. Excellent for green or shell beans. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 30c.

California or Colorado Butter. Larger than Lima and shaped like a Navy. Best shell bean grown. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 35c.

Fordhook Bush Lima. Does well in light soil. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 40c.

Henderson's Bush Lima. Smaller than regular Lima but better producer in this territory. Pkt., 5c; $\frac{1}{4}$ lb., 10c; lb., 35c.

Bush Wax Pods

Improved Golden Wax. Pods broad and flat and very abundant. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 45c.

Dwarf Black Wax. Deep yellow pods, crisp and brittle. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 45c.

Davis White Wax. Favorite with market gardeners, makes good shell bean. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 45c.

Brittle Wax or Kidney Wax. Favorite for canning. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 45c.

Golden Cluster Wax. Similar to Golden Wax above. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 45c.

Pole or Running Varieties

Kentucky Wonder. King of all Pole Beans. Long, stringless pods in great abundance. Green. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 45c.

Kentucky Wonder Wax. Yellow pod variety equal to Kentucky Wonder. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 45c.

Lazy Wife. White seed, green pod, stringless. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 45c.

Dutch Case Knife. Old time favorite. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 45c.

Cut Short or Corn Hill. Planted with corn. Pkt., 5c; $\frac{1}{4}$ lb., 15c; lb., 45c.

TABLE BEETS

CULTURE. Beets require a deep, rich, mellow soil, and may be sown from early spring to commencement of summer. Drop about an inch deep in drills 12 to 18 inches apart. One ounce to 60 feet of drill; 6 to 8 lbs. to the acre. When well up thin to from 3 to 4 inches apart. The young beets pulled out of the row are excellent when used as spinach.

Detroit Dark Red. Favorite Beet for table or canning. Deep blood red throughout. Tender and fine flavor. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c.

Early Blood Red Turnip. Turnip Beet. Early variety, tender and second to above. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c.

Early Eclipse. Globular shape, early and tender. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c.

Ex. Early Egyptian. Earliest of Beets. Larger than most varieties but not as tender. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c.

Long Smooth Blood. Best long beet grown. Late variety hence good for second crop. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c.

Swiss Chard or Follage Beet. More desirable than Spinach for greens. Leaves are broad, flat and green with white stem. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 65c.

the heaviest yielding Mangels there is, producing under proper conditions from 40 to 80 tons per acre, many specimen roots weighing from 40 to 50 pounds, and being of fine texture and good quality. Pkt., 5c; ¼ lb., 20c; lb., 50c.

Detroit Dark Red.

Sugar and Stock Beets

Culture. The soil for these should be plowed more deeply and the drills should be farther apart than for garden Beets. Sow in April or beginning of May in drills from 2 to 3 feet apart, and when 4 to 5 inches high thin to 12 or 15 inches in the row. As soon as frost comes dig up the roots, cut top off and then pile 5 to 6 feet deep on a raised and sloping situation and cover at frost with straw or hay and one inch of earth. As it gets colder, increase to 5 or 6 inches of earth; by so doing all danger of heating is obviated, and the roots keep until next summer. Four or five pounds are sown to the acre. Sugar Beets are also used for stock feeding, and while not as large as the Mangels, they have a higher percentage of sugar and therefore are of higher feeding value.

Sugar Beets

Vilmorin's Improved Sugar. This is one of the best for making sugar. The skin is a creamy color and flesh is white. Pkt., 5c; ¼ lb., 20c; lb., 50c.

Lane's Imperial Sugar. Large, thick, tapering variety; yields almost as much as mangels. Is sweet and rich and very desirable for stock. Pkt., 5c; ¼ lb., 20c; lb., 50c.

Selected Golden Tankard. Most nutritious variety in cultivation; roots large, ovoid, but filled out at top and bottom, terminating with a small tap-root; flesh deep golden yellow, solid, crisp, sweet and rich; excels all others in milk-producing qualities, and very productive. It has no superior as a keeper. Pkt., 5c; ¼ lb., 20c; lb., 50c.

Stock Beets

Long Red. Our stock of this variety has been grown in Germany and is the result of continued careful selection. It is one of

Broccoli

This plant belongs to the family of "Brassica," and is cultivated like Cabbage, Cauliflower and the other members of that family. Sow early in the spring, then transplant and set out. It will form heads

DON'T DELAY!

ORDER TODAY!

like Cauliflower, but it is more hardy and of less delicate flavor. It is grown in cold localities to some extent and also in the south for winter use.

Purple Cape. Pkt., 5c; $\frac{1}{4}$ lb., 60c; lb., \$1.50.

Large White Mammoth. Pkt., 5c; oz., 50c.

Brussels Sprouts

Brussels Sprouts. Are a very delicate vegetable and deserve a more general cul-

tivation than they receive. The plant belongs to the Cabbage family and should be grown and cultivated like Cabbage. The "sprouts" which grow around the strong upright stems of the plant, look like miniature cabbages. Very hardy, improved by frost. One ounce will produce 2,000 plants.

Dwarf Improved. Bearing a large crop of small, solid, tender heads. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c.

CABBAGE

Have you ever made any Sauerkraut or Liberty Cabbage? It is easy to make, and we will be glad to tell you how. It sure will taste good to you next winter.

CULTURE. For early Cabbages sow the seed in a hotbed in March or April, covering the seed from one-quarter to one-half inch deep and when big enough transplant to another bed. As soon as the ground is in good condition, transplant outside in rows 2 feet apart and 15 to 18 inches in a row. The soil should be mellow, rich and well drained. For late crops the seed can be sown in a cold frame or even in the open ground, and then transplanted in rows 3 feet one way and 2 feet the other, so as to be able to work with a horse and cultivator. One ounce of saltpeter dissolved in 3 gallons of rain water, sprinkled over the Cabbage or Cauliflower will destroy the green worm. The liquid being clear does not color the Cauliflower or Cabbage heads. Fine air-slacked lime or tobacco dust sifted on the young plants as soon as the fleas appear on the ground will prevent them from doing harm. One ounce of good seed will produce 2,000 plants.

Earliest Varieties

Copenhagen Market. The earliest round head, short stem Cabbage offered today. The heads are even in size of about 8 lbs. average and will stand longer than other early varieties without bursting. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 80c; lb., \$2.50.

Cabbage. Copenhagen Market.

Early Jersey Wakefield. Cone shaped heads maturing from late in June to July. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.00.

Early Winingstadt. But little later than Wakefield. Heads round and solid. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.00.

Glory of Enkhuisen. Medium early, solid round heads. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 80c; lb., \$2.50.

Early Dwarf Flat Dutch. One of the most reliable headers. Medium early. Can be planted close on account of absence of "wing" leaves. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.00.

All Seasons. Good variety for kraut. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.00.

Second Early or Round Headed

Premium Late Flat Dutch. Favorite for late crop. Makes enormous size and uniform solid heads. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.00.

Danish Ballhead or Hollander. Hardest heading variety known. One of the best keepers. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 80c; lb., \$2.50.

Mammoth Red Rock. Largest heading Red Cabbage. Fully as large as Flat Dutch and fine grained. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 80c; lb., \$2.10.

If you don't find a lot of bargain seed collections in this catalog; remember it's because we ditch 'em when they get too old to grow.

AMERICANS EAT FAR TOO LITTLE CABBAGE. NO VEGETABLE KNOWN IS SO RICH IN NECESSARY MINERAL SUBSTANCES.

CARROTS

One ounce will sow 100 feet of drill; 3 to 4 pounds for an acre.

CULTURE. Carrots may be sown in hotbeds in February for early use. In open ground from March to first of July; however, main crop will produce best results if sown from first of May to first of July. Thin out early plantings to 5 inches apart in the row and main crop 6 to 8 inches apart. The rows should be 10 inches apart for early crop and 15 to 18 inches for main crop. Cultivation should be carefully performed to keep down the weeds and deep hoeing between the rows will give a large increase in the crop. Sow from 2 to 3 pounds to the acre. Carrot tops, cut from young plants, may be used for garnishing.

Ox Heart, or Guerande. Especially desirable for clay soil. Root is short and thick and flesh is bright orange in color. Heart is tender and not woody. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Danver's Half Long. One of the leading varieties. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Danver's Half Long.

Chantenay. Medium early and very productive. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Improved Long Orange. Good in light sandy soil. Larger than other late varieties. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Early Scarlet Horn. Extra early and for that reason recommended for market. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Large White Belgian. Used for stock only. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

Celery

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

Culture. The conditions necessary for successful Celery cultivation are good seed, plenty of manure and complete fertilizers, moisture and cultivation. The most suitable soil is rich loam finely pulverized and highly enriched with 30 to 40 loads to the acre of good stable manure. Sow seed in boxes for early planting; later plants

may be produced from seeds sown in frames or open ground. Transplant 4 inches apart when 3 inches high, water and protect until well rooted, then transplant into rows for garden culture 18 inches to 2 feet apart, for field culture in rows 4 to 6 feet apart; set the plants from 8 to 12 inches apart, supply plenty of moisture and see that plants receive thorough cultivation. They may be set either on the surface or in well manured trenches 1 foot in depth. To blanch draw earth around the plants, being careful not to cover the tops of the center shoots.

Giant Pascal. By far the most popular Celery. Medium to small size but wonderfully well flavored. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Golden Self Blanching. Blanches easily and larger than Pascal. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Celeriac

(TURNIP-ROOTED CELERY.)

Culture. Grown mostly for its bulbous roots. Seeds are started and plants set out in the same way as advised for Celery. Celeriac is not usually blanched, but is very fine when thus treated, and much harder than the stalk Celeries.

Large Smooth Prague. An improved form of turnip-rooted Celery; round smooth roots with very few side roots. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00.

Chicory

Culture. Sow seed in early spring as for Carrots, in rows 12 to 16 inches apart and thin the plants to 2 or 3 inches. To blanch the leaves for salad in winter, dig the roots in the fall, cut the leaves off a little above the root crown and place them horizontally in layers alternating with layers of sand or loam in a dark cellar, the tops all pointing outward of the sloping heap. One ounce will plant about 100 feet of drill.

Large Rooted. The dried roots are roasted and mixed with coffee or used as a substitute. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Collards

Culture. This is a variety of Cabbage largely grown in the South, where it is extensively used for man and beast. It forms a large, loose, open head, or mass of leaves. Freezing does not injure the crop. Sow seeds in the South from January to May, August to September.

True Georgia. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Corn Salad

Culture. Sow during August and September in drills $\frac{1}{4}$ inch deep and 6 inches apart. If the weather is dry when the seed is sown, firm soil to insure germination. Keep weeds down. Just before winter cover thinly with leaves or straw.

Large Round-Leaved. Matures in four or five weeks. Sow two ounces to 100 feet of drill. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Cress

Curled or Peppergrass. This small salad is much used with lettuce, to the flavor of which its warm, pungent taste makes a most agreeable addition. Sow very thickly in shallow drills; cover on a smooth surface at short intervals throughout the season. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.00.

Water Cress

Quite distinct from Garden Cress, and thrives only when its roots and stems are submerged in water. It is one of the most delicious of small salads and should be planted whenever a suitable place can be found. Pkt., 5c; oz., 45c.

Chives

Chives are perfectly hardy perennial plants of the onion type. They are grown for their small leaves, which are produced very early in the spring, for giving a mild onion flavor to various dishes. The tops appear early in the spring and can be shorn off close to the ground as needed. They can be grown also in pots in a sunny window during the winter. Pkt., 10c; roots, 20c bunch, 3 for 55c, postpaid.

Eggplant

One ounce will produce 2,000 plants. A strong, uniform heat is required to germinate the seeds, and a thoroughly pulverized, well enriched, warm soil is necessary to perfect the fruit. Transplant to 3 feet apart each way, and when about a foot high support the plants by drawing the earth up around them.

New York Improved Purple. Fruit large, fine and free from thorns, and produces until frost; skin rich purple. Pkt., 10c; $\frac{1}{4}$ oz., 20c; oz., 50c; $\frac{1}{4}$ lb., \$1.75.

Kale or Borecole

One ounce will produce 2,000 plants; 4 lbs. to the acre.

Culture. Sow from the middle of April in hotbeds; transplant in June and treat the same as Cabbage. Of all the cabbage tribe, this is the most tender and delicate, and much more would be grown if its excellent qualities were generally known. Drill in rows of $2\frac{1}{2}$ feet and thin to 6 to 10 inches. The varieties are extremely hardy.

Dwarfed Curled Greens. Extensively grown as winter greens. Sow in autumn in rows 1 foot apart and treat as Spinach. Plants very hardy, 4 to 6 inches high. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Tall Curled Scotch. Grows about 18 inches in height and spreads, sometimes reaching 3 feet in diameter. Desirable for winter use. Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c.

Garlic Sets

Garlic sets or bulbs are planted from September to March in rows 12 inches apart, placing the sets 4 inches apart in the rows, 2 inches deep. Lb., 50c.

Cauliflower

One ounce will produce 3,000 plants. The cultural directions given for Cabbage will apply for this crop, but the soil should be more heavily manured. Keep the ground well hoed, and bring the earth gradually up to the stems. Water freely in dry weather, and especially when they begin to head. Never allow the plants to become crowded in the seed-bed; transplant them with great care, as any check will injure, if not entirely prevent the formation of the head. For late Cauliflower set the plants in a cool, moist place in the garden. When the heads have formed, the long leaves should be drawn over and tied above them, to keep off the sun and rain. Some gardeners break the leaves over the heads, but this method is not entirely effective.

Henderson's Early Snowball.

Henderson's Early Snowball. One of the best types of Cauliflower on the market. Its compact habit of growth renders it a very profitable variety to force under glass, and it does well for late planting, as well as for early crops. It is a sure header. Pkt., 15c; $\frac{1}{4}$ oz., 75c; oz., \$2.25; 2 ozs., \$4.00.

Endive

One ounce will sow 150 feet of drill. Sow in any ordinary dry soil in drills 1 foot apart, covering lightly. When the plants are about 2 inches high, thin to about 12 inches in the row. When the plants have attained full size, gather up the leaves and tie together at the tips. The inner leaves, in the course of three or four weeks, will become beautifully blanched.

Green Curled. Finely curled, dark green leaves; excellent plant. Not only most useful as a salad, but much used for garnishing. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Broad Leaved Batavian. (Escarolle.) Leaves are broad and nearly plain; chiefly used in stews and soups. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

CUCUMBERS

CULTURE. One ounce will plant 100 hills; 2 pounds will plant one acre. They succeed best in a warm, rich, moist loamy soil. Plant in hills 4 feet apart each way. Leave four of the strongest plants to each hill, but do not thin out until the plants are strong enough to resist the attacks of insects. The English forcing varieties can be grown in hotbeds where the temperature does not fall below 65 degrees at night. Many of this class grow from 20 to 30 inches in length.

Improved Long Green. Good for pickling when small and unexcelled as slicing Cucumber when matured. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Boston Pickling. Best pickling variety. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Early Cluster. Medium to small; produced in clusters. Tender and well flavored. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Japanese Climbing. Grown on trellis. Makes excellent cover for fence or porch while producing edible variety of fruit. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Improved Long Green.

White Spine. Early, prolific and continuous bearer. One of the most popular varieties. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Early Frame. Fruit straight and smooth. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Davis Perfect. Excellent for forcing under glass; also for outdoor culture. Medium in size. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Kohl-Rabi

A plant forming a firm bulb above the ground and bearing short leaves. The bulb is the edible part, and when cooked tastes very much like turnip. If the seed is sown early, the young bulbs will be ready for use in spring, and a planting in July will secure good vegetables for fall use. The seed should be planted in the open garden in 18-inch rows and the young plants thinned to four or six inches. It does not transplant well, unless when very small.

Early White Vienna. The most desirable variety for general use. It is very early and has small tops. Color, light silvery green. Pkt., 5c; oz., 20c; ¼ lb., 75c.

Early Purple Vienna. Has a bright purple bulb. The leaf and stems are green and tinged with purple. Pkt., 5c; oz., 20c; lb., 75c.

Leek

One ounce will plant 200 feet of drill; 4 lbs. to the acre.

Culture. Leek is very hardy and very easily cultivated. Sow early in spring in rich soil ¼ inch deep, in drills 1 foot apart. When 6 inches high, transplant in rows 10 inches apart each way; as deep as possible, so that the neck, being covered, may be blanched.

Large London Flag. The oldest and best known and most largely grown variety. Pkt., 5c; oz., 20c; ¼ lb., 60c.

Horseradish Roots

No home garden is complete without them. 35c doz., postpaid.

Do not overlook that part of our catalog devoted to **POULTRY FEEDS** and **SUPPLIES**. We challenge any Western house to show as complete a line of really **SUCCESSFUL Feeds and Appliances** as we sell.

LETTUCE

CULTURE. Sow in hotbed or boxes in February or March and in open ground as soon as it can be worked; transplant to rows 8 inches apart both ways. Extra rich, mellow soil, high cultivation and moisture are demanded by lettuce to secure best results. Lettuce is hardy and makes better growth when mercury is below 60 degrees; when above 75 degrees the plant is soon drawn out of shape. A succession of plantings at intervals of two weeks after first outdoor planting is desirable. In August any of the varieties can be sown either outdoors or in frames. In October, Grand Rapids and Denver Market may be planted in frame to head in winter. Always sow seed thin and then thin out plants to stand from 6 to 8 inches apart in row. Lettuce requires good soil, carefully enriched with well rotted manure and well pulverized to secure the best results. For hotbed and very early sowing, we especially recommend Big Boston, Grand Rapids, Early Curled Simpson and Black Seeded Simpson.

Loose or Cutting Varieties

Black Seeded Simpson. One of the best leaf varieties. Leaves are fluffy but not crinkled. Tender and sweet. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 50c.

Simpson's Early Curled. Crisp and tender. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 50c.

Grand Rapids. Popular because of large bunches. Leaves are rather smooth with frilled edges. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 50c.

Denver Market. Semi-head. Wrinkled leaves. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 50c.

are red edged. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 50c.

Hanson's Improved. Favorite with market gardeners. Heads easily if not grown too close together. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 50c.

Iceberg. Leaves have a tendency to turn in, hence sure to head. Tender and crisp. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 50c.

Mustard

When young the leaves are used for salad, which although slightly pungent, is very appetizing. Mustard may also be cooked like Spinach and will make a very wholesome and delicious food. Sow early in the spring in shallow drills. One ounce will sow 5 feet of drill.

Mammoth Southern Curled. The large curled leaf variety, popular in the South, where the seed is sown in the fall for spring use. Pkt., 5c; oz., 15c; ¼ lb., 25c; ½ lb., 75c.

Brown or Black. More pungent in flavor than the white. Seed black. Pkt., 5c; oz., 15c; ¼ lb., 30c; ½ lb., 75c.

Okra

Culture. Sow late in the spring, after the ground has become warm, in drills 3 feet apart, where the plants are to remain. Thin out to from 9 to 12 inches. Soil should be well manured. Plants may also be raised in pots or hotbed, and transplanted.

White Velvet. Of tall growth, pods never prickly to touch, being always round and smooth. Pkt., 5c; oz., 10c; ¼ lb., 20c; ½ lb., 50c.

Early Dwarf Prolific. Grows low, but stocky and is very productive. Pkt., 5c; oz., 15c; ¼ lb., 25c; ½ lb., 60c.

Learn to know your seed man as you would your grocer or your implement dealer. If he serves you satisfactorily stay with him; if he is unreliable and tricky, quit him cold for he does not merit your patronage.

California Cream Butter.

Heading Varieties

California Cream Butter. Large, rich, creamy heads. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 50c.

May King. Extra large, solid heads, green outside but cream colored within. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 50c.

Paris White Cos. Distinct from other varieties. Leaves long and straight but when tied up heads nicely. Pkt., 5c; oz., 10c; ¼ lb., 30c; ½ lb., 50c.

Prize Head. Not really a heading variety though usually so catalogued. Leaves

MUSKMELONS

One ounce to 60 hills; 3 pounds to acre.

CULTURE. A rich, deep sandy soil well worked and highly manured is of the utmost importance. Plant when all danger of frost is over, in hills 5 to 6 feet apart each way; scatter a dozen seeds to a hill and afterwards thin out to 3 or 4 plants. Cantaloupes and cucumbers are often destroyed by lice and should be well sprinkled with slug shot when the plants appear. When they have 4 leaves, pinch off the end of the main shoots, which will cause lateral branches to put forth sooner and strengthen the growth of the vines.

Burrell's Gem. An orange fleshed Rocky Ford. Fine grained and spicy. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 80c.

Rocky Ford. Oval shaped of netted type. Green flesh of fine flavor. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 80c.

Emerald Gem. One of the earliest. Green skin and salmon flesh. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Hackensack. Ribbed variety, large and round. Good market variety. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

Netted Nutmeg. Medium size, early, green flesh. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 80c.

Osage, or Miller's Cream. Pink fleshed, spicy flavor. Very heavy producers. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 80c.

Casaba, or Large Persian. Long, oval shaped. Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.00.

Honey Dew Melon. Comparatively new type of melon. Flesh is deep green, unusually sweet and will keep 3 to 5 months after ripe. Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

Burrell's Gem.

WATERMELONS

Selected Strains of the Choicest and Best Varieties

One ounce to 60 hills; 4 or 5 pounds to the acre.

Culture. The culture of the Watermelon is very similar in all respects to that of the musk varieties, being hardier and of more vigorous habit. However, it may be planted in May, before settled warm weather appears, in hills not less than eight feet apart, and thinned to two vines per hill.

Kolb's Gem. The best shipping melon. Rind thin but tough. Striped, slightly oval and of good size. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Rocky Ford. Oblong, green rind, superb flavor. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Tom Watson. A large melon, oblong and green with thick netting on entire surface. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Kleckley's Sweet. Early, medium sized and very sweet. Skin dark green, flesh bright red. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Mountain Sweet. Long green type. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Georgia Rattlesnake. Sometimes called "Gypsy." Very large and good shipper. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Kansas Stock, or Colorado Preserving. A boon to dry farmers. Often weighs 60 to 70 lbs. Will keep all winter and can be fed to stock all winter. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Pepper

One ounce will produce 1,500 plants.

Ruby Giant, flesh mild and very thick. Pkt., 10c; ¼ oz., 15c; oz., 45c.

Chinese Giant, very large with thick mild flesh. Pkt., 10c; ¼ oz., 15c; oz., 45c.

Ruby King, extra large and mild. Pkt., 5c, ¼ oz. 15c, oz. 45c.

Long Red Cayenne, commercial variety, long, bright red, very hot. Pkt. 10c, ¼ oz. 15c, oz. 45c.

ONIONS

One ounce of Onion Seed for 200 feet of drill; 4 to 5 pounds for an acre.

Culture. Onions must have a clean and very rich soil. A good loam, previously cultivated for two years, is the best. The land should be highly fertilized with well-rotted manure and fertilizers. Fresh stable manure has a tendency to produce soft, unsalable onions. Sow in drills 1 foot apart as soon as the ground can be worked in the spring. Thin plants to three or four inches apart, using rake and hoe frequently to keep down the weeds. The finest onions are produced by sowing seed in hot beds in February and March and transplanting seedlings to the open ground in rows where they are to mature. Onions require a very high culture, and weeds soon choke them out if permitted to grow. Bottom sets are little onions, grown the previous year; when set out in the spring they soon form large onions. If you wish to grow onion sets, use 70 to 80 pounds of seed to the acre, drilled in very thick.

Yellow Globe Danvers.

Yellow Globe Danvers. Brownish-yellow skin with mild flavor. A very excellent variety. Pkt., 10c; oz., 25c; ¼ lb., 60c; lb., \$2.00.

Yellow Danvers. Reliable flattened variety. Mild and same color as above. Pkt., 10c; oz., 25c; ¼ lb., 60c; lb., \$1.95.

Prizetaker. Heavy yielder on account of immense size. Skin pale straw color, flesh white and mild. Pkt., 10c; oz., 25c; ¼ lb., 60c; lb., \$2.00.

Large Red Weathersfield. Best red va-

riety. By far the finest strain of red Onions. Pkt., 10c; oz., 30c; ¼ lb., 90c; lb., \$3.00.

Southport Red Globe. Matures slightly ahead of Weathersfield. Pkt., 10c; oz., 25c; ¼ lb., 60c; lb., \$2.00.

Silver Skin, or White Portugal. Medium sized, rather flat. Our strain is particularly excellent. Pkt., 10c; oz., 25c; ¼ lb., 70c; lb., \$2.10.

White Barletta Pickling. Best pickling onion. Pkt., 10c; oz., 25c; ¼ lb., 70c; lb., \$2.00.

Yellow, White or Red Bottom Sets. Write for prices.

Pumpkins

One ounce will plant 15 hills; 2 quarts to acre.

Culture. Sow in May, when the ground is warm, in hills 8x8. Can also be grown with corn, every fourth hill of every fourth row. The common practice is to drop two or three seeds in every third or fourth hill in the cornfield. If cultivated in 8x8 hills use four plants to each hill.

Connecticut Field. Best variety for Colorado. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

Kentucky Field. Large variety similar to above. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c.

Mammoth Tours. French variety of great size. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 70c.

Small Sugar. Finer grained and best for table use. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 85c.

Parsnips

One ounce for 200 feet of drill; 5 to 6 pounds for an acre.

Culture. Sow as early in the spring as the ground can be worked, in drills 18 inches apart. Only rich soil should be used and the ground should be thoroughly and deeply cultivated before sowing seed. Thin to 6 or 8 inches apart in the rows. Hoe and cultivate frequently to keep the weeds down.

Improved Hollow Crown. The best variety for market or home garden. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Improved Guernsey. Roots not so long as Hollow Crown, but of greater diameter and more easily gathered. Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.00.

Parsley

One ounce of seed for 150 feet of drill.

Culture. Soak the seed in warm water for several hours, and sow in border or frame; thin the row or transplant to another bed. If to be carried late into the fall, set eight inches apart both ways, and cover with litter. It will go through the winter with moderate protection. Make open ground sowing in April.

Moss Curled. A choice selected strain with beautifully crimped and curled bright-green leaves. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

PEAS

One pound will plant 100 feet of drill; 60 pounds to acre.

Culture. Peas are among the first seeds that are planted in spring and need rich, well-manured soil. Sow in drills 3 feet apart and repeat until the first of July, with the exception of our Extra Early, which can be sown as late as August, on account of its early ripening and mildew resistance. The number of Peas may vary from 10 to the foot for the dwarf varieties to 8 to the foot of the medium tall and 6 to the foot of the very tall kinds.

American Wonder. 1 ft. Matures in 50 days. Bears its crop quickly and is out of the way for other crops on same ground. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; 1 lb., 25c; 2 lbs., 40c.

Dwarf Telephone. 2½ ft. Pods larger than Am. Wonder. Well flavored and productive. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 30c; 2 lbs., 50c.

Telephone (Pole). 3¾ ft. Best of the pole varieties. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 30c; 2 lbs., 50c.

Yorkshire Hero. 2½ ft. Hardy kind of good flavor. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 30c; 2 lbs., 50c.

Champion of England. 3 ft. Considered standard for summer use. Everbearing in nature. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 30c; 2 lbs., 50c.

Gray Sugar. (Edible pods.) Growing in popularity. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 30c; 2 lbs., 50c.

Blue Bantam. Early and dwarf. Very sweet. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 30c; 2 lbs., 50c.

Potatoes

Figure 1 pound to 7 hills. Space rows 3 ft. apart. 500 lbs. to the acre. Plant as soon as danger of killing frost is over. Be sure ground is well worked up to a good depth and fertilize with bone meal. Be sure to cut so as to leave one or two good eyes to each piece. **DO NOT PLANT TOO DEEP IF SOIL IS HEAVY.** 5 inches is plenty.

Varieties. We recommend Early Ohio, Burbank or Peach Blow for light sandy soil and IRISH COBBLER for heavy or clay soil. This latter variety has repeatedly proved itself the only consistent producer in heavy soil. Write for prices.

Rhubarb or Pie Plant

Linneus Giant. For market gardeners the best. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.40.

Strawberry. By far the sweetest though small in size. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.40.

Rhubarb Roots. 2 for 25c. \$1.25 doz. Postpaid.

Gradus, or Prosperity. 3 ft. Early as any standard sort and one of the best early kinds. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 30c; 2 lbs., 50c.

Premium Gem. Peas small and sweet, pods well filled. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; 1 lb., 25c; 2 lbs., 40c.

Alaska. 2½ ft. Earliest of all though not so sweet. Truckers plant Feb. 22nd if ground can be worked. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; 1 lb., 25c; 2 lbs., 40c.

First and Best. 2½ ft. Good canning variety. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 30c; 2 lbs., 50c.

Bliss Everbearing. 3 ft. One of the most prolific. Peas very large and wrinkled. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 30c; 2 lbs., 50c.

Thoms Laxton. 3 ft. Almost as early as the earliest. Very heavy cropper and a general favorite. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 20c; 1 lb., 30c; 2 lbs., 50c.

Stratagem (Improved). Middle crop sort. Good sized pods born in abundance. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; 1 lb., 25c; 2 lbs., 40c.

Telephone Peas.

RADISH

Icele.

One ounce to 50 feet of drill; 8 pounds to acre.

Culture. The soil for radishes should be very rich, light and mellow, well broken by digging, as they tender and mild qualities depend much upon their rapid growth. For very early use, sow in gentle hotbeds in February, and in open air as soon as the ground can be worked, at intervals of ten or twelve days, for a succession as long as they may be wanted. The winter varieties should be sown in August, lifted before severe frost, and stored in the cellar.

Sow in drills 1 foot apart and cover lightly; thin out while small to 3 inches apart. Hoe often.

Early Scarlet Globe. One of the best both for forcing as well as open culture. Early, crisp and tender. Pkt., 5c; oz., 10c; ¼ lb., 25c.

French Breakfast. Pink with white tip. Olive shaped. One of the earliest and best. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Rosy Gem. Round red with white tip. Very early. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Sparkler. Similar to above except that it gets larger. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Icele. The king of all long radishes. Always tender, crisp and mild. Pkt., 5c; oz., 10c; ¼ lb., 25c.

White Strasburg. Longer and larger than Icele. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Simpson's Glass. Long light pink type with transparent white flesh. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Long Brightest Scarlet. The handsomest radish grown. Scarlet above and white below. Pkt., 5c; oz., 10c; ¼ lb., 25c.

China Rose Winter. Flesh firm and white; will keep all winter. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Long Black Spanish Winter. Black skinned with white flesh. Gets to enormous size. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Round Black Spanish. Globe shaped roots with black skin. Pkt., 5c; oz., 10c; ¼ lb., 25c.

Spinach

German—Spinat.

One ounce will sow 50 feet of drill; 13 to 16 pounds to acre.

Culture. This is a very important crop in our market gardens, and is one of the most easily managed of all vegetables, requiring but little culture, and may be had fit for use the entire season. The main crop is sown in September. It is sometimes covered up in exposed places with straw or salt hay during winter, which prevents it from being cut by frost; but in sheltered fields there is no necessity for covering. For summer use it may be sown at intervals of two or three weeks from April to August. Spinach is best developed and most tender and succulent when grown in rich soil.

Long Standing. The best for spring sowing. Stands a long time before shooting to seed. Large thick leaves, excellent for greens. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

New Zealand. Makes a luxuriant growth all summer. In appearance entirely distinct from other spinach. Its quality is very desirable and tender. Soak the seed in warm water before planting. Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Round Summer. This variety is generally preferred for early growing and is popular with market gardeners. Leaves thick and fleshy. Not quite as hardy as the prickly, but stands winter well. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 60c.

Monstrous Leaved Viroflay. Quick, strong growth; much used by New York truckers. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Salsify or Oyster Plant

Culture. The oyster plant succeeds best in some light, well-enriched soil which previous to sowing the seeds should be stirred to the depth of 18 inches. Sow early in the spring in drills 15 inches apart; cover the seeds with fine soil 1 inch deep. One ounce for 60 feet of drill; 7 pounds to one acre.

Mammoth Sandwich Island. This splendid variety grown to fully double the size of the old sort; is of superior quality and delicate flavor. The Oyster Plant is one of the most nutritious and delicious vegetables and should be more generally cultivated for winter use when the supply of really good vegetables is limited.

No market gardener should fail to grow it. It is a paying proposition. Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.00.

SWEET CORN

One pound will plant about 180 hills; 10 to 12 pounds to an acre, in hills.

Golden Bantam Sweet Corn

Culture. Sweet Corn should not be planted very early in the season; the soil must be warm and should be a rich loam. If planted too early the seed is apt to rot. Sweet Corn will not make any progress until the weather is warm. If possible select a sheltered location for the very early kinds. A succession can be continued with the later kinds by planting at regular intervals from June to middle of August, thus insuring a continuous supply of table corn throughout the summer and fall months. Plant the small early varieties in drills $2\frac{1}{2}$ feet apart and 10 inches apart in the rows. The taller varieties should be planted in drills 3 feet apart and 12 to 14 inches apart in the rows. Rich manure worked into the soil will increase the crop.

Write for Quantity Prices.

Golden Bantam. The First Early Sweet Corn. Rich and delicious flavor. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

Mayflower. One of the very earliest white Sweet Corns with regular sized cobs. Highly recommended. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

Country Gentleman. "Shoe Peg" grains not in rows on the cob. Very fine flavor. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

Early Evergreen. Has all the good qualities of Stowell's Evergreen and matures earlier. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

Howling Mob. Produces two splendid ears to the stalk. Early, sweet and of good size. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

Stowell's Evergreen. One of the very best late varieties. Planted with medium early variety will furnish succession of corn until frost. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

Extra Early Minnesota. Early and large. Stalks not very tall. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

Peep-O-Day. Early as Golden Bantam. Ears average about 6 inches in length. Sweet and juicy. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

Black Mexican. Highly favored in some sections. Ears size of G. Bantam, grains black when ripe and of a peculiarly delicious flavor. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

POPCORN

Giant Spanish. Favorite with many. Large ears and large grains, popping quickly and very crisp. Yields more to

acre than any other pop corn. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

White Rice. Grains small and pointed. Some claim it to be more crisp than other kinds. Pkt., 5c; $\frac{1}{4}$ lb., 10c; $\frac{1}{2}$ lb., 15c; lb., 25c.

SQUASH

One ounce will plant 30 hills; 3 to 4 pounds an acre.

Culture. The plants are very tender and sensitive to cold, and planting must be delayed until settled, warm weather. The general principles of culture are the same as those given for cucumbers and melons, but the plants are less particular as to soil. The summer varieties should be planted 4 feet apart each way and the winter sorts 8 feet. Three plants are sufficient for a hill. Care should be taken not to break the stems from the squashes intended for winter use, as the slightest injury will increase the liability to decay.

Summer

Early White Bush. This is the well known White Patty-pan Squash. The earliest to mature, very productive; light cream colored. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

Golden Summer Crook Neck. Very early and productive. Fruit about 1 foot long, with crooked neck and warty surface; color bright yellow. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

Giant Crook Neck. This strain is a great improvement on the old variety of Crook Neck. It is larger and better in every way. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

SQUASH—Continued**Winter Varieties**

Table Queen or Acorn. A deep green winter sort just the right size to halve and bake and serve as individual helping. Pkt., 5c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.25.

Warty Hubbard. Best shipper and best keeper. Shell is hard and warted. Dark olive green. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; $\frac{1}{2}$ lb., 90c; 1 lb., \$1.50.

Golden Hubbard. Somewhat smaller than above, a trifle earlier but not so

Golden Summer Crook Neck

good a keeper. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; $\frac{1}{2}$ lb., 90c; 1 lb., \$1.50.

Boston Marrow. Orange color with distinct flavor. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; $\frac{1}{2}$ lb., 90c; 1 lb., \$1.50.

TOMATOES

One ounce of seed will produce from 3,000 to 4,000 plants.

Culture. Sow seed in a box or hotbed early, and transplant at least once to get a strong root growth. When danger of frost is over set in open ground 3 to 5 feet apart each way and cultivate thoroughly. Fruit may be had several days earlier by transplanting into small pots

Livingston's Beauty.

and then setting out the entire contents as soon as ground is warm. The varieties of Tomatoes described in this seed book comprise the very best kinds known to the trade and none are included that do not possess some merit.

Livingston's Beauty. Large, round and even. Early as any standard variety in this locality. Pkt., 5c; oz., 30c; $\frac{1}{4}$ lb., \$1.00; $\frac{1}{2}$ lb., \$1.75.

Ponderosa. The largest smooth Tomato. Slices exceptionally well and is firm and meaty. Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.50; $\frac{1}{2}$ lb., \$2.25.

Earliana. One of the earliest. Fruit is reasonably smooth and firm but not equal to Beauty. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; $\frac{1}{2}$ lb., \$1.75.

Early June. Medium size, round and early. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; $\frac{1}{2}$ lb., \$1.75.

John Baer. Very early and nearly as large as Beauty. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; $\frac{1}{2}$ lb., \$1.90.

Dwarf Champion. Very sturdy grower. Potato leaf with medium sized purplish pink fruit. Pkt., 5c; oz., 40c; $\frac{1}{4}$ lb., \$1.25; $\frac{1}{2}$ lb., \$2.00.

Yellow and Small-Fruited Varieties

Yellow Plum. Excellent for preserving. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; $\frac{1}{2}$ lb., \$1.75.

Red Plum. Same as above except color. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; $\frac{1}{2}$ lb., \$1.75.

Yellow Pear. For preserving only. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; $\frac{1}{2}$ lb., \$1.75.

Husk or Ground Cherry. Very productive. Pkt., 5c; oz., 35c; $\frac{1}{4}$ lb., \$1.00; $\frac{1}{2}$ lb., \$1.75.

TURNIPS

One ounce will sow 150 feet of drill; 2 lbs. will sow an acre.

Culture. For early use, sow as soon as the ground can be worked in spring in drills 15 inches apart and thin to 3 inches apart as soon as the plants are large enough to handle. For succession, sow at intervals of a fortnight until the last week of July, from which time until the end of August sowings may be made for main and late crops. The sowings should be made just before rain if possible, a rapid growth being important.

Early White Egg. General favorite. Flesh is white, firm and mild without the pungent taste. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; $\frac{1}{2}$ lb., 50c; 1 lb., 75c.

Purple Top Strap Leaf. Best flat type for fall planting. Excellent for stock or table. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; $\frac{1}{2}$ lb., 50c; 1 lb., 75c.

Early White Flat Dutch. Good quality. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; $\frac{1}{2}$ lb., 50c; 1 lb., 75c.

Purple Top Globe. Larger than White Egg. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; $\frac{1}{2}$ lb., 50c; 1 lb., 75c.

Yellow Aberdeen. Especially good for feeding. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; $\frac{1}{2}$ lb., 50c; 1 lb., 75c.

Rutabagas

Improved Purple Top. Perfect keeper, large, solid and sweet. An old time favorite never improved upon. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; $\frac{1}{2}$ lb., 50c; 1 lb., 75c.

HERBS

A few Pot Herbs and Sweet Herbs should have a place in every vegetable garden. A very small space will give all the herbs needed by a family. Culture is very simple; the best way is to make seedbed in the early spring and set the plants out in beds.

All varieties in 5c, 10c and 25c packages.

Anise. Used for flavoring.

Caraway. Seeds used in seasoning.

Catnip. Leaves used for tea.

Coriander. Seeds used for seasoning.

Dill. Used for seasoning pickles.

Horhound. Very useful for curing coughs.

Lavender. Leaves very fragrant.

Rosemary. Leaves very fragrant.

Rue. A medical plant.

Saffron. Used for flavoring.

Sage. A highly aromatic herb; most useful of all.

Savory, Summer. Leaves and shoots used for seasoning.

Sorrel. Used in soups and salads.

Sweet Basil. Leaves used for flavoring.

Sweet Fennel. Seeds aromatic.

Thyme. Used as a seasoning.

Wormwood. Has medicinal qualities.

A splendid plant for poultry.

LAWN GRASSES

Kentucky Blue Grass

The old standard grass for pasture and lawns. Sow 25 to 30 pounds to the acre for meadow; for lawns, 100 to 140 pounds per acre. Write for prices.

English or Perennial Rye Grass

Considered invaluable for permanent pastures. It is also one of the best lawn grasses for the central part of the United States. Sow 60 pounds to the acre for pasture; 100 to 140 pounds to the acre for lawn. Write for prices.

White Clover. For lawn purposes is very desirable on account of its creeping stems. It spreads rapidly and acts as a binder. Very hardy. In permanent pastures it is of considerable value when used in a grass seed mixture. Write for prices.

Flower Seeds

WE PAY POSTAGE ON FLOWER SEEDS

Every seed order should include a generous list of FLOWER SEEDS, ROOTS and BULBS. Time spent in your Flower beds is well spent. If you have a natural love of Flowers, encourage it. If you have no such impulse, develop it. Flowers are God's message to us of Love and Good Cheer. They will erase the lines of care from your face and arrest the march of grey in your hair.

Ageratum. Light Blue, low and compact. Make excellent borders. Pkt. 5c.

Alyssum. Little Gem. White, low and compact. Early and fragrant. Pkt. 5c.

Alyssum. Tall. 10 to 12 inches, otherwise same as Little Gem. Pkt. 5c.

Amaranthus. Caudatus. Blood red drooping flowers. Pkt. 5c.

Amaranthus. Currentus. (Prince's Feather.) Red feathery flowers. Pkt. 5c.

Antirrhinum, or Snapdragon. Can be furnished in rose, red, yellow, white, orange and mixed. Large fragrant flowers of great beauty. Pkt. 5c.

Ampelopsis, Veltchi. (Boston Ivy.) Hardy perennial climber. Pkt. 5c.

Asters

This splendid fall favorite continues to gain in popular favor and is constantly being improved both as to type and size. The new varieties of PEONY FLOWERED ASTERS are as large as Chrysanthemums and of wonderful beauty. Every garden should have an assortment of ASTERS. They bloom from AUGUST to NOVEMBER.

Culture. The Aster is hardy and easily grown. Sow seed in the open ground in May for August and September blooms, or in March or April in cold frames for earlier bloom. The seeds should be covered about $\frac{1}{4}$ inch in good rich soil. When the plants are strong enough, transplant about 18 inches apart in deeply-dug, well prepared beds. Asters must not be planted in freshly manured soil nor in soil that has been planted to Asters for two or three years previous. Unslacked lime or fresh wood ashes are beneficial if stirred in the soil a little before planting and are said to counteract the ravages of the Aster blight. A few soakings with tobacco water around the roots during the growing season are also recommended.

ASTER PLANTS, in mixed or assorted colors, postpaid, at 50 cents per dozen.

Giant Peony-Flowered Asters. White, lavender, rose pink, shell pink, crimson, azure blue, purple and mixed. Pkt. 10c; $\frac{1}{4}$ oz., 35c.

ASTERS—(Continued)

Seemple's Giant Branching. White, lavender, rose pink, shell pink, crimson, azure blue, purple and mixed. Pkt., 10c; ¼ oz., 35c; ½ oz., 60c.

Giant Branching Comet Asters. Same colors as above. Pkt., 10c; ¼ oz., 35c.

Baby's Breath. (See Gypsophila.)

Begonia. Dense bushes about 1 ft. high completely covered with flowers. Single mixed. Pkt., 15c.

Begonia. Double mixed. Pkt., 10c.

Balsam. (Lady's Slipper.) Mixed. Pkt., 5c.

Rachelor Button. Single and double mixed. Pkt., 5c.

Beans, Scarlet Runner. Climber. Pkt., 5c; ½ lb., 25c.

Burning Bush. Turns scarlet in autumn. Pkt., 5c.

Calliopsis. Shades of red and yellow. Pkt., 5c.

Calendula (Pot Marigold.) One of the most satisfactory for massed effects. Blooms abundantly. Pkt., 5c; ¼ oz., 10c.

Canna. (See also Summer Flowering Bulbs.) Mixed. Pkt., 5c.

California Poppy. (See Eschscholtzia.)

Canterbury Bells. Profusion of bell-shaped flowers. Pkt., 10c.

Canary Bird Vine. Rapid climber. Pkt., 10c.

Candytuft. One of the best for borders. Pkt., 5c; oz., 20c.

Carnations. (Centaurea Margurite.) Pkt., 5c; ¼ oz., 40c.

Centaurea Imperialis. (Sweet Sultan.) Pkt., 5c; ½ oz., 40c.

Centaurea. (Dusty Miller.) White leaved foliage. Pkt., 5c.

Castor Beans. Beautiful foliage plant 10 to 12 ft. high, leaves often 3 to 4 ft. across. Pkt., 5c; oz., 10c.

Chrysanthemums. Excellent for cut flowers. Pkt., 5c; ¼ oz., 15c.

Cobaea Scandens. Called "Foot a Day." Most rapid climber, having bell-shaped flowers of purplish lilac color. Pkt., 5c.

Coleus. A marvel of beauty for house or garden culture. Pkt., 15c.

Cockcomb. One of the most brilliant and showy summer flowers. Colors range from bright red to orange and yellow. Mixed. Pkt., 5c.

Columbine. State flower of Colorado. Rocky Mt. Pkt., 10c.

Columbine. (Aquilegia.) Mixed. Pkt., 10c.

Clarkia. Profuse and continuous bloomer. Pkt., 5c.

Cosmos. One of the most popular autumn flowering plants. The new giant early flowering kinds can be furnished in white, pink, yellow, crimson and mixed. Pkt., 5c; ½ oz., 15c.

Cypress Vine. Scarlet and white star-

Aster.

shaped blossoms. Will climb on trellis 10 to 12 ft. Pkt., 5c.

Dahlia. (See also Summer Flowering Bulbs.) Single or double. Pkt., 5c.

Daisies. Double mixed. Pkt., 10c.

Everlastings or Strawflowers. Excellent for winter decorations. Mixed. Pkt., 5c.

Feverfew. Free flowering either indoors or out. Pkt., 5c.

Forget-Me-Not. Good for shady spots. Pkt., 10c.

Foxglove. Hardy. Spikes 3 to 5 feet. Pkt., 10c.

Eschscholtzia. (California Poppy.) Very free flowering. Pkt., 5c; oz., 15c.

Four O'Clock. Handsome old fashioned flower. Pkt., 5c; oz., 15c.

Gaillardia. Profuse, continuous bloomer. Pkt., 5c.

Geraniums. Single and double mixed. Pkt., 10c.

Godetia. Very attractive. Pkt., 5c.

Globe Amaranth. Immortels or Everlasting. Pkt., 10c.

Gourds. Dipper, Dishcloth, Nest Egg, Calabash and Mixed. Pkt., 5c.

Gypsophila. (Baby's Breath.) Annual. Pkt., 10c.

Gypsophila. Perennial. Pkt., 10c. Roots, 25c each.

Hellotrope. Choice mixed. Fragrant. Pkt., 10c.

Hibiscus. Large flowers of great beauty. Pkt., 5c.

Hollyhock. Good for background. Double, red, white, pink, maroon, yellow, black or mixed. Pkt., 10c.

Hollyhock Roots. Separate colors or mixed. \$1.50 dozen. Postpaid.

LARKSPUR

Lobelia. Trailing. Light blue. Pkt., 5c.

Marigold. French mixed. Pkt., 5c.

Marigold. African. Mixed. Pkt., 5c.

Mesembryanthemum. (Ice Plant.) Fine for hanging baskets. Trailing plants with small double red flowers and icy foliage. Pkt., 5c.

Mignonette. Fragrant. Pkt., 5c; oz., 40c.

Mimulus. (Musk Plant.) Pkt., 10c.

Moon Flower. One of the most beautiful climbers. Blooms from mid-afternoon to day break. White or blue. Pkt., 10c.

Petunia.

Hyacinth Bean. Rapid growing climber. Pkt., 5c; oz., 35c.

Japanese Hop. (Japonica.) A very ornamental climber. Pkt., 5c.

Job's Tears. Broad corn-like leaves. Pkt., 5c.

Lantana. Verbena-like heads of orange, rose, white, etc. Pkt., 5c.

Larkspur. Annual. Mixed. Pkt., 10c.

Larkspur. Perennial. Mixed. Pkt., 10c.

Larkspur. Perennial roots. \$2.00 doz. Postpaid.

Linum. (Scarlet Flax.) Very brilliant bedding plant. Pkt., 5c.

Lobelia. Dwarf. Deepest blue. Pkt., 5c.

Nasturtium. Dwarf. Yellow, bronze, orange, maroon, pink and mixed. Pkt., 5c; oz., 20c; ¼ lb., 50c.

Nasturtium. Tall. Colors same as above. Pkt., 5c; oz., 20c; ¼ lb., 50c.

Nicotiana. Early and of great beauty. Pkt., 10c.

Nigella. (Love-in-a-mist.) Free flowering, white. Pkt., 10c.

Pansies. We carry only the Giant Trimardeau. Blossoms will often reach a diameter of 4 inches. Must have rich soil to produce large flowers. Our plants are grown in beds of half manure and half soil. White, black, yellow, blue, purple, bronze and mixed. Pkts., 10c; ½ oz., 50c.

Pansy Plants. Packed for express, 50c dozen. Not prepaid.

Pansies.

Petunia. Single mixed. Pkt., 10c.

Petunia. Giants of California. Pkt., 10c.

Petunia. Striped and blotched. Pkt., 10c.

Phlox. Drummondii mixed. Pkt., 5c.

Phlox. Star mixed. Pkt., 5c.

Phlox Roots. Perennial. \$2.00 dozen. Postpaid.

Pinks. Dianthus. Double mixed. Pkt., 5c.

Pinks. Chinensis. Double mixed. Pkt., 5c.

Poppies. Shirley mixed. Pkt., 5c.

Poppies. Single mixed. Pkt., 5c.

Poppies. Double mixed. Pkt., 5c.

Poppies. Oriental mixed. Pkt., 5c. Roots, \$2.00 dozen. Postpaid.

Portulaca. (Moss Rose.) One of the best bedders. Single mixed. Pkt., 10c.

Portulaca. Double mixed. Pkt., 10c.

Primrose. Plant in shade. Pkt., 10c.

Pyrethrum. (Golden Feather.) Pkt., 5c.

Salpiglossis. One of the most beautiful and most neglected of all flowers. Colors are velvety and gorgeous. Pkt., 5c.

Salvia. (Scarlet Sage.) Excellent for bedding. Pkt., 10c.

Schizanthus. (Poor Man's Orchid.) Mixed. Pkt., 10c.

Snapdragon. (See Antirrhinum.)

Stocks. Best mixed. Pkt., 10c.

Sunflower. Giant Russian. Raise some for your chickens. Pkt., 5c; ¼-lb., 10c.

Sunflower. Chrysanthemum flowered. Very double. Grows lower than the Giant and is thoroughly desirable. Pkt., 10c.

Scabiosa. (Mourning Bride.) Justly popular. Pkt., 5c.

Sweet Sultan. Sweet scented and fine for cut flowers. Pkt., 5c.

Sweet William. Hardy but blossoms first year from seed. Pkt., 5c.

Thunbergia. (Black-Eyed Susan.) Good for hanging baskets or low climber. Pkt., 5c.

Verbenas. One of the best bedding flowers. Covers lots of ground and comes in great variety of colors. We can supply young plants at \$1.00 dozen, Pkt., 5c.

Zinnias. New Mammoth Flowered. Separate colors as follows—White, Yellow, Pink, Orange, Violet, and Scarlet. Pkt., 10c each, ¼-oz., 30c; ½-oz., 50c; oz., 90c. Special Mixture of the six colors, Pkt., 10c; ¼-oz., 25c; ½-oz., 40c; oz., 80c.

Zinnia.

NEW GIANT DAHLIA FLOWERED ZINNIA

This remarkable new ZINNIA was originated by John Bodger in California three or four years ago and is now pretty well known to flower lovers the world over. Its immediate popularity proves it to be one of the outstanding introductions in recent years. The blooms are full and rounded and resemble a double dahlia, colors are in soft though varied shades and of a size to take the breath. Flowers of 5 to 6 inches in diameter are the average rather than the exception. We offer the following colors and recommend them all as each has its particular merit:

Polar Bear, pure white.

Illumination, deep rose pink.

Golden State, rich orange yellow.

Crimson Monarch, red.

Exsquisit, light rose pink.

Oriole, deep orange yellow.

Canary Bird, clear canary yellow.

Dream, deep lavender shading purple.

Any of the above, Pkts., 15c; ¼-oz., 50c; ½-oz., 90c; oz., \$1.65.

Mixed Colors, Pkts., 10c; ¼-oz., 35c; ½-oz., 60c; oz., \$1.00.

SPECIAL COLLECTION, One full sized packet of each of the above 8 named varieties for 90c Postpaid. (Value \$1.20.)

SWEET PEAS

Sweet Peas are worth a little extra care and if you will follow these instructions you will get more and better blooms and general satisfaction. Where possible, plant your rows running north and south well away from tight board fence or wall. Sweet Peas require free circulation of air about the roots and vines and will not stand reflected heat such as might be caused from planting close to a wall.

Spade the soil to a depth of at least a foot, work the ground up thoroughly and fertilize with pulverized sheep manure or bone meal. When ready to plant the seed dig a trench about ten inches deep the full length of the desired row. Fill trench to within 5 inches of the top with finely pulverized, lightly fertilized, soil. To use too much fertilizer will result in rank growth of vine and few blooms, or burn the tender sprouts. Inoculate the seed with NITRAGIN (a 20c size is enough for a pound or more of seed) and plant carefully in the bottom of the trench. Plant in a zig-zag row spacing each seed about an inch apart like this

Cover the seed with not more than 2 inches of soil and water thoroughly. If you have followed instructions you now have a trench 3 inches deep. This should be gradually filled in as the plants grow, always keeping the heads of plants in sight.

Water once a day, morning or evening, and avoid watering when the sun is hot. After plants are an inch or two above the top of the trench, which by this time should have been filled in to the level of the surrounding ground, place your wire, lattice, or strings for the vines to cling to. This support should be 4 or 5 feet high as the vines will reach this height if they have been properly cared for.

PICK BLOOMS EVERY DAY OR TWO if you wish free flowering throughout the entire summer. To allow too many blooms to wither on the vines causes setting of seed pods with resultant stoppage of blooming. **DO NOT PLANT TOO EARLY** in the season. The best Spencer varieties are not as hardy as the old types and too early planting will result in loss of some of the most beautiful shades. We recommend the latter part of March or any time in April as a rule. Growth will not start until the ground is warm.

Barbara, Lovely soft salmon, very large.

Blue Stone, A striking new blue. This variety deserves a generous space in your garden.

Brilliant, Brilliant cherry-cerise, a sweet pea of unusual beauty.

Cherub, Rich creamy yellow, edged with pink.

Crimson King, A rich, deep crimson, the best red, does not burn.

Fordhook Orange, Glistening orange, the best orange produced.

Giant Attraction, Large shell pink.

Sweet Peas.

Guinea Gold, Glowing, liquid gold.

Hebe, Large bright pink, an improvement on Countess Spencer and Hercules.

Joan Ryder, the finest white, pure and glistening.

Mrs. C. P. Tomlin, A wonderful fiery red.

Powercourt, One of the finest lavenders.

Warrior, A rich chocolate maroon.

Mixed Colors, Burpee's Blend of many choice named varieties, including every color and shade.

PRICES—Any of the above separate colors, large packets 10c; ½-oz., 15c; oz., 25c; ¼-lb., 65c; ½-lb., \$1.25; 1-lb., \$2.00 postpaid.

Burpee's Blend, a mixture of all colors of Spencer varieties, large packet 10c; oz. package, 15c; ¼-lb. for 35c; ½-lb., 65c; 1-lb. for \$1.25.

SPECIAL COLLECTION. One packet each of the ten best named varieties, including all of the favorite shades and colors, 75c postpaid.

HARDY PERENNIAL PLANTS

THOSE MARKED * ARE SUITABLE FOR ROCK GARDENS

Each 20c, Doz. \$2.00 unless otherwise noted.

We Pay Postage on All Perennials.

***Achillea** (Yarrow or Milfoil). Desirable garden subjects for any soil. Good for cut flowers. Finely cut foliage, frequently silvery. *Millefolium roseum*. 1½ feet, Summer, rosy pink.

Anchusa (Summer Forget-Me-Not). Fine tall blue flowers for massing. Moisture lover.

Aquilegia Coerulea. True Rocky Mt. Columbine. Large roots. 25c each.

(Hardy Aster) Michaelmas Daisy. A fine perennial for tall borders or mass effects, very hardy and blooms well in almost any location. Named varieties in white, cream, pink, light blue, lavender, and purple.

Bellis (English Daisy). Very popular, low growing, six to eight inches. Blooms very double and full something like a small Aster. Basket of 6 to 8 plants, 40c.

Bleeding Heart. Scarce for three or four years but we have a fair supply. 75c each.

Buddleia (Summer Lilac). A half hardy shrub freezing down to the root in the fall like the Shasta Daisy. Very attractive lavender colored blooms, fine for cutting. 35c each.

Campanula (Bell Flower). These come in great variety in height from 18 to 48 inches and colors from white thru the shades of blue to deep violet. This family also includes the well known Canterbury bell. 25c each; \$2.50 per doz.

Centurea (Hardy Corn Flower). A graceful and attractive plant. Height two to three feet. Valuable for cuts as it has a good stem. Colors: White, yellow, red, and rosy purple.

Chrysanthemum. Handsome and vig-

orous. Height about twenty-four inches. Fine for borders. We carry named varieties in many shades and colors.

Coreopsis. Good for cut flowers and continues in bloom through the entire season.

Delphinium. Larkspur. Very ornamental, flowers in large heads.

Dianthus (Pinks). Another large and valuable group. Some for borders, others suitable for rock gardens. All members of this family are hardy and will thrive in either heavy or sandy soils. Colors: White, light or deep pink, red and mauve. They are all season bloomers.

Digitalis. Foxglove. An old-time favorite.

Gaillardia. Begins to flower in June.

***Geranium** (Cranesbill). Easily grown plants giving masses of small showy flowers and good foliage. Most of them have a magenta tinge. 25c each; \$2.50 per dozen.

***Geum**. A good border subject, attractive foliage, bright scarlet flower. 25c each; \$2.50 per doz.

Goldenrod. Needs no description. Strong roots.

Golden Glow. Strong roots.

Gypsophila. Baby's Breath. Medium sized roots.

Helianthus (Hardy Sunflower). One of the most valuable tall borders. It is a hardy vigorous grower with good foliage, flowers in this country in August and September. Color: Golden yellow.

Hemerocallis. Lemon Lily. Very satisfactory and pretty. Flowers are bell shaped of clear lemon yellow.

Hibiscus. (Crimson Eye.) Immense white flower with crimson eye. 25c ea.

PERENNIALS---Continued

Hollyhocks. Double only. Can furnish in separate colors as follows: Buff, white, yellow, maroon, red, pink, blush, black.

Iberis (Hardy Candytuft). Grows low with beautiful foliage, fine for rock work or low borders.

***Iris.** Germanica. Excellent for borders. Can supply in colors as follows: Blue, cream, purple, bronze, lavender, orange, yellow, pink.

Iris Dalmatica. The finest of all Iris. Grows to four feet, producing massive flowers of rich lavender. Very fragrant.

Lathyrus (Everlasting Pea). A desirable hardy climber, much like the annual sweet pea.

Latifolius. 6 feet, July, white, pink, red.

***Linum** (Flax). A desirable border plant having light graceful foliage and bearing flowers all Summer.

***alpinum.** 1 to 1½ feet, June to July, blue.

***arboresum.** 1 foot, May, yellow.

Lupinus. Somewhat resembles the larkspur but has a greater variety of colors and is fragrant. We have it in white, yellow, and lavender blue. 25c each; \$2.50 per doz.

Oriental Poppy. The largest poppy, often nine or ten inches across when open. Color is a rich, fiery red. Perfectly hardy.

Pentstemon. A rather low border that is hard to beat, the blooms rise above a beautiful mat of variegated foliage.

Special Collection of Hardy Phlox. Crimson, white, white with red eye, pink, lavender, orange, purple.

Platycodon (Chinese Bell Flower). Attractive border plant with peculiar

shaped blue flower. Blooms in July and likes lots of sun. 25c each; \$2.50 per doz.

Pyrethrum (Persian Daisy). A fine perennial greatly improved of late. Prefers a rather open location, grows two to four feet, flowers are of Daisy type in a good variety of colors.

***Ranunculus** (Buttercups). Deep green foliage, small bright yellow flowers in clusters. A good border plant. No particular soil needed.

Salvia (Meadow Sage). A group of plants giving exceptionally fine spikes of small graceful blue flowers. Do well anywhere in the border.

Scabiosa (Blue Bonnet). Good border plants. Fine blue flowers on long stems, good for cutting. Any well drained soil and a sunny place needed.

Shasta Daisy. (Alaska.) Immense white flowers with yellow center.

Statice (Lavender Baby's Breath). Produces a profusion of tiny lavender colored blooms in clusters or sprays useful for blending with other flowers. Can be cut when in full bloom and dried for winter use. 45c each; \$4.00 per doz.

Sweet William. Flowers in clusters like phlox.

Tritoma (Red Hot Poker). One of the most attractive perennials. If you want a bed of flaming color that will last through the summer this is the one to use. A little more expensive to start than annuals but cheaper in the long run. Colors: White, yellow, and orange red. 25c each.

Veronica (Speedwell). Some of the best garden subjects are found here. A fine range of blue spikes with attractive grayish foliage. Will do finely in any good rich soil in full sun.

SUMMER FLOWERING BULBS

These Prices Are Prepaid.

Every yard or garden should have a bed or two of these bulbs. We list only proven items that you can count on to produce satisfactory plants and blooms.

Caladiums or Elephants Ears

Medium sized bulbs, 20c each, 3 for 50c. Giant bulbs, 35c each, 3 for \$1.00. To make the best growth they must have plenty of water. In planting make a circular trench about the plants to hold water. We have seen plants with leaves 2½ feet wide.

Calla Lilies

Yellow. 35c to 50c, according to size. Order early, as supply is gone after April 1st.

Choice Hardy Lilies

Auratum. "Gold Banded Lily of Japan." Our customers have repeatedly written us praising our stock of these Japanese Lilies. They are perfectly hardy and will increase in number from year to year.

Rubrum. "Crimson Lily of Japan."

Album. "White Lily of Japan."

Melpomene. "Pink Lily of Japan." Set of four bulbs, \$1.50, or 40c singly.

Tiger Lilies. Immense clusters of orange-red flowers. Hardy and easily grown. 15c each; 2 for 25c; \$1.50 dozen.

Lily of the Valley.

Lily of the Valley. A shady corner is the place for these beauties. The flower is justly famed and will grow in almost any soil though doing best in a sandy loam. 6 pips for \$1.00 or \$1.75 dozen.

Tuberose. One of the most delightfully fragrant and beautiful of the late flowering bulbs. Can be taken up and potted for indoor culture in the fall. 3 for 25c; \$1.00 dozen.

Cannas

One of the most satisfactory summer flowering bulbs. A bed 7 feet in diameter requires 19 bulbs. A 10 ft. bed requires 36 bulbs. We mention only the most popular varieties but carry others. Prices, single bulb 15c; \$1.25 doz.

King Humbert. Large scarlet with bronze leaf. 4 to 5 feet.

Yellow Humbert. Bright clear yellow flowers. Green leaf. 4 to 5 feet.

Apricot. Buff yellow base, overspread with salmon pink. 4 feet.

President. Glowing scarlet often 7 inches in diameter, 4 feet.

Hungaria. The best pink. 3½ feet.

Wintzers Colossal. One of the largest. Vivid scarlet. 5 feet.

Mixed Cannas. Good assortment. Doz., \$1.00.

GLADIOLUS

One of the easiest bulbs to grow and at the same time one of the most satisfactory from every standpoint. They enrich your whole garden with a wealth of color that is not possible from other sources. They practically take care of themselves and multiply generously. If cut when the first one or two blooms open they will keep for a full week and even the small buds will develop and open.

Planted in groups or rows they furnish a flare of color that can be seen from a great distance. Planted singly or by twos and threes with other shrubbery they blend in with anything you may have. When successive plantings are made about three weeks apart blooms may be had from early July until well into November.

Gladioli bulbs may be had in literally thousands of different named varieties. We are listing what we consider the cream of the good, medium priced ones but will be glad to quote on any others that you may desire.

PRICES QUOTED ARE FOR LARGE BULBS, POSTPAID.

Henry Ford, a dark velvety-purple, a color that will attract attention. 3 for 25c; doz., 90c; 100 for \$6.00.

Alice Tiplady, an extra large orange. 3 for 20c; doz., 75c; 100 for \$5.00.

Early Sunrise, a good salmon-scarlet with a pencil stripe of cream through each petal. 3 for 25c; doz., 90c; 100 for \$6.00.

Le Marshal Foch, very large rose-pink. 3 for 15c; doz., 50c; 100 for \$3.00.

E. J. Shaylor, a deep rose pink. A beauty. 3 for 20c; doz., 75c; 100 for \$5.00.

Mrs. Dr. Norton, pink with yellow throat. 3 for 25c; doz., 90c; 100 for \$6.00.

Wilbrink, delicate pale pink. 3 for 15c; doz., 50c; 100 for \$3.25.

Lily White, the best early white. 3 for 20c; doz., 75c; 100 for \$5.00.

Niagara, a beautiful canary yellow. 3 for 25c; doz., 90c; 100 for \$6.00.

Golden Measure, a new dark yellow. 3 for 20c; doz., 75c; 100 for \$5.00.

Prince of Wales, a charming coral pink, 3 for 20c; doz., 75c; 100 for \$5.00.

Francis King, brightest possible red, a sure favorite. 3 for 15c; doz., 50c; 100 for \$3.25.

Mixed Colors, a mixture that will bring us your future orders. 3 for 15c; doz., 40c; 100 for \$3.00.

DAHLIA BULBS

Cactus Dahlias

Dahlias are easily grown and so exceptionally satisfactory that every garden should have a good variety. Some of the newer varieties are truly enormous in size and striking in color and form. We list only those that are well worth while. If you are a **Dahlia Fancier** bring in your list and let us quote you on some of the more rare kinds.

PRICES POSTPAID

Cactus Dahlias

Each, 25c; Doz., \$2.25.

Charles Clayton. A vivid red with long stems.

Countess of Lonsdale. The freest flowering Dahlia grown, rich salmon.

Dainty. Rosy pink, shading to pale lemon.

Genesta. Rich bronze with orange cast.

Lavender Beauty. A clear soft lavender.

Marion Thompson. Pure lemon yellow, large flowers with long stiff stems.

Rheinkonig. The best white Cactus Dahlia, free flowering and vigorous.

Uncle Tom. A dark deep maroon, with good stem.

Standard Decorative Dahlias

Each, 25c; Doz., \$2.25.

Berch Von Heemstede. An extra fine, clear, rich yellow.

Delice. A glowing rose-pink that is sure to please. The stems are long and stiff.

Eugene Teele. A deep scarlet with long stems.

Mrs. Thos. Burch. Rich old gold, some times marked with pink.

Souvenir Douzon. An immense flower with flat petals, full to the center. The largest red in the decorative section.

Flemingo. An ideal variety for cutting. Bright shell pink.

Show and Fancy Dahlias

25c Each, \$2.25 Doz.

Arabella. Pale lemon, shading to primrose at the tips.

Bertha Bernstein. Dark lavender with beautifully quilled petals.

Dr. I. B. Perkins. An ideal white. Its large pure white flowers are borne on long stems.

D. M. Moore. A deep velvety maroon of mammoth size.

Show Dahlias

Stradella. A large, full, well rounded purple.

Victory. Of immense size and perfect form, deep yellow, each petal tipped with cherry red.

DAHLIAS—Continued

Peony Flowered Dahlia

Peony Flowered Dahlias

Each, 50c; Dozen, \$4.50.

Arvada, a free blooming old rose shading to fawn pink.

Chancellor, large petals twisted and curved in a most fantastic form. Color: Coppery bronze.

Francis Daniels, a lovely light pink with long stems. Has excellent keeping qualities.

Happy Dream, stems long and wiry, holding the bloom to full view. Bright pink shading to lavender.

La Grande Lilas, a superb new variety of immense size. Stems are often two feet long. Rich amaranth red.

Mme. Bystein, a pure lilac lavender of exceptional size.

Sweetheart's Bouquet, a perfect Peony Flowered Dahlia, salmon rose shaded with fawn.

The Screamer, the flowers are large and borne on long firm stems. Color: Dark red shaded to violet purple.

DAHLIAS OF SPECIAL MERIT

POSTPAID PRICES

Figures to the right indicate height

Amun Ra. (Originated and introduced by Jessie Seal. This fact in itself is the highest guarantee. A mammoth decorative dahlia borne on stout stems of good length. The flowers are gorgeous. In color a combination of copper, orange and golden bronze. Highly recommended. 50c each..... 4

Butterfly. (Decorative.) A pretty shading of creamy pink. This one is particularly recommended for cut flowers. \$1.00 each..... 3

Clarissa Blanco. (Decorative.) Deep wine color, often variegated with white. A beautiful flower and very early. 50c each..... 3

Chlpeta. (Cactus.) A mammoth flower borne on very long stems. A most pleasing amaranth red. 50c each..... 4

Emperor. (Decorative.) Beautiful deep maroon of the finest type. The petals are long and flat and bloom is of unusual size. 50c each..... 4

Ethel T. Smith. (Hybrid Cactus.) A giant creamy white with a slight lemon tint. A monster in size. 50c each..... 6

Gladys Sherwood. (Hybrid Cactus.) A pure white that can be grown to a diameter of 10 inches. \$1.00 each..... 4

J. W. Davies. (Decorative.) The flowers are of great size, of good depth and fine form. Color a deep bright rose. \$1.00 each..... 3

Millionaire. (Decorative.) An immense Dahlia and among the most popular of all the extra large Dahlias. Color, a clear rich orchid, shading to almost white in the center. 50c each... 3

Mrs. Carl Salbach. (Decorative.) Extra large and of beautiful form and always full to the center. Color, soft lavender. One of the best recent introductions. 50c each..... 5

Nobills. (Decorative.) A combination of red and white with white predominating. \$1.00 each..... 4

Oregon. (Cactus.) An American Beauty red, with long stems and large flowers. 50c each..... 5

Pierrot. (Cactus.) A striking novelty in color, form and size. Color, amber with white tips. 50c each..... 4

Radio. (Decorative.) Without a doubt one of the greatest Dahlias ever originated. Can be grown 11 to 12 inches in diameter. Color, blood red, edged and tipped with yellow. \$1.50 each..... 4

Rollo Boy. (Cactus.) An enormous amber and yellow cactus. One of the best new varieties. \$1.50 each..... 4

William G. (Decorative.) A mammoth flower of shaggy form borne on stems long and strong enough to hold the flowers erect. Color, light or scarlet red and truly enormous. \$2.00 each..... 3

Peonies

Good Strong Roots 50c each, \$5.00 doz. except where noted. Prices Postpaid

Felix Crouse, brilliant dark red. One of the best. 75 cents each.

Duke of Wellington, ivory white with creamy center.

Festiva Maxima, one of the very best peonies grown. Pure white flaked with red.

Lady Lenora Bramwell, silvery rose, very large and fragrant.

Mad. Breon, flesh pink and lemon, changing to white.

Rosea Superba, large rosy-pink, free bloomer.

Peonies

FIELD GROWN ROSE BUSHES

We list only those varieties that are found to be hardy in Colorado and adjoining states. Many fine roses are not suitable for our climate and to plant them will only lead to disappointment.

Roses are lovers of heavy soil and for that reason we do not recommend lightening the soil with manure or leaves. Fertilization is very necessary and should be applied in the form of surface dressing, slightly worked into the soil. We suggest VIGORO, bone dust or manure water.

Protect your roses in winter by working leaves, straw or dried grass about the roots but do not wrap the stems. Frequent freezing and thawing will cause mildew, sweating and mould, and result in winter killing if wrapping is resorted to.

Bush roses should be cut back to 18 inches to 2 feet soon after the first killing frost. Watch out for bugs. Spray with Black Leaf 40, or Melrosine, and powder leaves and buds with any good insect powder to prevent stinging by the rose fly.

PRICES QUOTED DO NOT INCLUDE POSTAGE

When sent by mail add 10 cents each, or \$1.00 dozen

Roses, Hybrid Teas

Average height 1½ feet,
bloom all summer and fall.

Columbia, Bright Pink, Good for cutting	\$0.80
Double White Killarney, Snow White	.90
Etoile de France, Double Crimson....	.80
Pink Killarney, Brillaint Pink.....	.80
Madam Butterfly, Pale Pink and Gold	.80
Ophelia, Pearly Pink and Cream.....	.80
Pink Radiance, Bright pink, extra good	.80
Red Radiance, Light Crimson.....	.80
Sunburst, Yellow with orange tint..	.90

Hybrid Perpetual Roses

Average height 4 feet

American Beauty, Dark Rose Pink..	\$0.80
Frau Karl Druschki, Snow White....	.80
General Jacqueminot, Bright Crimson	.80
George Arends, Large Light Pink....	.80
Paul Neyron, Rich Old Rose Pink....	.80

Climbing Roses

Climbing American Beauty, Crimson..	\$0.80
Crimson Rambler, Vivid red in clusters	.75
Dorothy Perkins, Shell Pink in clusters	.75
Excelsa, Bright Crimson in clusters..	.75
Yellow Rambler, Bright Yellow clusters	.75
Pauls Scarlet Climber, Bright Scarlet	.75

CHOICE HARDY (Pot Grown) ROSE BUSHES

For Outdoor Planting

Prices—65 cents each, \$6.50 dozen, 100 for \$50.00. Shipped express collect, or by parcel post. Postage 10 cents each, or \$1.00 dozen.

These roses are all grown on their own roots, assuring you that they will never "run wild." Most field grown bushes are grafted on wild rose roots and unless properly handled will turn to wild rose bushes in two or three years. This explains why some of the best roses you have bought, have ceased blooming just as the bushes made a good growth.

Rose bushes do best in a heavy clay soil and for that reason we recommend the use of bone dust fertilizer applied as a top dressing several times during the growing and blooming season, rather than the use of barnyard fertilizer that is worked into the soil and which tends to lighten the soil.

Pot grown roses develop better root systems than do field grown bushes and there should be absolutely no loss of plants when planting these bushes. The soil must never be allowed to get dry, however, for the first two or three years.

We list only a few of the most popular monthly blooming varieties, but can furnish any satisfactory rose at the same price.

White

- Angelus.** A big yellowish white.
Double White Killarney. Long budded and fragrant.
Edel. White shaded old ivory.
Kaiserin. Very fragrant and free bloomer.
White Ophelia. Pinkish center, long budded.

Yellow

- Golden Ophelia.** Good clear yellow.
Irish Fireflame. Flame colored bud, opening pinkish.
Lady Hillingdon. Clear light yellow.
Mme. Butterfly. One of the very best yellows.
Mrs. A. R. Waddell. Good bloomer, justly popular.
Roselandia. A new rich yellow.

Light Pink

- Columbia.** Big flowers of brilliant hue.
Cynthia Ford. Free bloomer and sturdy.
Pink Killarney. True pink and free bloomer.
La France. The best pink in the list.
Mme. C. Testout. The rose that made Portland famous.
Mrs. Chas. Bell. Shell pink.
Radiance. Free bloomer and sturdy.
Rosy Dawn. Form similar to Ophelia.

Dark Pink

- Commonwealth.** Deep pink, very fragrant.
Dunlop. Deep pink with pointed bud.
Jonkherr Mock. The largest deep pink grown.
My Mariland. Free bloomer and sturdy.
Premier. Big and fragrant.

White Climbing Roses

- Mary Lovett.** Large double flowers, glossy foliage.
White Perkins. The most rapid grower.

Red

- American Beauty.** The most satisfactory rose ever grown, blooms freely and is hardy in any climate.
Crusader. Very double, with long stem.
Francis Scott Key. One of the largest reds.
Hadley. Good grower, fragrant and sturdy.
Legion. A medium sized rose with good growing habits.
Mrs. Henry Sewall. Cherry red, pointed bud.
Red Columbia. Brilliant scarlet.
Red Radiance. One of the best.
Senator. A new dark red.
Templar. Similar to Ophelia.

Yellow Climbers

- Electra.** Blooms over a long period.
Gardenia. Very free bloomer.

Light Pink Climbers

- Alida Lovett.** Large pink.
Dorothy Perkins. Rapid grower but flowers fade.
Pink Rambler. Similar to Crimson Rambler.
Tausendschoen. Shell pink, a beauty.

Dark Pink Climbers

- American Pillar.** Dark pink with white center.
Heart of Gold. Better than Hiawatha, larger and more vigorous.

Red Climbers

- Climbing American Beauty.** Best red rambler known.
Excelsa. Improvement over the old Red Rambler.
Paul's Scarlet. Large blooms, very popular.

HARDY SHRUBS

Almond. Pink flowering. The first shrub to flower in the spring. The whole bush is covered with beautiful double pink flowers before the leaves appear. Each, \$1.00. Postpaid \$1.10.

Barberry. New red leaved. The foliage is a rich bronzy red, changing to vivid orange, scarlet and red in the fall. Each, \$1.00. Postpaid \$1.10.

Butterfly Bush. Beginning to bloom in July, it continues throughout the summer, until cut by frost. Very attractive lavender colored blooms, fine for cutting. Each, 50 cents. Postpaid 60 cents.

Bridal Wreath. *Spiraea von Houttii.* The most beautiful of all *Spiraeas*, blooming in early spring. Resembles a mass of snow. Each, 75 cents. Postpaid 85 cents.

Dogwood. Coral and yellow. We can supply both. Coral Dogwood has bright red limbs and branches, and the Yellow Dogwood has yellow branches. These two Dogwoods make a beautiful contrast when planted together. Each, 75 cents. Postpaid 85 cents.

Honeysuckle. Pink tartarian. Bright pink flowers in profusion.

Honeysuckle. Japanese bush. A spreading variety with creamy white flowers.

Above two varieties: Each, 75 cents. Postpaid 85 cents.

Hydrangea. *Paniculata grandiflora.* A most beautiful shrub with immense clusters of white flowers shading to pink. Each, 75 cents. Postpaid 85 cents.

Lilac. White. An old favorite that deserves space in every yard. Each, 75 cents. Postpaid 85 cents.

Lilac. Persian purple. More dwarf than the white, and less liable to lose blooms through early frosts. Beautiful shade of purple. Each, \$1.00. Postpaid \$1.10.

Mock Orange. Early flowering tall shrub that is justly popular. Each, 75 cents. Postpaid 85 cents.

Quince. Japanese. The shrub is simply covered with dazzling scarlet flowers through the early spring, followed by quince shaped fruits which are fragrant. Each, \$1.00. Postpaid \$1.10.

Snowball. Covered with white balls of flowers through the early spring. Each, 75 cents. Postpaid 85 cents.

Snowberry. White. Blooms during June and July with rose colored flowers, followed by clusters of milk white fruits that remain through the winter. Each, 75 cents. Postpaid 85 cents.

Snowberry. Red. Similar to the white, except that the fruits are red. Becoming very popular as it is better known. Each, 75 cents. Postpaid 85 cents.

Hedge Plants. Amoor River Privet. Our stock is northern grown, therefore very hardy. 24 plants will make a 10-foot row planted in a zigzag double row. Can be set in single row 10 to 12 inches apart but planted in this way will make a thinner hedge. 12-18 inch, \$1.75 doz.; 25 for \$3.50; 100 for \$12.00. Add 10 per cent for postage, or may be sent express collect.

HARDY CLIMBING PLANTS AND VINES

Clematis Paniculata

Cinnamon Vine. Very satisfactory for low walls or fences. Foliage is not dense, but is lacy in effect, with glossy dark green leaves. Good sized tubers. 10c each; \$1.00 doz.; postpaid.

Clematis Jackmanii. The most beautiful of all climbers. Large star shaped purple flowers in clusters. This variety is difficult to grow from a dormant root, hence we furnish potted plants already well started. \$1.50 each, postpaid.

Clematis Paniculata. The white Clematis. The flowers are pure white and borne in immense sheets covering the whole vine. Each 50c, postpaid.

Dutchman's Pipe. A vigorous grower with large, broad leaves and brownish colored flowers shaped like a pipe. Each \$1.25; postpaid.

Honeysuckle. Scarlet Trumpet. Very strong rapid grower with red, trumpet-shaped flowers. One of the first vines to show green in the spring. Strong roots. 50c each, postpaid.

Hop Vine. The hop is such a rapid grower that it is always in demand for a quick fence coverer. The fruits are borne in profusion. Large roots. 20c each; \$2.00 doz.; postpaid.

Ivy. Ampelopsis Engelmanni. A rapid growing vine that clings tightly to brick or stucco walls. Young plants should be fastened to wall by means of cloth strips, until the suckers form. Each 50c, postpaid.

Kudzu Vine. A Chinese introduction that has become justly popular. While slow to start, after three or four weeks begins to grow amazingly fast. In good soil and sunny location, will sometimes reach a height of 60 to 70 feet in a season. Very effective when planted against tree trunks. Each 50c; \$5.00 doz.; postpaid.

Madeira Vine. Grown from tubers that resemble a potato. This vine is well worth your attention as the foliage is peculiarly attractive. Freezes down to the ground in winter. Tubers should be dug before killing frosts and stored in a cool, dry cellar. Large tubers 10c each; \$1.00 doz.; postpaid.

Matrimony Vine. Has small white flowers with scarlet fruit in the autumn. Used as a ground coverer or for hanging over walls and fences. Will climb to moderate height if supported. Each 40c, or 3 for \$1.00, postpaid.

Silver Lace Vine. A hardy climber introduced from Turkestan. To see one is to want one. It grows rapidly and clings to any support. Each slender branch terminates in a spray of foamy white flowers. Will reach a height of 10 to 15 feet. Strong plants. 75c each, postpaid.

Sweet Pea. Perennial. This vine is very popular because it is so easily grown. The flowers are formed in clusters and come in red, white and pink. Assorted colors only. 25c each; \$2.50 doz.; postpaid.

Wisteria. Purple. A rapid growing vine with purple-lilac, pea-shaped flowers. Very hardy. Each 90c, postpaid.

Wisteria. White. Twines tightly and will cling to any sort of support. Blooms early and profusely. Each \$1.00, postpaid.

TREES, SMALL FRUITS, Etc.

Not Prepaid

ASH. European Mountain Ash. Has green fern-like foliage and is covered with red berries from late summer throughout the winter. The Ash is hardy in Colorado and makes a very attractive, ornamental tree. 5-6 ft. \$2.00; 6-8 ft. \$3.00.

BIRCH. Cut-Leaved Weeping. This is the true white barked, weeping birch. It is the most beautiful tree in the whole list and attracts attention wherever seen. 3-4 ft. \$3.00; 4-5 ft. \$4.00; 6-8 ft. \$6.00.

CHINESE ELM. This is the best tree for shade and ornamentation in the whole list. It is by far the most rapid grower and has more to recommend it than any tree we know of. It is not unusual for the Chinese Elm to attain a height of forty feet, with a trunk circumference of thirty-five inches within six years. 4-5 ft. \$1.50 each, 10 for \$12.50; 5-6 ft. \$1.75 each, 10 for \$15.00; 6-8 ft. \$2.25 each, 10 for \$20.00. Prices for larger sizes on application.

MAPLE. Soft, or Silver Leaf. The fastest growing maple and best known. 6-8 ft. \$1.50; 8-10 ft. \$2.00.

MAPLE. Hard. This is one of our most beautiful trees but is much slower in growth than the soft Maple. 4-5 ft. \$3.50; 5-6 ft. \$4.00.

POPLAR. Bolleana. Similar to the Lombardy, except that it has leaves resembling the soft Maple. 6-8 ft. \$2.00; 8-10 ft. \$3.00.

POPLAR. Lombardy. Grows to great height, narrow, with dense foliage. 6-8 ft. \$1.25; 8-10 ft. \$2.00.

RUSSIAN OLIVE. A blooming ornamental tree reaching a height of 30 feet or more. Blooms are yellow and fragrant, foliage silvery white. 5-6 ft. \$1.50.

WILLOWS. Golden Weeping. Long, slender, drooping branches, giving the tree an excellent ornamental effect. 6-8 ft. \$1.25.

WILLOWS. Golden. Same as above without the drooping habit. 6-8 ft. \$1.00.

EVERGREENS. Colorado Blue Spruce. This is the most beautiful of all the evergreens. Its distinct bluish color is immediately noticed. These trees are taken from our mountains and transplanted in the nursery for two to three years, giving them better shape and root growth. 18-24 in. \$4.00; 24-30 in. \$7.50; 30-36 in. \$10.00.

FRUIT TREES

APPLE. Chenango, Delicious, Grimes Golden, Jonathan, Tallman Sweet, Stayman Winesap, Wealthy, Yellow Transparent and Red Siberian Crab, 5-7 ft. \$1.00; ten for \$8.50.

CHERRY. Early Richmond, English Morello, and Large Montmorency, 4-6 ft. \$1.00; ten for \$8.50.

PLUM. German Prune, Lombard, Wild Goose, Opata, Sapa, 5-7 ft. \$1.00; ten for \$8.50.

SMALL FRUITS, ETC.

BLACKBERRIES. Snyder, or Rathburn. Each, 15c; 10 for 80c; 100 for \$5.00, postpaid.

CURRANTS. Red Cherry, Perfection, or White Grape. Each 25c; 10 for \$2.00, postpaid.

GOOSEBERRIES. Downing, Houghton, or Oregon Champion. Each 30c; 10 for \$2.50, postpaid.

GRAPES. Concord, Moore's Early, Brighton, or Niagara. The Concord is 25c each, or 10 for \$2.00. Other varieties 30c each, or 10 for \$2.50, postpaid.

RASPBERRIES. St. Regis Everbearing, each, 15c; 10 for 80c. Cuthbert, Marlboro, or Kansas Black, each, 15c; 10 for 80c; 100 for \$5.00, postpaid.

STRAWBERRIES. Progressive Everbearing, probably the best all-around everbearing. 25 for 50c; 50 for 75c; 100 for \$1.25, postpaid. Superb, a good everbearing, somewhat larger than the Progressive. 25 for 60c; 50 for \$1.00; 100 for \$1.50, postpaid.

FERTILIZERS

We guarantee Vigoro to be the equal of any fertilizer on the market regardless of price.

ENJOY BETTER LAWNS, FLOWERS AND GARDENS BY USING VIGORO

There is no secret in having a velvety lawn, colorful flowers, crisp, succulent vegetables, luxuriant shrubbery, and stately trees.

You can enjoy these beauties of nature if you use good seed, plants, bulbs and the right plant-food. The right plantfood is important because plants must be fed the same as human beings.

VIGORO provides an economical, practical, and effective way to secure finest results. Economical because the cost is only 10c to 20c for every 100 square feet. Practical because it is clean, odorless, easy to apply—can be sown by hand like grass seed or applied with an ordinary kitchen colander. Effective because it contains all of the elements of plantfood required to produce early, vigorous growth, and bring fruit, flowers and foliage to full development.

Complete directions in every bag.

Flowers of beauty rare

Delicious vegetables from
your own garden

CLEAN, ODORLESS, EASY TO APPLY

VIGORO

Specially prepared plant food

100-lb. bag \$6.00	50-lb. bag \$3.75
25-lb. bag 2.00	5-lb. bag .60

A SWIFT & COMPANY PRODUCT

FERTILIZERS—Continued

GRANULATED PEAT MOSS. We import this fertilizer in car loads. It is especially adapted for mixing with the soil, though it makes an excellent mulch. When spread over the soil, after plants are through the ground, it keeps weeds down and prevents soil from drying out. Original bale, about 180 lbs. **\$5.50**; half bales **\$3.50**. Enough to fill an ordinary grain sack for **\$1.00**.

NITRATE OF SODA. A good all-around fertilizer. 1 lb. **15c**; 2 lbs. **25c**; 10 lbs. **\$1.00**; 25 lbs. **\$2.25**; 100 lbs. **\$8.00**. Can not be mailed.

STEAMED BONE MEAL. Excellent for rose bushes and other shrubs. 1 lb. **10c**; 5 lbs. **30c**; 10 lbs. **50c**; 25 lbs. **\$1.00**; 50 lbs. **\$1.65**; 100 lbs. for **\$3.00**.

SACCO
— Makes Things Grow —

SACCO produces wonderful results and will be found valuable for all purposes. 1 lb. can **25c**; postpaid **35c**; 5 lb. bag **50c**; 10 lb. bag **85c**; 25 lb. bag **\$1.75**; 50 lb. bag **\$3.00**; 100 lb. sack for **\$5.00**.

SHEEP MANURE. Ground, treated to kill weed seeds, and pulverized. This pulverized sheep manure is very fine for lawns and gardens. 100 lbs. will cover 500 square feet. It is intended especially for early spring use, though may be used any time during the growing season. It is far superior to the ordinary barnyard manure, which is usually loaded with weed seeds and comes in large lumps that are never worked into the soil. 10 lbs. **25c**; 25 lbs. **50c**; 50 lbs. **80c**; 100 lbs. **\$1.30**; 2 or 3 sacks at **\$1.25** per sack; 5 sacks for **\$6.00**; 10 sacks for **\$11.50**; 20 sacks for **\$20.00**.

FORD'S FERTILIZER. Sulphate of Ammonia. Acts quickly, rather a stimulant than a fertilizer. 1 lb. **15c**; 2 lbs. **25c**; 5 lbs. **50c**; 10 lbs. **75c**; 25 lbs. **\$1.50**; 50 lbs. **\$2.75**; 100 lbs. for **\$5.00**.

EVERGREEN BONE DRESSING. A packing house product that is now practically odorless. It is valuable for lawns and plants and trees. 5 lbs. **25c**; 10 lbs. **40c**; 25 lbs. **75c**; 50 lbs. **\$1.35**; 100 lbs. for **\$2.50**.

NITRAGIN. Inoculating Bacteria. Wonderful for beans, peas, and sweet peas. The "garden" size is but **20c** postpaid, and is enough to inoculate up to 8 lbs. of seed. Special bacteria for beans, peas, alfalfa and clovers. State which you wish. $\frac{1}{4}$ bushel size **40c**; $\frac{1}{2}$ bushel **60c**; 1 bushel size **\$1.00**; 5 bushel size for **\$4.75**. Postpaid. Complete instructions for use with each package.

STIM-U-PLANT TABLETS. Especially good for house plants. Also used for outdoor bushes and trees. Instructions for use in each package. 10 tablets for **15c**; 30 for **25c**; 100 for **75c**; 1,000 for **\$3.50** postpaid.

"FEEDDEM" PLANT FOOD. A concentrated food for potted plants or garden use. One teaspoonful in two quarts of water makes a wonderfully effective solution. Pour on soil about roots and watch results. For lawns use one teaspoonful for one gallon of water and sprinkle over the grass. A 4 oz. package for **30c** postpaid. An 8 oz. package for **50c** postpaid. All plants in pots require regular feeding as the roots soon use the elements in the soil that cause plant growth. Unless your plants are fed regularly, they will discolor and cease to grow.

JAPANESE PALM FOOD. Good for palms, ferns and Rubber Plants. Each package contains full directions. 5 oz. package **25c**, postpaid **30c**.

EXCELSIOR PLANT FOOD. For all kinds of flowers and plants. Odorless and easily used. 2 oz. can for **15c**, postpaid **18c**; 5 oz. can **25c**, postpaid **30c**; 12 oz. can **40c**, postpaid **50c**.

LIME, PULVERIZED. All soils that receive constant watering are liable to sour. An application of Pulverized Lime will bring back the original condition of the soil and prevent grass or plants turning yellow, also will prevent growth of moss. Lime aids in breaking up lumps in heavy soil and helps to keep the top soil from caking. 6 lbs. for **25c**; 10 lbs. for **40c**; Original bags of 50 lbs. for **\$1.00**; 2 sacks (100 lbs.) **\$1.75**.

INSECTICIDES

As Poisons Cannot Be Mailed, These Prices Are NOT Prepaid. All Insecticide Orders Will Be Sent By Express or Freight

FREE SPRAYING GUIDE ON REQUEST

ACME PARIS GREEN

A rich, emerald color and of fine fluffy physical character. Containing 55 per cent arsenious oxide, it will give quickest control where extreme measures are necessary.

For use on: potatoes, cotton, tobacco, also to mix with arsenate of lead for fruit tree spraying where quick results are necessary.

Prices: $\frac{1}{4}$ lb. 20c; 1 lb. 50c; 5 lbs. \$2.25.

ACME ARSENATE OF LEAD

The most favored arsenical insecticide found on the American market. It is safest to use on tender foliage and sticks well on the leaves. Recommended for fruit trees, vegetables, bushes and tobacco. Can be used as dust or spray.

Prices: $\frac{1}{2}$ lb. 25c; 1 lb. 40c; 4 lbs. \$1.25; 100 lbs. \$22.00.

ACME GARDEN GUARD

A garden insecticide and fungicide for use as a dust. No water, no mixing, no muss.

For use on: cabbage, cauliflower, tomato plants, melon vines, currants and gooseberries and other vegetables, flowers and shrubs of many kinds.

Prices: 1 lb. sifter carton 25c; 5 lbs. 85c.

ACME TWO-WAY SPRAY

A balanced insecticide and fungicide containing 14% arsenate of lead and 83% Bordeaux Mixture. Two results with one application.

Use wet or dry on: apple, sour cherry, currant and gooseberry, grape, pear, plum, strawberry, pecan, bean, beet, cucumber, pepper, potato, tomato and many other fruits and vegetables.

Prices: $\frac{1}{2}$ lb. 25c; 1 lb. 45c; 4 lb. \$1.25.

ACME ALL 'ROUND SPRAY

Flowers, vines, shrubs, roses, vegetables, need protection same as commercial crops. All Round Spray contains the three leading remedies used by all large growers. Arsenate of Lead, Nicotine Sulphate and Bordeaux Mixture.

Perfect protection for the small user is assured by complete directions in form of spraying guide attached to every package.

Prices: $\frac{1}{4}$ lb. 35c; 1 lb. 85c.

ACME BAIT-M

An effective insecticide bait which will throw a ring of protection around shrubs, flowers and plants in garden and lawn.

For use against snails, cutworms, sow bugs, grasshoppers and many other insects which migrate along the ground.

Prices: 1 lb. 35c; 3 lbs. 60c.

ACME BORDEAUX MIXTURE

Prevents large losses caused by blight, rot, mildew, scab, anthracnose and certain other fungous diseases. It stimulates plant growth and greatly increases the harvests. Almost every kind of vegetable, fruit and shrub can be greatly improved by the early use of Bordeaux Mixture.

Prices: 1 lb. 40c; 4 lbs. \$1.40.

ACME LIME SULFUR

A standard 33° Baume lime and sulphur converted into a dry powder but having all the effectiveness of the liquid product when dissolved in water.

For use in dormant spraying against scale, peach blight, leaf curl and twig borer. Summer spraying against scab, soot, blotch, red spider and mite.

Prices: 1 lb. 30c; 5 lbs. \$1.30.

ACME SPRAY SOAP

A (fish oil) soap effective in destroying many sucking insects and lice on plants, trees, ferns, etc. Also used extensively with cylinder oils in making oil emulsions to reduce the surface tension.

Its use with Nicotine greatly increases the value of that spray.

Prices: 1 lb. 30c.

ACME BEAN BEETLE DUST

A special beetle preparation most effectively used against Mexican bean beetle. Being both stomach and contact poison, it is sure to give quick results.

To be applied only as a dust. For use against: Mexican bean beetle, potato bug, cucumber beetle and many other less common hard shelled beetles.

Prices: 1 lb. 25c; 4 lbs. 75c.

INSECTICIDES—Continued

A GARDEN BUG KILLER That Fertilizes

Imagine an insecticide so deadly that it kills bugs, worms and insects like magic! Yet it is absolutely NON-POISONOUS! Also, acts as a soil conditioner and fertilizer.

Such are the benefits offered you in the new scientific discovery called PLANTGARD. You simply dust in on the plants from a handy, shaker top box.

A generous box full costs only 35c—larger size 60c. Send for a box today and see for yourself how quickly this sure harmless discovery will rid your garden of destructive insects. Order at once.

Plantgard
FOR GARDEN PROTECTION

Made only by National Products, Inc., Quincy, Ill.

"BLACK LEAF 40". Nicotine Sulphate. The best contact spray for use against plant lice, aphids, and any soft shelled bug or worm. Also used for poultry lice by simply painting the roosts. Kills lice from fumes while the chickens roost. See poultry section.

1 oz. bottle 35c; ½ lb. bottle \$1.25; 2 lb. can \$3.25; 10 lb. tin \$11.85.

TOBACCO DUST. Excellent for dusting powder for aphids, plant lice, or worms. 1 lb. 10c; 3 lbs. 25c; 100 lb. bag for \$5.25.

HELLEBORE. Used for rose bugs, slugs, etc. ¼ lb. pkg. 15c; 1 lb. for 45c.

HYDRATED LIME. Used as an insecticide in dry powdered form. 6 lbs. 25c; 10 lbs. for 40c. Original 50 lb. bag \$1.00.

MELROSINE. Preferred by many for bugs on roses. Small size. enough for one gallon of solution, 50c; pint can, \$1.00; one quart \$1.75; half gallon \$3.25.

HAMMONDS SLUG SHOT. A favorite for house and garden plants, shrubs, trees, vines, potatoes, etc. Shaker-top can, 25c, post-paid 35c.

POWDERED SULPHUR. 1 lb. 10c; 3 lbs. 25c; 10 lbs. 55c; 100 lbs. for \$4.50.

TREE TANGLEFOOT. Standard preparation for keeping ants, worms, and insects out of trees. 1 lb. can 60c; 5 lb. can \$2.00.

FISH OIL SOAP. ½ lb. pkg. 20c; 1 lb. pkg. 35c; 5 lb. pkg. \$1.40. This soap is excellent for house plants and tender garden plants that will not survive a spray that has a tendency to burn.

ATLAS NON-POISONOUS WEED KILLER PATENTED

Simply dilute with ten parts of water and apply to pernicious vegetation with a sprinkling can.

Will exterminate all undesirable vegetation—including poison ivy—as easily as watering a garden, without endangering human or animal life. One gallon is ample to clear 500 square feet of densely vegetated area.

1 quart cans, each.....	\$ 0.75
½ gallon cans, each.....	1.25
1 gallon cans, each.....	2.00
5 gallon drums, each.....	8.00
50 gallon drums, each.....	55.00

SPRAY PUMPS

Postage or Express Extra

No. F-2

No. F-2—Hudson Household Sprayer.
Each25c
Capacity about 5½ ozs., just the thing
for household use.

No. 452 Heavy Misty Spray

No. 452—Heavy Tin Misty Sprayer.
Each50c
A favorite in and around the house,
yard, garden and chicken house.
Well soldered and not easily put out
of commission. Capacity, one quart.

No. 122 Modoc

No. 122—Hudson Modoc Bucket Pump.
Each\$4.20

Used for fruit trees, vines and poultry houses. Is double acting and develops 150 pounds nozzle pressure. Interchangeable nozzles produce any desired spray.

No. 110-G Perfection

No. 110-G — Perfection, Galvanized tank\$6.50
No. 110-B—Perfection, Brass tank.\$9.00

The Hudson Perfection Sprayer is the best general high pressure compressed air machine we have yet offered. Can be used for whitewashing, disinfecting and all purpose spraying. Capacity 4 gallons, shipping weight 12 pounds.

No. 140-G Junior

No. 140-G—Junior\$5.00

The Hudson Junior is a medium size high pressure compressed air sprayer particularly adapted for small truck farm or poultry plant. Differs from larger models only in capacity, 2½ gallons. Operates perfectly at any pressure. Shipping weight about 9 lbs.

QUEEN INCUBATORS

Prices Greatly Reduced for 1929

THE LEADING HATCHER IN HIGH ALTITUDES AND DRY CLIMATES

The Queen Incubator again leads the field in number of chicks hatched and weight per chick, showing that the Queen ventilation is well nigh perfect. In hatching in Colorado, many incubators must be altered in order to allow sufficient ventilation to furnish the necessary moisture. This is not the case with the Queen.

NOTICE THAT WE PAY ALL CARRYING CHARGES ON ALL INCUBATORS AND BROODERS

All STANDARD QUEEN INCUBATORS are heavily built, carefully put together, and so constructed that they will last a life time. There is nothing cheap about the Standard Queen except the price.

The Style K QUEEN INCUBATORS meet the demand for a reasonably good incubator at a popular price. They will give just as good results as the Standard Queen models if conditions are ideal. The Standard Queen models are recommended, however, where there is any doubt about hatching conditions, changes of temperature, ventilation, etc.

Prices, Freight Paid to Your Station

Style K Models

No. 20K, 70 egg capacity.....	\$16.50
No. 21K, 130 egg capacity.....	22.50
No. 22K, 220 egg capacity.....	30.00

Standard Models

No. 1, 85 egg capacity.....	\$25.00
No. 2, 135 egg capacity.....	30.00
No. 3, 180 egg capacity.....	35.00
No. 4, 275 egg capacity, with turning trays.....	46.50
No. 5, 400 egg capacity, with turning trays.....	55.00
No. 25, 600 egg capacity, with turning trays.....	87.50
No. 30, 800 egg capacity, with turning trays.....	135.00
No. 40, 1,000 egg capacity, with turning trays.....	175.00
No. 50, 1,500 egg capacity, with turning trays.....	265.00

QUEEN STOVE BROODERS

BURN EITHER HARD OR SOFT COAL

Free, Complete Queen Catalog on Request

GASPROOF and FIREPROOF. There are no drafts on the smokepipe of the Queen Stove Brooder. The check rests on top of the stove and opens outward when fire is too warm, thus giving a gentle inflow of air to retard the heat. When it is too cool the wafer contracts and closes the check and at the same time opens the draft. This keeps an even heat all the time.

Hundreds of farmers use Queen Stove Brooders in their hog houses to protect winter and early spring litters from chilling. Results prove that they save many pigs that would ordinarily have been lost.

Queen Stove Brooders are slightly larger at the bottom than at the top, thus preventing the clogging of stove toward morning, that is so common in some brooders. Complete brooder catalog sent free on request.

Cut at the right shows the new **QUEEN MAGAZINE BROODER STOVE No. 4**. This brooder stove ends the work of constant refueling and assures you plenty of heat during cold nights for large flocks. It has a 60-inch canopy and holds 75 pounds of coal. Fill the magazine and you can forget all about your stove for hours at a time. Has feed door above canopy and no openings for heat regulation below canopy, assuring safety to your chicks at all times.

Over a quarter of a century of satisfaction stands behind every **QUEEN STOVE BROODER**. Thousands are in daily use by poultry raisers in every part of the country. There is a model for every need and they are priced to fit your pocketbook.

QUEEN STOVE BROODERS, FREIGHT PAID TO YOUR STATION

No. 0,	400 chick capacity, 42-inch canopy.....	\$14.75
No. 1,	800 chick capacity, 52-inch canopy.....	18.50
No. 2,	1,200 chick capacity, 56-inch canopy.....	22.50
No. 4,	1,600 chick capacity, 60-inch canopy, magazine stove.....	30.00

QUEEN OIL BURNING BROODERS

The above illustration shows the extra strong construction of the canopy legs. Note how sturdily they are braced—an innovation in brooders.

Clear, Regular Heat From a Clear Blue Flame

That's what you get from the Nesco Heater in every Queen Oil Burning Brooder. *No smoke—no gas!* This burner stands strictly in the center of brooder. The clear blue flame rises from the top of the chimney (which is 12½ inches above floor) directly to the ventilator or cap at center of hover—then spreads evenly all around. Supply tank is located outside the hover, connected by a long supply pipe. Regulation is controlled by the handle at the tank. Oil runs into sub-tank and flows through supply pipe into the burner, saturating the wick which feeds to the flame.

PRICES PREPAID TO YOUR STATION

Wick of indestructible asbestos. No solder used on burner. All welded. Leaks almost impossible. Oil cannot overflow burner. Attractive guard around burner and cross pipes.

Two-gallon metal tank. Will burn 48 hours without refilling. Metal tank minimizes fire risk. No overflowing. No bottle to break. Few moving parts. All visible. Strong and rugged. Parts seldom need renewal.

300 Chick size (wt. 35 lbs.), 32-inch Hover.....	\$16.00
600 Chick size (wt. 40 lbs.), 42-inch Hover.....	18.00
1000 Chick size (wt. 45 lbs.), 42-inch Hover.....	20.00

THE OIL-O-STAT BROODER

A TRULY GREAT OIL BURNING BROODER

The OIL-O-STAT is a drum type brooder and the best one we have seen yet. The drum type oil burning brooder has become very popular because once adjusted it is only necessary to fill the supply tank occasionally, and clean the burner as necessary. The Oil-O-Stat will furnish all the heat required, regardless of outside temperatures. When used with the canopy, the heat is deflected to the floor where it is needed. In this way the OIL-O-STAT is far superior to the other brooders of this kind which are not equipped with a canopy.

CONSIDER THESE FEATURES OF THE OIL-O-STAT BROODER

AN IDEAL DRUM TYPE

FOR ECONOMY: Distillate burning, sixteen feet flame travel, eliminates labor.

FOR SAFETY: Limitless heating ability, a "won't-go-out" burner, freedom from fire hazard.

Broods any number of chicks.

Safeguards under any weather conditions.

Requires the minimum of attention and will not go out with fuel in tank, explode or cause fire, subject chicks to smoke or gas.

All at a price anyone can afford to pay

A large heavy steel heating drum, baffled so the hot blast travels 17 feet within it. Greater radiation and economy. A remarkable burner, the "Twin Blast" handling 38-40 distillate as well as kerosene, needs cleaning but seldom, burns as low as $\frac{1}{2}$ gallon and less daily, but won't go out.

A wire edged tilting canopy deflects the heat down to the floor, affords ideal brooding conditions and gives greater economy.

An automatic valve controls the flame.

The oil tank holds 20 gallons, enough for many days.

CONSIDER THESE LOW PRICES, PREPAID TO YOUR STATION

Complete without canopy.....	\$22.00
With 52-inch canopy.....	26.00
With 62-inch canopy.....	28.00

The MaKomb Giant Coal Brooder

Beyond Compare, the Greatest Coal Brooder Ever Built

THE MOST SIMPLE BROODER IS THE BEST

In designing the "MaKomb" Coal Brooder, entire simplicity has been obtained and maintained. There are no superfluous trick "selling points," no features added just to make sales talk. The "MaKomb" has no "water pan" for none is needed. The "MaKomb" has everything a brooder should have, but nothing that is not necessary. Anyone can operate the "MaKomb"; there's nothing like it for ease of operation, all because it is so simple.

Patented "By-Pass" Control, unlike any other, superior to any other.

Tilting Canopy for Convenience.

Patented Removable Baffle Plate.

Five-Inch Stove Pipe.

Big Hinged Top Door, fills direct from coal scuttle.

One-Piece Gas Proof Barrel.

Heavy Rocker Grates, large in area.

Positively Satisfactory, Using Soft Coal.

When those March gales whoop at night the man with a "MaKomb" Giant does not worry, because it has the **By-Pass Control**, the only **Automatic Control** not affected by high winds. It is not simply an adaptation of old style furnace and stove dampers, but is a new and original invention designed particularly for coal brooders. The method of control is the heart of any brooder and the By-Pass Control is the most sensitive and positive ever devised. It is one reason why the "MaKomb" holds fire over night so easily. When the proper temperature has been reached the fire is checked at once, preventing fuel waste.

When the fire once gets started in any brooder it will come on with a rush, exhaust the fuel and go out unless quickly and positively retarded. There is no control which will as quickly check the fire as the "By-Pass." When the desired temperature is reached and the Two-Way Damper shuts off the air and opens the By-Pass, the air is literally drawn away from the fire because the open By-Pass offers the most ready path. That is why high winds blow without effect. The By-Pass, drawing on the ash pit simply carries any air which may seep through doors and drafts up the By-Pass and NOT THROUGH THE FIRE.

How the canopy appears when tilted for attention to stove or chicks. An exclusive labor saving feature.

IMPORTANT SPECIFICATIONS

Diameter of canopy.....	42 in.	52 in.	62 in.
Actual coal capacity.....	35 lbs.	52 lbs.	66 lbs.
Actual chick capacity.....	350	600	800
Diameter of grates.....	9 3/4	11	11
PRICE, DELIVERED TO YOUR STATION.....	\$14.00	\$18.00	\$22.00

We distribute the MAKOMB line in Colorado. Your order will be filled by nearest dealer, or if no dealer in your district, will be shipped prepaid from our stock.

CEL-O-GLASS

Cel-O-Glass is now too well known to require an introduction. It is now standard equipment for brooder house and poultry house fronts, and being cheaper and better than ordinary glass, is in wide use. There is one CAUTION, however, that we feel impelled to make. Like every other good article, Cel-O-Glass has many imitators. Some of them are practically worthless and will not stand the sun's rays any length of time. Unfortunately, these imitations are often sold as genuine Cel-O-Glass. We advise you to be sure of the manufacturer's name before buying. Genuine Cel-O-Glass is made by Acetol Products, Inc., 21 Spruce Street, New York City and their label appears on every roll. We handle the genuine product.

Because Cel-O-Glass admits the Ultra-Violet Rays of the Sun, its use is recommended by many experiment stations and practical breeders. These Ultra-Violet Rays have much to do with the growth and health of any living creature, and chicks raised under Cel-O-Glass will not only grow faster but will be stronger than chicks raised under ordinary glass.

We will gladly supply free bulletins by noted scientists who have experimented with Cel-O-Glass and strongly recommend its use.

PRICES

Less than 25 running feet.....	sq. ft. 15c, postpaid 16c
25 running feet, 75 square feet.....	\$11.25 postpaid
50 running feet, 150 square feet.....	22.25 postpaid
Original roll, 100 feet long by 3 feet wide.....	42.00 postpaid

Cel-O-Glass will withstand the most severe hail or wind storm and when used in an upright position will last indefinitely. We do not recommend it, however, as roofing or in any position except vertical, if it is exposed to the burning rays of the sun in hot weather.

When used for hot beds, and it is truly wonderful for this purpose, the frames should be removed in summer and stored away from the direct rays of the sun.

FULL-O-PEP CHICK STARTER

(Made by the Quaker Oats Company)

Just the Things Baby Chicks Need

Oatmeal...Cod Liver Oil and Meal...Molasses

Quaker Ful-O-Pep Chick Starter "does the work" because it's just the right combination of the things baby chicks should have—and *nothing else!*

A base of pure, soft, oatmeal . . . vitamin-laden cod liver oil . . . fresh cod liver meal . . . valuable minerals . . . and now, *molasses!* These are ingredients every poultry owner should know about.

Think of this: *oatmeal is more digestible (96% available) than any other grain product.* It is soft and non-irritating. It just fits a baby chick's tender digestive tract.

The cod liver oil in Quaker Ful-O-Pep Chick Starter is the finest oil to be had. It works like sunshine, helps prevent rickets, leg weakness, toe-picking, and kindred ailments.

It helps to build large, strong bones.

Cod Liver Meal, in just the right proportion, adds to the efficiency of every other ingredient in Ful-O-Pep Chick Starter. It sends nourishment

Every poultry raiser remembers with dismay the terrible death losses of his young chicks in past seasons.

You can raise your chicks this year without these discouraging losses if you raise them on

FUL-O-PEP CHICK STARTER

After years of research science has discovered that Cod Liver Oil, when combined with other life and health-giving ingredients, greatly reduced leg weakness, with its consequent heavy death losses.

The Quaker Oats Company have combined this latest discovery of science in Ful-O-Pep Chick Starter

and extensive experiments have proved conclusively that it greatly reduces death losses. We now have this wonderful feed for our patrons. Let us supply YOU.

Manufactured by
The Quaker Oats Company

"right to the spot."

And now The Quaker Oats Company announces another important ingredient for this exceptionally good feed—*molasses!*

Tests over a period of years have proved the value of molasses in poultry feeding. It is rich in vitamin B. It contains potash. Being slightly laxative it relieves constipation. In Quaker Ful-O-Pep Chick Starter, it is of exceptional value in preventing coccidiosis.

Send for your free copy of the 1929 Ful-O-Pep Poultry Book. Your name and address on a card will do.

For Ful-O-Pep Chick Starter prices, see page 46.

FULL-O-PEP EGG MASH

(Made by The Quaker Oats Company)

Make Your Hens Give You Better Eggs---and More of Them

Now is the time to make your hens do their very best; make them give you better eggs, as well as more of them.

Quaker Ful-O-Pep Egg Mash will do this for you, encouraging the flock to deliver a full count of large, uniform, strong-shelled hatchable eggs.

Authoritative tests prove that oatmeal ranks first in "productive energy." And oatmeal—pure, fresh and clean—is the base of Quaker Ful-O-Pep Egg Mash.

Minerals, proteins, carbohydrates—the hen gets them all, plus cod liver meal in exactly the right proportion thoroughly mixed into the mash. The cod liver meal helps every other ingredient do better work.

Another ingredient of great value has been added to Ful-O-Pep Egg Mash in *molasses*, following years of careful study of the benefits of this material in egg production.

By means of an exclusive

process, The Quaker Oats Company is able to combine molasses with the other ingredients so the mash remains dry, mixing it so thoroughly that at every mouthful the hen gets a proper amount.

Eggs produced from Quaker Ful-O-Pep Egg Mash find favor everywhere. For hatching purposes they are unsurpassed, producing large, well-formed chicks that thrive and grow.

Used according to directions Quaker Ful-O-Pep Egg Mash proves most economical. Hens eat it eagerly, but obtain their nourishment more quickly. It is ready to use just at it comes from the sack.

For Ful-O-Pep Egg Mash prices, see page 46,

FUL-O-PEP

POULTRY FEEDS

WHAT THEY DO

Feeding, of course, is an all-important question with the poultry owner, whether he depends upon his flock for a living, or whether he "keeps chickens" as a side-line, or a hobby.

And while it is true that correct feeding alone will not guarantee poultry profits, it is a fact that no matter how careful the owner may be in matters of breeding, incubation, housing, and marketing he cannot hope for maximum profit, or satisfaction, unless he feeds efficiently.

A CHEAP FEED IS COSTLY

Now, efficient feeding is by no means a matter of buying the cheapest feed, or of using feed sparingly. Such an attitude toward feed-costs invariably leads the poultry owner into trouble and expense. Rather, efficient feeding calls for the employment of the very best feed obtainable, and its consistent use in an intelligent way.

Times have changed in the poultry industry, as in everything else. Efficient methods of feeding have greatly increased poultry production. To keep pace with the business any poultry owner must keep pace with modern methods of feeding and management; otherwise he will lag behind in production and profit.

PRICES—SUBJECT TO CHANGE AFTER APRIL 15, 1929

		500-lb. Lots	1,000-lb. Lots	2,000-lb. Lots
FUL-O-PEP CHICK STARTER				
100-lb. bags	\$4.80	\$4.75	\$4.70	\$4.65
50-lb. bags	2.60	....	....	....
25-lb. bags	1.45	....	....	....
8½-lb. bags	.55	....	....	....
5-lb. bags	.40	....	....	....
FUL-O-PEP GROWING MASH				
100-lb. bags	4.30	4.25	4.20	4.15
50-lb. bags	2.25	....	....	....
25-lb. bags	1.25	....	....	....
8½-lb. bags	.50	....	....	....
FUL-O-PEP EGG MASH				
100-lb. bags	3.95	3.90	3.85	3.80
50-lb. bags	2.05	....	....	....
25-lb. bags	1.15	....	....	....
FUL-O-PEP FINE CHICK FEED				
100-lb. bags	3.50	3.45	3.40	3.35
50-lb. bags	1.90	....	....	....
25-lb. bags	1.00	....	....	....
8½-lb. bags	.35	....	....	....
FUL-O-PEP COARSE CHICK FEED				
100-lb. bags	3.40	3.35	3.30	3.25
50-lb. bags	1.80	....	....	....
25-lb. bags	1.00	....	....	....
FUL-O-PEP SCRATCH GRAINS				
100-lb. bags	3.15	3.10	3.05	3.00
FUL-O-PEP FATTENING FEED				
100-lb. bags	3.60	3.55	3.50	3.45
QUAKER BULK ROLLED OATS, STEEL CUT OATS OR OAT FLOUR				
100-lb. bags	3.85	3.80	3.75	3.70

HOW TO RAISE BABY CHICKS SUCCESSFULLY

Chicks should be kept in the incubator or in shipping boxes until the youngest are about 48 hours old and the oldest about 72 hours old.

FIRST WEEK

Spread Ful-O-Pep Chick Starter on newspapers or cardboard for the chicks before they are put in the brooder house. The chicks walking about will rattle the paper. This will attract their attention and they will all get some.

Sprinkle some fine grit on top of the Starter for the first week. The chicks must be fed when they are put in the brooder house. Otherwise, they will start to eat litter and so starve to death when they are about a week old. Do not put any disinfectant in the drinking water.

Many poultrymen who are using Ful-O-Pep Chick Starter from the very beginning, are raising nearly 100 per cent from good hatches.

When the chicks are started on litter or sand without being fed, it frequently results in an uneven flock, for the litter eaters have little room or desire for feed.

When the first Chick Starter is given, be sure that you have provided enough trays, newspapers or cardboard for all the chicks. Otherwise, the smaller and weaker chicks will be crowded out from getting sufficient food. Do not try to reduce the amount of feed that the chicks eat by limiting the hopper space, for the big chicks will then get all they want and crowd out the smaller birds.

Keep Ful-O-Pep Chick Starter in front of the chicks dry just as it comes from the bag. And for the first week do not give the chicks anything else except fine limestone grit and some fresh, luke-warm water. Provide clean litter, such as cut alfalfa or clover. Have the litter one inch or so thick so that the chicks keep their feet warm. If the floor is left bare, or if sand is used without straw, it is likely to be too cold or too hot.

Take care that the chicks are not allowed to chill or become overheated.

If the chicks have been chilled or overheated before being placed in the brooder, or if they come from stock that is in bad condition, or if they are improperly incubated, a number may die when they are about a week old. Chicks that die at that age usually do so because their systems have been thrown out of condition and they are unable to eat. Or their deaths may be due to the fact that they began to eat litter and, therefore, starved to death. If the brooder is small or crowded, it is advisable to feed Ful-O-Pep Chick Starter on trays for about fifteen minutes at a time three or four times a day. This should be continued until the chicks get outdoors.

SECOND WEEK

In the second week continue to feed Ful-O-Pep Chick Starter. It may be fed in trays or hoppers from then on. Provide sufficient space so that all the chicks can eat at the same time and thus develop evenly. The Starter should be fed dry. Provide all the Chick Starter they will eat for they cannot harm themselves by overeating. The limestone grit can also be hopper fed. Milk may be given also if it is desired to hurry the pullets along.

In the second week you also can begin to feed Ful-O-Pep Fine Chick Feed. A tablespoonful each morning and another tablespoonful each night is the proper quantity for each 100 chicks. Unless the litter is especially clean it is best to sprinkle the fine chick feed on the chick starter in the hoppers. Hopper feeding is much more sanitary than letting the chick dig in soiled litter.

The Cod Liver Meal in Ful-O-Pep Chick Starter enable the chick to assimilate its food better. As a result it gets more good out of the oatmeal and other ingredients, and growth is fast and certain.

If you can keep your brooder house warm, let the chicks have a chance to run back and forth outdoors by the eighth day. Be very certain that it will be easy for them to find their way back to the brooder. They soon learn not to stay out too long and the air and sunlight will help them grow. Do not fail to provide a wind break or some other form of shelter if there is a cold wind.

If grass or other green range is not available, better chicks will be raised if they can be fed lawn clippings, carrots, lettuce, cabbage or turnips.

SECOND WEEK CRITICAL

The second week is frequently the critical week, which determines how the chicks are to grow and do, so you must watch temperatures and ventilation very closely.

If the chicks show any tendency to slacken their appetite, feed three or four times a day instead of constantly. (The brooder is probably too hot.) Continued lack of appetite is probably a sign of constipation. To remedy this put one teaspoonful of epsom salts to each gallon of water for a day or two.

From the third to sixth week continue to feed Ful-O-Pep Chick Starter. Keep it in hoppers in front of the chicks all the time. If it is kept dry, it will always be sweet, and there is no danger of overfeeding.

Provide a clean, bright grit at all times and plenty of fresh, clean water. Give chicks a chance to run on a good grass range, if possible. Let them get outdoors as much as possible, always remembering that they must be protected in stormy, wet and windy weather. Gradually increase the amount of Ful-O-Pep Fine Chick Feed that you are giving them each morning and each night, so that at the end of the sixth week you will be feeding about three parts by weight of Ful-O-Pep Chick Starter to two parts by weight of Fine Chick Feed. Always watch the litter or troughs. Be sure that you are not overfeeding on Fine Chick Feed.

ONE POUND AT SIX WEEKS

It is particularly desirable to feed Ful-O-Pep Chick Starter until the chicks are six weeks old, because that is ordinarily the end of the danger period. The Cod Liver Oil and Cod Liver Meal in Ful-O-Pep Chick Starter will be found especially beneficial in preventing leg weakness, coccidiosis, and other chick ailments that may otherwise cause much trouble during the first six weeks. When the chicks are six weeks old they should weigh about a pound, and should have eaten a total of one and one-half pounds of Ful-O-Pep Chick Starter and one-half pound of Ful-O-Pep Fine Chick Feed.

Change gradually from Ful-O-Pep Chick Starter to Ful-O-Pep Growing Mash when the chicks are seven weeks old and keep the Growing Mash in front of the chicks at all times. Provide enough hopper space so that the small chicks will not be crowded out by the large ones.

COARSE CHICK FEED, NOW

Change now to Ful-O-Pep Coarse Chick Feed instead of Fine Chick Feed, and gradually increase the amount of Coarse Chick Feed so that the birds are eating more of the Coarse Chick Feed than the Growing Mash when they are five months old.

Now is the time when the pullets are forming their frames and structures, and if you want them to grow to full size and have the vigor necessary for good egg production, give them the Growing Mash. They cannot make the proper growth or development on grain alone.

The amount of Ful-O-Pep Growing Mash the birds should eat will vary with the age and size of the bird and the season of the year. If you want them to mature early, feed heavily on Ful-O-Pep Growing Mash. If you want to retard laying, feed more heavily of Ful-O-Pep Coarse Chick Feed. Late hatched birds should be brought along steadily and rapidly. It is usually wise to hold back the early hatched birds and not let them lay until they are five or six months of age.

Early hatched birds should be fed all the Ful-O-Pep Coarse Chick Feed they will eat after they weigh $1\frac{1}{2}$ to 2 pounds. If the pullets begin to shoot their combs, indicating they are getting ready to lay too young, restrict the Growing Mash and make them range more, but do not restrict the feed so that the birds will be stunted. And always keep bright, shiny grit and plenty of fresh water available.

THE "HALF-AND-HALF" RATION

When pullets are six months old, feed them half Ful-O-Pep Growing Mash and half Egg Mash. This is the famous 50-50 ration that develops the finest egg producers. In addition to the 50-50 Mash, feed one quart of Ful-O-Pep Scratch Grains to twelve pullets daily or fourteen pounds to 100 pullets.

The Ful-O-Pep Growing Mash frequently starts pullets laying at four to five months of age. If it is your intention to keep the pullets for egg production, they should be kept from laying until they are five to six months old. This may be done by reducing the amount of Growing Mash and feeding more Ful-O-Pep Coarse Chick Feed.

After the birds have matured, follow the Ful-O-Pep way of feeding hens and watch the eggs roll out. Ful-O-Pep Egg Mash supplies the egg building materials for maximum production.

WATER FOUNTAINS for CHICKS & CHICKENS

The O. K. No. 400, prepaid up to 300 miles, \$4.95. This is an insulated fountain with drinking space all around the fountain. Keeps water warm in cold weather, or cool in warm weather. Excellent as a baby chick fountain by removing from the base and placing flat on the floor. Made of copperized galvanized iron which lasts much longer than the ordinary galvanized. Equipped with handy appliance to release the water instead of the old cork style. Made in two sections that come apart, making it easy to clean.

Many poultry raisers tell us this is the finest waterer they have ever used.

The No. 3, O. K. Super Heated Fountain, 2½ gallon capacity, similar to the No. 400 except that it has a lamp in the base, guaranteeing warm water in the coldest weather. Price prepaid up to 300 miles, \$3.25.

No. 4, O. K. same as above except holds 5 gallons. Price prepaid up to 300 miles, \$4.15.

No. 10, O. K. 10 gallon capacity, price prepaid up to 300 miles, \$6.15.

No. 1 Summer waterer, 1 gal. capacity, 90c postpaid.

No. 2 Summer waterer, 2½ gal. capacity, \$1.35 postpaid.

No. 7 Charcoal Tin Buttermilk Feeder, 1 gal. capacity, \$1.20 postpaid.

No. 8 Charcoal Tin Buttermilk Feeder, 2½ gal capacity, \$1.75 postpaid.

These waterers have the all around trough, made in two sections, easy to clean.

No. 142 Mason Jar Fountain. Fits any standard jar, pint, quart, or 2-quart. Galv., each 10c, 1 doz. for \$1.00, postpaid. Same style in charcoal tin for buttermilk, each 10c, 1 doz. for \$1.00, postpaid.

Bottom-Fill Fountains, made in two pieces, easy to clean.

No. 19—1 quart capacity, each 25c, 1 doz. for \$2.50, postpaid.

No. 20—½ gallon capacity, each 40c, 1 doz. for \$4.20, postpaid.

No. 24—1 gallon capacity, each 55c, 1 doz. for \$6.00, postpaid.

Moe's Magazine waterer and feeder. The upper magazine is fitted to the feeder top with a spiral thread so it can be adjusted up or down. Works equally well for waterer or feeder. Diameter 8¼ inches, height 8½ inches, capacity two quarts. 12 feeder holes.

No. 18—Made of galvanized steel, each 55c, 1 doz. for \$6.00 postpaid.

No. 139—Made of tin plate for buttermilk, each 85c, 1 doz. for \$9.20 postpaid.

RAISE YOUR BABY CHICKS ON Ful-O-Pep CHICK STARTER. 1 pound will carry a chick to six weeks, when it will be ready for Ful-O-Pep GROWING MASH. Most starting feeds require 2 lbs. per chick, this is because they are corn-base feeds. They may produce rapid growth, but will never mature a perfectly developed chick.

FEEDERS FOR POULTRY

Layers should not be given any scratch feed until about one hour before roosting time in the evening. In order to control mash feeding, it is necessary to have enough properly made mash feeders to supply your flock. The Moe Mash Hopper prevents waste and fills every requirement for a good feeder. Prices quoted are postpaid.

No.	Height	Width	Capacity	Each	Three for
35	19 in.	8 ½ in.	10 qts.	\$1.50	\$3.75
36	19 in.	12 in.	14 qts.	2.10	6.00
13	19 in.	18 in.	22 qts.	2.40	6.60
37	19 in.	24 in.	32 qts.	3.00	8.25

Grit is always necessary, even where poultry are allowed to range. A good grit box is one that hangs on the wall out of the way, holds enough for several days supply and offers easy access to the flock. Moe's grit and shell boxes are satisfactory in every particular.

No. 45—2 compartments, 8 in. high, 5 in. wide, each 45c postpaid.

No. 9—3 compartments, 13 in. high, 8 ½ inches wide, each 90c postpaid.

No. 90—4 compartments, 13 in. high, 11 in. wide, each \$1.20 postpaid.

3 or more grit boxes at 10 per cent discount, postpaid.

Moe's Round Chick Feeder is in great demand. It keeps the feed pure and prevents waste. Top comes off but is so made that chicks or hens cannot remove it.

No. 11—6 in. diameter, 8 feed holes, each 12c; 1 doz. for \$1.20 postpaid.

No. 12—8 ¼ in. diameter, 12 feed holes, each 25c; 1 doz. for \$2.50 postpaid.

No. 133 for buttermilk, 8 holes, each 20c; 1 doz. for \$2.15 postpaid.

No. 190—Porcelain, 12 holes, each 80c; 3 for \$2.00 postpaid.

Moe's Eclipse Feeding Trough. Galvanized steel made without seams, rivets, or solder. The top slides off for filling, making cleaning easy. Nos. 137 and 138 are made of charcoal tin for milk or buttermilk. Prices quoted are postpaid.

No. 27—10 in. long, 10 holes, each 25c; 6 for \$1.25; 1 doz. for \$2.40.

No. 28—20 in. long, 20 holes, each 40c; 6 for 2.20; 1 doz. for 4.25.

No. 137—10 in. long, 10 holes, each 30c; 6 for 1.60; 1 doz. for 3.25.

No. 138—20 in. long, 20 holes, each 45c; 6 for 2.50; 1 doz. for 4.90.

FEEDERS FOR POULTRY—Continued

holes, each, \$1.60, 3 for \$4.50 postpaid.

Moe's single and double chick feeders. No sharp or rough edges. Well made of galvanized steel. Sliding top, easy to fill and clean. Just what you want.

Prices quoted are postpaid.

Moe's Large Capacity Chick Feeder is the best of this type feeder. A wonderful feeder for young growing stock, and a great time and labor saver when chicks are raised in large numbers.

No. 140—21 in. long, 32 feeder holes, each \$1.10, 3 for \$3.00, postpaid.

No. 141—35 in. long, 54 feeder

No. 55—Single,	length 12 in.,	9 holes, each	25c;	doz. \$2.50
No. 56—Single	length 18 in.,	13 holes, each	35c;	doz. 3.80
No. 57—Single,	length 24 in.,	18 holes, each	40c;	doz. 4.25
No. 58—Double,	length 12 in.,	18 holes, each	35c;	doz. 3.80
No. 59—Double,	length 18 in.,	26 holes, each	55c;	doz. 6.00
No. 60—Double,	length 24 in.,	36 holes, each	65c;	doz. 7.00

LEG BANDS FOR POULTRY AND PIGEONS

Colored Spirol Leg Bands in White, Black, Red, Garnet, Pink, Green, Dark Blue, Light Blue, Purple, Yellow. Made in six sizes. Be sure to order by number. No. 91 for Brahmas or hen turkeys, No. 92 for Reds, No. 93 for Leghorns, No. 94 for Bantams, No. 95 for Pigeons, No. 96 for Baby Chicks. Prices are postpaid.

POULTRY SIZES

12 bands.....	\$0.15
25 bands.....	.25
50 bands.....	.35
100 bands.....	.65
500 bands.....	3.00
1000 bands.....	5.50

PIGEON AND BABY CHICK SIZES

12 bands.....	\$0.10
25 bands.....	.20
50 bands.....	.35
100 bands.....	.50
500 bands.....	2.25
1000 bands.....	4.00

Aluminum Leg Bands. The best numbered leg band for ordinary marking. Large raised numbers that are easy to read. Adjustable for any size fowl. Packed in cartons of 12, 25, 50 and 100 bands each. Numbered 1 to 12, 1 to 25, 1 to 50, 1 to 100, 101 to 200, etc., up to 9,999 which is the largest number made. Prices are postpaid.

12 bands.....	\$0.15	100 bands.....	\$0.75
25 bands.....	.25	500 bands.....	3.50
50 bands.....	.45	1000 bands.....	6.00

Thermometers, Hygrometers, Etc.

All Postpaid

TYCOS HYGROMETER.

"TYCOS" INCUBATOR THERMOMETER No. 5776. Used with, or without stand. Price complete, 75c.

"TYCOS" INCUBATOR THERMOMETER No. 5783, similar to above, but certified and guaranteed absolutely accurate, complete with stand, \$1.15.

BROODER THERMOMETER No. 5792, complete 70c.

BROODER THERMOMETER "F & L" No. 60, red liquid, easily seen, complete, 60c.

"TYCOS" HYGROMETER, complete for \$1.65. No. 5796. Extra wicks 15c each. Every incubator should have a Hygrometer as it is necessary to have the necessary moisture if a good hatch is to be had. Full instructions with each Hygrometer.

THE PATTERSON AND YOUNG MOISTURE GUIDE, with glass tube telling when to give more moisture or ventilation. Price postpaid \$1.00 each.

No. 5776

Tycos Incubation-Zone Thermometer

When used with Stand

When used without Stand

LITTLE PUTNAM STOVE AND PUTNAM BROODER HEATER

Little Putnam Stove, galvanized, \$1.95 postpaid.

Little Putnam Stove, aluminum, \$2.95 postpaid.

Wicks for either one, 25c doz.

The Little Putnam Stove is nine inches in diameter and four inches high, and BURNS THREE TO FOUR WEEKS WITHOUT REFILLING OR OTHER ATTENTION.

PUTNAM BROODER HEATER, complete for \$4.75 postpaid. It requires tending and refilling only once a week and can be depended upon to deliver a regular supply of heat. Ideal for home-made brooders for 30 to 40 chicks.

BROODER HEATER

Close-to-Nature Oat Sprouters

Close-to-Nature Oat Sprouters are made in two styles. The Premium Sectional Sprouters are made mostly of Galvanized Sheet Steel with wood frames and are intended for use in a room where some heat is furnished. The Double Quick Sprouters are for use in unheated rooms. They are well constructed of Cypress Wood, well insulated, and produce the much to be desired Vapor Bath Sprouts.

PRICES AND DESCRIPTION

The Little Eggetter, 13x13x28 inches, 4 trays, 25 to 35 hens.....	\$ 7.95
Small Premium, 24x20x26 inches, 2 trays, 70 to 75 hens.....	10.00
S. P. with 1 section, 8 compartment, 4 trays, 100 to 140 hens.....	15.00
S. P. with 2 sections, 48-quart capacity, 6 trays, 150 to 200 hens.....	19.50
S. P. with 3 sections, 64-quart capacity, 8 trays, 200 to 275 hens.....	23.50
Large Premium, 48-quart capacity, 6 trays, 150 to 200 hens.....	18.00
L. P. with 1 section, 80-quart capacity, 10 trays, 250 to 325 hens.....	25.00
L. P. with 2 sections, 112-quart capacity, 14 trays, 350 to 425 hens.....	31.50
L. P. with 3 sections, 144-quart capacity, 18 trays, 450 to 550 hens.....	37.50
L. P. with 4 sections, 176-quart capacity, 22 trays, 550 to 675 hens.....	43.00

DOUBLE QUICK VAPOR BATH SPROUTERS

No. 24, weight 50 lbs., 24-quart capacity, 3 trays, 75 to 100 hens...	18.00
No. 40, weight 90 lbs., 40-quart capacity, 5 trays, 125 to 175 hens...	24.00
No. 80, weight 125 lbs., 80-quart capacity, 10 trays, 250 to 325 hens...	36.00
No. 160, weight 200 lbs., 160-quart capacity, 20 trays, 500 to 600 hens...	49.00
No. 256, weight 300 lbs., 256-quart capacity, 32 trays, 800 to 1000 hens...	72.00

WORMS IN POULTRY

It is a known fact that most poultry flocks are more or less infected with worms, and that worms must be eradicated if results are to be obtained. Wormy fowls will eat more than they should and produce less, hence it is readily seen that wormy flocks are not profitable. BARNES EMULSION is recommended because it is not a poison, rather it acts as a tonic. Two treatments are possible, both described fully in the BARNES BOOKLET, sent free on request. The use of BARNES EMULSION at regular intervals is not expensive and will prevent worms forming. When worms are present a 30-day treatment in the drinking water will be found advisable.

Where tape worms are suspected, we suggest the Kamala or Nema Capsule treatment as it acts quicker than anything else.

PRICES INCLUDE POSTAGE

BARNES EMULSION

Pint size, enough for 12 fowls.....	\$ 0.60
Quart size, enough for 25 fowls.....	1.00
Gallon size, enough for 100 fowls.....	3.00
5-gal kegs, enough for 400 fowls.....	12.50

KAMALA CAPSULES

Box of 50.....	\$1.00
Box of 100.....	1.75
Box of 200.....	3.00
Box of 300.....	4.25

NEMA WORM CAPSULES, PARKE, DAVIS & CO.

No. 188, for baby chicks and turkeys three weeks old or older. Box of 12 for 25c; box of 50 for 60c.

No. 187, for chickens and turkeys, adult fowls up to 6 pounds. Box of 12 for 40c; box of 50 for \$1.20.

Ask for free booklet on NEMA CAPSULES for poultry, dogs, hogs, etc.

Dr. Hess & Clark's Poultry and Stock Preparations

We find this line the best all-around line to tie to, and buy it in carload lots direct from the factory at Ashland, Ohio.

These prices are NOT PREPAID. Please add postage when sent by mail.

Dr. Hess Poultry Pan-a-cea, a regulator and tonic used in the mash feed. 1½ lb. pkg. 30c; 5 lb. pkg. 85c; 12 lb. pkg. \$1.75; 25 lb. pail \$3.50; 50 lb. drum \$6.50; 100 lb. drum \$12.00.

Dr. Hess Improved Stock Tonic, an excellent tonic for all stock, especially recommended for milk cows. 3½ lb. pkg. 65c; 10 lb. pkg. \$1.50; 25 lb. pail \$3.50; 50 lb. drum \$6.50; 100 lb. drum \$12.00.

Dr. Hess Instant Louse Killer. 1 lb. pkg. 30c; 2½ lb. pkg. 60c.

Dr. Hess Dip and Disinfectant. Household size, bottle, 50c; quart can 75c; half gallon can \$1.25; gallon can \$2.25; 5 gal. can \$8.75; 30 gal. bbl. \$39.00.

Dr. Hess Fly Chaser. Half gallon can \$1.00; gallon can \$1.75; 5 gal. can \$7.50.

Dr. Hess Roup Tablets, medium size 50c; large pkg. \$1.00.

Dr. Hess White Diarrhoea Tablets, medium size 50c; large pkg. \$1.00.

Dr. Hess Poultry Worm Powder, 1½ lb. pkg. 60c; 4 lb. pkg. \$1.50; 10 lb. pkg. \$3.25; 25 lb. pail \$7.50.

Dr. Hess Healing Powder, 4 oz. pkg. 25c; 10 oz. pkg. 50c.

Dr. Hess Stock Worm Powder, 1½ lb. pkg. 50c.

Dr. Hess Heave Powder, 1½ lb. pkg. 50c.

Dr. Hess Distemper Remedy, 3 oz. bottle 50c.

Dr. Hess Colic Remedy, 3 oz. bottle \$1.00.

Ask for Dr. Hess free books and bulletins.

Cod Liver Oil and Cod Liver Meal

For Poultry, Dogs, Foxes, etc.

We recommend the "KO-VITA" brand as being the best obtainable.

We also carry cheaper brands at market prices.

"KO-VITA" Brand Cod Liver Oil

Pure Unrefined

We pay postage up to 300 miles.

2 oz. bottle for cage birds.....	\$0.25
5 oz. bottle (Phos.) for dogs.....	.50
Quart cans, raw.....	1.00
Half gallon cans, raw.....	1.75
Gallon cans, raw.....	3.00
5 gallon cans, raw.....	13.50
30 gallon drums, not prepaid.....	60.00

"KO-VITA" Brand Cod Liver Meal

Prepaid up to 300 miles.

25 lb. drum.....	\$ 4.75
50 lb. drum.....	7.50
150 lb. drum.....	18.00

Notice that in the 150 lb. drum the cost is but \$12.00 cwt.

Miscellaneous Poultry Feeds and Supplies

These prices are subject to market changes without notice.

	100 lb.	50 lb.	25 lb.	For
Simpson's Scratch grain.....	\$ 2.60	\$ 1.45	\$0.85	29 lbs. \$1.00
Simpson's Egg Mash.....	3.00	1.60	.90	27 lbs.
Wheat, good quality.....	2.10	1.20	.70	35 lbs.
Corn, whole, yellow.....	2.50	1.40	.80	31 lbs.
Corn, Kaffir.....	2.75	1.55	.90	26 lbs.
Corn, cracked, yellow.....	2.55	1.50	.90	31 lbs.
Corn, chop.....	2.55	1.50	.90	31 lbs.
Bran, red.....	2.05	1.30	.70	35 lbs.
Bran, white.....	2.35	1.35	.80	31 lbs.
Shorts, middlings.....	2.80	1.50	.85	27 lbs.
Barley, whole.....	1.95	1.15	.70	35 lbs.
Barley, rolled, for rabbits.....	2.45	1.35	.80	33 lbs.
Oats, whole.....	2.35	1.35	.80	31 lbs.
Oats, ground.....	2.60	1.45	.85	29 lbs.
Oats, rolled with hull.....	2.60	1.45	.85	29 lbs.
Oats, Quaker, rolled without hull.....	4.00	2.25	1.30	19 lbs.
Oats, sprouting, seed quality.....	2.50	1.35	.70	31 lbs.
Meat Scraps, Swifts.....	3.75	2.05	1.15	22 lbs.
Oil Meal, linseed.....	3.75	2.05	1.15	22 lbs.
Blood Meal.....	5.00	2.65	1.45	17 lbs.
Charcoal, any size.....	3.00	1.60	.90	28 lbs.
Grit, Cryscos, any size.....	1.35	.80	.50	60 lbs.
Grit, Granite, any size.....	1.25	.75	.50	65 lbs.
Oyster Shell, hen or chick size.....	1.25	.75	.50	65 lbs.
Alfalfa Meal, green.....	2.25	1.30	.75	33 lbs.
Schumacher Calf Meal.....	5.50	2.75	1.50	
Green Cut Bone, hen or chick size.....	3.25	1.80	1.00	25 lbs.
Bone Meal, fine, for mashes.....	3.25	1.80	1.00	25 lbs.
Lime, hydrated, disinfectant.....	1.80	1.00	.60	
Chick Feed, Hoyts formula.....	3.10	1.70	.95	26 lbs.
Coarse Chick Feed, Simpson's.....	2.85	1.60	.90	27 lbs.
Pigeon Feed, with peas.....	3.60	1.90	1.05	23 lbs.
Conkey's Y-O (C. L. Oil & Yeast).....	27.50	16.00	9.00	
Cod Liver Meal, 150 lb. drum for.....	18.00	7.50	4.75	(prpd.)

We Carry All Standard Lines of Poultry and Stock Preparations. If You Wish Items Not Catalogued Please Write for Prices and Booklets.

POULTRY SUPPLIES AND REMEDIES THAT DESERVE SPECIAL MENTION

Roup-Over

numbers of neighbors of the first purchaser. 6 oz. bottle, \$1.00; large size, about 12 times the \$1.00 size for \$8.00, postpaid.

AVICOL, tablets for White Diarrhoea in chicks and Blackhead in turkeys, a remedy that every breeder should keep on hand. It is always advisable to use a preventive remedy rather than wait until your birds are infected. Box of 80 tablets, 50c; box of 200 for \$1.00; large size, more than 6 times the \$1.00 size for \$5.00, postpaid.

DON SUNG tablets for making hens lay, a tonic and conditioner. This is a Chinese preparation and is in considerable demand. Box of 45 tablets, 50c; box of 135 tablets, \$1.00; also put up in powdered form as follows—3 lb. pail for \$5.00; 10 lb. pail for \$10.00; 25 lbs. for \$20.00. All sizes postpaid.

can be picked up, placed in the cup and then in the carton or case which is properly marked for that particular grade of eggs. Ungraded eggs should never be marketed as they bring a lower price than graded eggs.

ACME EGG GRADING SCALE, the best egg scale we have seen, postpaid for \$3.00. This scale will accurately grade all eggs ranging from 16 ounces per dozen to 32 ounces per dozen. The operation of this scale is so simple a child can operate it. By placing an egg in the cup the beam will automatically adjust itself. The lowest number visible on the

blades will indicate the weight in ounces of one dozen like eggs. The scale works so fast that eggs can be weighed and graded almost as fast as they

'PAINT' THE ROOSTS

WITH "BLACK LEAF 40"

DISCOVERED! A NEW CONTROL FOR POULTRY LICE. BLACK LEAF 40 WORKS WHILE THEY ROOST. It has been demonstrated that "BLACK LEAF 40," undiluted, painted on the top-side of the roost will control body lice. This saves the labor of handling each bird, either to dust, dip or grease. "Black Leaf 40" does not harm the birds nor retard egg production. We regard this discovery as one of the greatest aids to poultry raising in the last generation. One ounce of Black Leaf 40 will paint about 12 to 15 feet of roosts. One pound will paint 190 to 240 feet. Prices—One ounce bottle, 35c; half pound bottle, \$1.25; 2 pound tin, \$3.25; 10 pound tin, \$11.85. Black Leaf 40 being a nicotine poison, cannot be sent through the mails.

HUMPTY-DUMPTY EGG CARRIERS, light slat construction, yet perfectly safe for shipping eggs to market. 6 doz. size, 70c; 9 doz. size, 75c; 12 doz. size, 80c; 15 doz. size, 85c. If wanted by mail add 15c each for any size.

FOOD FOR DOGS, CATS, FOXES, Etc.

SIMPSON'S DOGGIE DINNER AND PUPPY DINNER.

A canned meat food that is NOT HORSE MEAT. 18-oz. cans 15c each; 7 cans for \$1.00; case of 36 cans \$4.50; 2 cases for \$8.50; 3 cases for \$12.00. Not prepaid.

CHAPPEL BROS. CANNED DOG FOODS.

With meat, cereals and cod liver oil.

		Each	10 Cans	Case
Ken-L-Ration, for mature animals...	1 -lb. cans	\$0.17	\$1.50	\$6.50 48
Hemo-Ration, for convalescents.....	1 -lb. cans	.17	1.55	6.65 48
Pup-E-Ration, for young dogs.....	1 -lb. cans	.18	1.60	7.00 48
Maro-Meat, a condensed food.....	2 1/2 -lb. cans	.45	3.50	6.25 18
Kit-E-Ration, for cats.....	1 -lb. cans	.17	1.50	6.50 48

When ordered in 3 case lots the following prices will apply: Ken-L-Ration or Kit-E-Ration, \$5.52 per case; Hemo-Ration, \$5.64 case; Pup-E-Ration, \$6.12 case; Maro-Meat, \$5.29 case.

ROSE'S DOG, PUPPY AND FOX FOOD.

A granulated meat and bone food that is making new friends daily. This is an economical food for large breeders. 5-lb. pkg. 60c; 10-lb. pkg. 85c; 25-lb. sack \$1.85; 50-lb. bag \$3.25; 100-lb. bag \$6.50; 500 lbs. for \$30.00. Not prepaid.

"KO-VITA" BRAND PURE COD LIVER OIL.

We now know that the reason for many ailments in dogs and foxes is due to lack of certain vitamins that are best supplied by cod liver oil. The KO-VITA brand is the best we can buy and it will be found cheaper than poor grades that may cost less. 5-oz. bottle, phosphated, 50c; quart cans \$1.00; half gallon cans \$1.75; gallon cans \$3.00; 5 gallon cans \$13.50; 30 gallon barrels \$60.00. We pay postage on all but the 30 gallon barrels.

BULK BISCUITS, ETC. Prices quoted are NOT prepaid.

	100 lbs.	50 lbs.	25 lbs.	10 lbs.
Perfection Dog Food.....	\$ 7.50	\$4.00	\$2.25	\$1.10
Champion Dog Biscuits.....	11.00	5.50	2.90	1.35
Champion Puppy Biscuits.....	11.50	5.75	3.00	1.40
Champion Puppy Meal.....	11.50	5.75	3.00	1.40
Champion Kibbled Biscuit.....	11.50	5.75	3.00	1.40
Spratt's Fibo	13.75	7.00	3.75	1.60
Spratt's Ovals	12.40	6.40	3.50	1.50
Spratt's Terrier Meal.....	11.00	5.75	3.00	1.30
Spratt's Kibbled Biscuit.....	12.75	6.50	3.75	1.50
Austin's Dog Biscuits.....	11.00	5.75	3.00	1.30
Austin's Puppy Biscuits.....	11.50	5.90	3.15	1.35
Chappel Bros. Kibbled Biscuit.....	9.50	5.00	2.75	1.30

MISCELLANEOUS DOG FOODS AND SUPPLIES

BENNETT'S MALTOID MILK BONE BISCUITS.

For dogs. 11½ oz. cartons 20c; 31 oz. cartons 45c. Similar sizes for puppies at the same prices. In dozen lots, small size \$2.20, large size \$4.75. Bennett's "Junior," for very young puppies, 40c. Postage NOT prepaid.

SPRATT'S DOG FOODS IN CARTONS. NOT PREPAID.

Fibo, cartons about 2 lbs. 45c each. Ovals, cartons about 2 lbs. 40c each. Charcoal ovals, cartons 45c each. Dog cakes, cartons about 2 lbs. 40c each. Puppy cakes, cartons about 2 lbs. 45c.

KIPPY DOG FOOD.

A meat food in cans. 10 oz. cans, 15c each, 2 for 25c; 1 doz. for \$1.50; case of 48 cans for \$5.00. 20 oz. cans, 25c each; 2 for 45c; 1 doz. cans for \$2.50; case of 24 cans for \$4.50. NOT prepaid.

RUBBER DOG BONES.

The kind that will last for years, 35c each. Postpaid. We do not carry the 25c dog bones as we find them worthless.

DR. GEO. W. CLAYTON'S REMEDIES FOR DOGS.

The favorite of local kennels. 60c remedies include the following: Mange, Skin Medicine, Hair Tonic, Distemperine liquid, Distemperine tablets, Condition Pills, Blood Pills, Digestive Tablets, Laxative Pills, Worm Pills, Tape Worm Expeller, Vermifuge liquid, Vermifuge soft capsules, Red Worm Bullets, Canker Lotion, Eye Lotion, Fit Remedy, Cough Remedy, Sulphur Tablets, Puppy Tonic, Rheumatic Tablets, Diarrhoea Remedy, Chorea Tablets. Goitre Remedy, \$1.00. Cod Liver Oil Emulsion, \$1.00. Shampoo Soap, 25c; Kilflea Soap, 25c; Kilflea Powder, 35c.

Clayton's Cat Remedies 60c include—Mange, Distemperine, Catnip Tonic Condition Tablets, Blood Purifying and Cooling Tablets, Digestive Tablets, Laxative Tablets, Worm Tablets, Tape Worm Expeller, Vermifuge liquid, Canker Lotion, Eye Lotion, Fit Tablets, Cough Remedy, Diarrhoea Tablets, Mouth Wash; Cat Wash and Disinfectants, 25c; Kilflea Powder, 35c. Be sure to specify whether you want Dog or Cat remedies when ordering. We pay postage on remedies.

Send for Dr. Clayton's Free books on Dogs and Cats.

Q-W DOG REMEDIES.

The following are \$1.00 each—Mange and Flea Soap, Condition Powder, Mange Lotion, Worm Mixture, Tapeworm Mixture, Flea Oil and Coat Grower, Constipation Pills, All About Dogs, Healing Salve, Tonic and Red Blood Builder, Liquid Sulphur Compound, Eye Salve, Flea Powder, Rheumatism Tablets, Cough Mixture. The following are \$1.25 each—Phosphated Cod Liver Oil Comp., Verminol, Ear Canker, Diarrhoea Tablets, Fit Tablets, Liniment; Distemperol, \$2.00; Breeding Tablets, \$2.00. We pay postage on remedies.

FREE BOOKLET ON REQUEST.

CANARY BIRD CAGES

Prices include packing for shipment, but do not include carrying charges.

"HENDRYX" BREEDING CAGES. Each is equipped with a solid partition, a wire partition, two nests, and four large feed and water dishes. A breeding cage is very necessary in mating canaries to insure success.

No. 86S—14 inches high, 17½ in. long, 8¾ in. wide, \$5.50 each.

No. 86—14¾ in. high, 19½ in. long, 10 in. wide, \$6.00 each.

No. 87—16¼ in. high, 22 in. long, 11 in. wide, \$6.50 each.

No. 88—17 in. high, 24½ in. long, 12½ in. wide, \$7.00 each.

Extra nests 15c each. These cages have a slide bottom, making it easy to clean without disturbing birds.

HENDRYX STOCK CAGES. Each cage equipped with drawer base and four large feed and water dishes. Excellent for young birds. Before much progress is made in bird breeding it will be found necessary to have a good breeding cage and a stock or flight cage. Young birds should have plenty of room, and require a large cage for exercise.

No. 81—16 in. high, 16 in. long, 9½ in. wide, \$6.00 each.

No. 82—18 in. high, 17¾ in. long, 10½ in. wide, \$6.50 each.

No. 83—20 in. high, 20¼ in. long, 12 in. wide, \$7.00 each.

THE "1274 SERIES". A well made all brass round cage that has a flat bottom and screen guard.

No. 1274—Body 10¼ in. diameter, 13½ in. high, \$3.00 each.

No. 1275—Body 11 in. diameter, 13½ in. high, \$4.00 each.

No. 1276—Body 11¼ in. diameter, 15¼ in. high, \$4.50 each.

"HENDRYX" bird cages are always well made, standard in size and shape and, with care, will last many years.

THE NO. 274 SERIES have the same diameter as the No. 1274 above, but stand somewhat higher on account of the pedestal base. This is the most popular cage made.

No. 274—Complete with cups and perches, \$3.75.

No. 275—Complete with cups and perches, \$4.00.

No. 276—Complete with cups and perches, \$4.50.

The screen guards on series Nos. 1274 and 274 keep seed and all litter off the floor and make birds a pleasure rather than a nuisance.

SPECIAL ENAMELED CAGES. The No. 165 series seems to be the most in demand of all enameled cages. They are well made, light but substantial, white, with green trimming.

No. 165—9¾ in. x 6½ in. by 12½ in. high. Each.....\$2.00

No. 166—10½ in. x 6 in. by 13½ in. high. Each..... 2.70

No. 167—11 in. x 7½ in. by 14 in. high. Each..... 3.00

No. 168—12½ in. x 8¼ in. by 14½ in. high. Each..... 3.25

Canary Birds and Supplies

ROLLER CANARIES

We sell only the best grade of imported TRAINED ROLLERS. Each singer has passed a rigid inspection to test clearness of notes and range of song. Every bird guaranteed to be in good health when leaving our store.

Imported Trained Roller Singers....	\$10.00
Imported Roller Females.....	3.50
Roller Females, American, from im- ported stock, \$2.00 to.....	2.50

HARTZ MOUNTAIN CANARIES

We buy from the importer direct, getting only No. 1 stock with a good range of notes and in good plumage; we never offer "seconds" at any price as we recommend a good bird or none at all. The Hartz Mountain singers have the regular varied canary song, combining trills and other notes.

Hartz Mountain Singers.....	\$8.50
Hartz Mountain Females.....	2.00
Hartz Mountain Females, American raised from imported stock, \$1.00 to 1.50	

CANARY SINGERS

We always have singers raised locally from well selected stock that sell at \$6.00 to\$8.00

JUSTRITE BIRD PREPARATIONS

The JUSTRITE line is one of the most complete and satisfactory lines on the market. We list the most necessary items.

When wanted by mail add 10c if one item is ordered, or 5c each if more than one.

Justrite Bird Bitters	\$0.25
Justrite Bird Gravel	.15
Justrite Bird Nesting, white.....	.10
Justrite Bird Tonic	.35
Justrite Bird Wash	.25
Justrite Cage Cleaner	.35
Justrite Color and Pepper Food....	.25
Justrite Egg and Nestling Food....	.20
Justrite Feather Pulling Remedy....	.25
Justrite Honey Roll, 2 for 25c.....	.15
Justrite Imported Bird Seed.....	.25
Justrite Iron Tonic	.25
Justrite Lice Destroyer Kit.....	.65
Justrite Lice Powder	.15
Justrite Parakeet Seed	.25
Justrite Mixed Bird Seed.....	.20
Justrite Moulting Food	.20
Justrite Parrot Food	.40
Justrite Parrot Tonic	.35
Justrite Song Restorer, cans.....	.25
Justrite Vitamine Health Food.....	.25
Justrite Wild Grass Seed.....	.20
Justrite Gravel Paper, doz.....	.25

With every order for Justrite items we will send free Justrite book on canaries, if requested.

Geisler's Bird Feeds and Supplies

When sent by mail add 10c if one item is ordered, or 5c each if more than one.

Roller Seed	\$0.30
Tonic A, song restorer.....	.25
Tonic B, for diarrhoea.....	.25
Tonic C, for colds.....	.25
Tonic D, general.....	.25
Maizena Biscuit	.15
Medicated Biscuit	.25
Song and Moulting Food.....	.20
Parasite Cure	.25
Health Food	.20
Vegetable Extract	.25

KAEMPFER'S PRODUCTS

When sent by mail add 10c, or if more than one item is ordered, 5c each.

Highballs, 2 for 25c.....	\$0.15
Birdolene, large pkg.....	.25
Asthma Remedy	.25
Foot Ointment	.25
Bird Remedy (tonic).....	.25
Nesting Hair	.10
Red Top Bird Seed.....	.30

BULK BIRD SEED, ETC.

Superior Mixed Canary Seed, lb.....	\$0.20
3 lbs. for.....	.50
6 lbs. for.....	1.00
10 lbs. for.....	1.50
25 lbs. for.....	3.25
Roller Bird Mixture, lb.....	.20
3 lbs. for.....	.50
10 lbs. for.....	1.50

Sicily Canary Seed, pure, same price as Roller Bird Mixture, Rape Seed, Sweet Summer, same price as Roller Bird Mixture.

Hemp Seed, lb.....	.15
2 lbs. for.....	.25
10 lbs. for.....	1.00
25 lbs. for.....	2.25
Millet, large pearl, lb.....	.10
5 lbs. for.....	.35
10 lbs. for.....	.60
25 lbs. for.....	1.25

SIMPSON'S SUPERIOR SEEDS AND SUPPLIES

Simpson's Mixed Bird Seed, ctn.....	\$0.20
Simpson's Roller Seed, carton.....	.20
Simpson's Song Restorer, large.....	.25
Simpson's Nestling Food	.15
Simpson's Bird Vigor	.15
Simpson's Mite Powder	.25
Simpson's Mite Liquid	.25
Simpson's Bird Tonic	.25

BIRD CAGE SUNDRIES

ADD POSTAGE IF BY MAIL

PERCHES, tepered, set of 3.....	\$0.25	NESTS, wire, with holder.....	\$0.15
SWINGS for brass cages.....	.15	2 for	.25
SWINGS for enamel cages.....	.10	POWDER GUNS, empty.....	.15
SWINGS for round brass cages..	.35	Filled	.25
FOOD HOLDER CUPS, fit any cage	.10	CUPS, feed or water, many styles.	.15
3 for	.25	CUTTLE BONE HOLDER.....	.10
Dozen for	.75	SPRINGS, brass coil.....	.15
BATH DISHES, oval, glass, or		2 for	.25
white	.15	SPRINGS, heavy brass.....	.25
CRYSTAL FOUNTAINS, fit any		SPRINGS, with adjustable chain.	.25
cage	.75	CAGE BRACKETS, swinging, 8-in.	.20
DELTA BATH HOUSE, attaches to		CAGE BRACKETS, sw'ging, 10-in.	.25
cage over door, white enamel..	.85	CAGE BRACKETS, sw'ging, 12-in.	.30
Colored, each	1.00	BRASS GUARD CLOTH, per foot	.40
		WATER WELLS, will not spill..	.25

RABBIT SUPPLIES AND REMEDIES

POTTERY FEED DISHES, with flange tops. Pint size, 15c each; 1 doz. for \$1.75; quart size, 18c each; 1 doz. for \$2.00.

POTTERY DRINKING DISHES, round bottom, will not split with frost. Pint size, 12c each; 1 doz. for \$1.40; quart size, 15c each; 1 doz. for \$1.75; half gallon size, 18c each; 1 doz. for \$2.00. Packing charged at cost for express or freight shipments. Can not be easily mailed.

BARNES RABBIT REMEDIES. We find these remedies superior to anything we have ever handled before. Breeders report nothing but excellent results.

BARNES ANTI-DIARRHOEA, small size 50c, large size \$1.00, postpaid.

BARNES ANTI-SNUFFLE, small size 50c, large size \$1.00, postpaid.

BARNES ANTI-SLOBBER, small size 50c, large size \$1.00, postpaid.

BOVIERS SPECIFIC, for snuffles, small size 30c, large size 60c, postpaid.

RABBIT EAR TATOO MARKERS, complete outfit \$1.00, postpaid.

RABBIT FEED RACK, holds hay or ground feeds, each 90c, postpaid.

SALT-SULPHUR SPOOLS, 2 for 15c; doz. 75c; 100 for \$4.50; case of 250 for \$10.00. All postage or freight prepaid.

PIGEON SUPPLIES

SIMPSON'S SUPERIOR PIGEON FEED, 100 lbs. \$3.60; 50 lbs. \$1.90; 23 lbs. \$1.00; 11 lbs. 50c; 5 lbs. 25c. Not postpaid.

PIGEON GRIT, 100 lbs. \$1.35; 30 lbs. 50c; 12 lbs. 25c.

GRIT AND SHELL BOX, 2 compartment, 45c postpaid.

MOE'S FEEDER, No. 105, 3-quart capacity, \$1.00; postpaid \$1.10.

MOE'S FEEDER, No. 106, 6-quart capacity, \$1.60; postpaid \$1.75.

PIGEON NESTS, galv. steel 15c each, 1 doz. for \$1.50, postpaid.

LEG BANDS, aluminum, numbered, 20c doz.; 100 for \$1.20 postpaid.

LEG BANDS, "UNIQUE," inlaid colors, numbered, in lots of 25 pairs only for \$1.00. postpaid.

MISCELLANEOUS GARDEN TOOLS

THE VILLAGE BLACKSMITH LINR

No. 08—Trimsnip Hedge Shears. Full polished blades with selected maple handles, 8-inch blades with notch. One of the best models offered, \$2.65 each, postpaid.

No. 600—Hedge Shears. Ladies size with long handles. 6-inch blades, \$1.60 each, postpaid.

No. 410—Grasnip Shear with 6-inch cutlery blades, a tool that will come in handy in many ways. Good for cutting grass, vines and light shrubs. 80c each, postpaid.

No. 3—Grass Hooks. Swings perfectly in the hand with little effort. Forged cutlery steel, tempered edge, ground sharp and whetted, 65c postpaid.

No. V188—Pruning Shears. Full polished. Forged tool steel, length 8 inches, \$1.75 each, postpaid.

No. 160—Graswips. Cut your grass and weeds the new way without stooping. Cuts both ways. 37 inches long with 9 1/4-inch tool steel blade. \$1.00 each, \$1.25 postpaid.

No. 219—Special Dandelion Knives. The one we have all been looking for. Will not bend. 15 inches long. Tool steel, tempered, with enameled corrugated handle. 35c each, 45c postpaid.

No. T10—Garden Trowels. 6-inch heavy crucible steel forged one-piece, with hard-wood handle. 75c each, postpaid.

No. T20—Garden Trowels. 6-inch rolled steel, riveted blade, 25c each, postpaid.

No. T25—Garden Trowels. 6-inch transplanting. Heavy rolled steel blade, 15c each, 25c postpaid.

No. 19—Sprinklers. Non-corrosive—won't clog—with clean-out brass plug. Equal distribution of water over a large area. Base 8 inches wide. Will not tip. 65c each, postpaid for 75c.

MEMORANDUM

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

SIMPSON SEED & FLORAL CO., DENVER,
COLO.

We pay postage on Seeds in packets, ounces and $\frac{1}{4}$ lbs.

Date.....19....

Name.....

Postoffice.....

County.....State.....

Amount Enclosed

Send by.....

(Mail, Express or Freight)

\$.....

[illegible]

[illegible]

SIMPSON SEED & FLORAL CO., DENVER,
COLO.

We pay postage on Seeds in packets, ounces and $\frac{1}{4}$ lbs.

We charge postage only on heavier Seeds, and customers will please add to the Catalogue price of Peas, Beans and Corn at the rate of 8 cents a pound, to pay postage.

Date.....19....

Please forward the following articles to:

Name.....

Postoffice.....

County.....State.....

Send by.....

(Mail, Express or Freight)

Amount Enclosed

§.....

[illegible]

[illegible]

How to Make and Maintain a Lawn

Once a lawn is established, few changes can be made without starting all over again. For this reason great care should be taken in preparing the seed bed, selecting proper seed and supplying the right plantfood.

The soil used in making the seed bed should be fine and crumbly. This insures good drainage and permits deep rooting of the grass.

In leveling the seed bed it is well to have a gentle slope away from the house. This provides drainage and gives a more impressive appearance to the grounds.

Always buy good seed—it is far the most economical. We advise Kentucky Blue Grass with 10 to 20 per cent White Dutch Clover seed for most lawns, though there are soils or conditions of shade that sometimes make it more practical to use other mixtures. We will be glad to advise you in this regard.

Regardless of the kind of soil, fertilizer is needed to give the young grass a quick vigorous start. We recommend **VIGORO**, a Swift & Co. product, because it is a complete fertilizer in every sense of the word, acts quickly and thoroughly, and will not burn if applied with any kind of care. An application of **VIGORO** will develop an extensive root system which means much to the success of the lawn.

Do not mow the new lawn too soon. Let it get a fair start. Fall seeded lawns should not be mowed until spring. After the lawn is established mow it regularly and often, but not too close.

Proper watering is important. A thorough watering once or twice a week, preferably after sundown is ordinarily sufficient. Too frequent light sprinkling is harmful as it causes shallow rooting, which necessitates constant watering.

A good feeding of **VIGORO** in the early spring gives the grass a quick, vigorous start, develops an extensive root system and produces a thick, velvety turf. Lighter feedings every six to eight weeks thereafter will keep the grass in a thrifty and healthy condition.

See page 33 for prices of **VIGORO** and further description.

Simpson's

GARDEN AND FARM
BOOK

Spring
1929