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1920

LONG'S

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DECIDEDLY DIFFERENT
SEED CATALOGUE

Tried and True Seeds, Bulbs and Plants
BEST FOR THE WEST

RECORDED
JAN 30 1920

LONG'S DELIGHTFUL FLOWER GARDEN

Here's a corner of Long's garden as seen from the Boulder to Estes Park highway last summer. Thousands of tourists exclaimed with delight when they passed these marvelous dahlias, also asters, gladioli, pansies, tulips and other flowers grown for the bulbs and seeds offered in this catalogue.

"See America first" next summer, and plan your trip to include Long's flower garden one mile north of Boulder.

THE J. D. LONG SEED COMPANY

BOULDER, COLORADO

LONG'S GRAND SWEET PEAS

GRANDIFLORA SWEET PEAS

These are the Sweet Peas universally grown until recent years. They are fine, but most people find the Spencers still better. (See list of Spencers on opposite page.)

All colors, at: Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c.

SP45 White. SP46 Deep Pink. SP47 Light Pink. SP48 Cream. SP49 Salmon. SP50 Lavender. SP52 Red. SP53 Blue. SP54 Maroon.

PERENNIAL PEAS

Once established, these hardy plants improve from year to year. The white is especially beautiful; very large, waxy white clusters, fine for bouquets.

SP60 White. SP61 Pink. SP62 Mixed.

Price for either color, or mixed: Pkt., 10c; oz., 50c.

SP39. Cupid Sweet Peas. Mixed. Pkt., 5c; oz., 20c.

SPENCER "33-in-1" MIXTURE

SP41. In this mixture you get the best of up-to-date Spencers. I use 33 different named varieties. Of course you might not get all 33 kinds in a 10-cent packet—possibly not in an ounce—but they are all in this mixture. It is my ambition to make this the finest Spencer mixture offered this season. Pkt., 10c; oz., 35c; 2 oz., 60c; $\frac{1}{4}$ lb., \$1; lb., \$3.75.

LONG'S SPECIAL MIXTURE

SP43. My mixture that has given such splendid satisfaction for a moderate price. It includes the best of the grandiflora varieties, a "right smart" of Spencers, and a sprinkling of extra early kinds, the latter coming so early that they spring a delightful surprise on you before you are looking for first blossoms. Pkt., 5c; oz., 15c; 2 oz., 25c; $\frac{1}{4}$ lb., 45c; lb., \$1.60.

Partial view of Sweet Pea show held in our store several years ago, all grown from Long's Tried and True seed. Last season was so unusually hot and dry that sweet peas did not do very well, but here's hoping for more favorable conditions this year and a bumper crop of grand and glorious sweet peas.

LONG'S

GIANT SPENCER SWEET PEAS

My list of new Giant Spencer Sweet Peas is selected with great care, and includes the finest varieties in a wide range of colors, tints and shades. Edges of blossoms usually waved or frilled, giving an added charm to this popular flower.

Prices: Except where noted, all named Spencers at: Pkt., 10c; $\frac{1}{2}$ oz., 20c; oz., 35c; 2 oz., 60c; $\frac{1}{4}$ lb., \$1.10.

Special! Five 10c pkts. Sweet Peas at 8c each; 10 or more at 7c each.

SP0. AUSTIN FREDERICK. New. Extra large and fine lavender. (Sold in pkts. only, this year.)

SP1. BARBARA. Superb new salmon.

SP2. BLANCHE FERRY. Pink and white.

SP3. BUTTERCUP. New cream or primrose. Deeper than Dobbie's Cream.

SP4. CARDINAL. New. Intense poppy-scarlet. (In pkts. only, this year.)

SP5. CONSTANCE HINTON. The finest and largest black seeded Spencer. Upon first opening is slightly tinged with pink, but turns to pure white. Great exhibition variety, winning many prizes. Oz., 40c; 2 oz., 75c; $\frac{1}{4}$ lb., \$1.40.

SP6. COUNTESS SPENCER. The original Spencer sweet pea. Clear pink, deepening towards the edge.

SP7. DAINTY. White with picotee edge. "Dainty is right."

SP8. EDWARD COWDY. Glowing orange-scarlet. New.

SP9. ELFRIDA PIERSON. Lovely pink; buds and flowers tinted with salmon-pink.

SP10. EMPRESS EUGENE. Light gray, flaked with lavender. Novelty.

SP11. FIERY CROSS. Intense orange-scarlet.

SP12. HERCULES. Mammoth rosy pink.

SP13. IRISH BELLE, or DREAM. Lovely rich lilac flushed with pink.

SP14. KING EDWARD. The best pure red Spencer. Crop short. Oz., 45c; $\frac{1}{4}$ lb., \$1.50.

SP15. KING MAUVE. Largest waved mauve.

SP16. KING WHITE. Gigantic flowers of purest, glistening white.

SP18. LOVELY. Delicate rose.

SP19. MARGARET ATLEE. Extra large flower of rich glowing pink on cream ground, softly suffused with salmon. One of the very best.

SP17. LORD NELSON. Splendid navy blue Spencer.

SP20. MARKS TEY. Standard rosy-maroon; wings bluish-mauve.

SP22. MIRIAM BEAVER. Shell salmon-pink on cream ground.

SP23. NUBIAN. Deep maroon or chocolate.

SP24. ORCHID. Lavender, suffused pink. The flower suggests the rich tone found in the Cattleya orchid.

SP25. R. F. FELTON. Soft shade of lavender suffused rose. Wings French gray. Flowers large and exquisitely waved.

SP28. ROYAL PURPLE. Rich, warm, rosy purple, the younger flowers having a slightly softer color tone.

SP30. SENATOR. Claret striped on heliotrope ground.

SP31. THE PRESIDENT. Brilliant orange-scarlet. Large flowers carried on long stems, usually in fours.

SP33. WEDGEWOOD. Unique shade of lovely light blue.

SP34. YARRAWA. Extra early Spencer. Bright rose-pink with a clear, creamy base. Many flowers are duplex or double. Oz., 40c; 2 oz., 75c; $\frac{1}{4}$ lb., \$1.40.

LONG'S COLOSSAL ZINNIAS

In all my experience, I never grew anything that amazed and delighted visitors as much as these Colossal zinnias. The flowers are of enormous size, thickly set with velvety petals, while the colors are dazzling reds and yellows, orange and flesh tones, and still others, darker, and rich beyond description. Grown in rich soil with plenty of water these plants stood up to my shoulders, and were aglow with mammoth, gorgeous blossoms from July until frost.

Here's Good News! This season I can supply Colossal zinnia seed in all the following colors, as well as my special mixture and wonderful "13-in-1" \$1.00 package.

Separate Colors: Z1 White; Z2 Flesh; Z3 Pink Shades; Z4 Scarlet; Z5 Crimson; Z6 Golden Yellow; Z7 Orange; Z8 Purple.

Price. Any the above colors at: 15c pkt.; 2 for 25c.

LONG'S SPECIAL MIXTURE COLOSSAL ZINNIAS

Z12. Large pkt., mixed colors, running strong to reds and yellows. Pkt., 15c; 2 for 25c.

LONG'S "13-in-1" DOLLAR PACKAGE

Z13. All the above 8 colors and 5 more new shades and combinations of colors, including the most wonderful and gigantic new "Dahlia Flowered" zinnia, the largest of the Colossal class. A big package mixed by hand, a liberal pinch of seed being taken from each of the 13 separate kinds. The biggest dollar's worth of garden display you ever saw. Sold in \$1.00 pkts. only.

NEW DAHLIA FLOWERED ZINNIA

Z11. This new strain is the result of many years' painstaking selection and hybridizing by a Zinnia specialist. The flowers are of very large size, their shape closely resembles those of the "Decorative" Dahlias, while many of the shades are entirely new in the Zinnia family. The plants are tall and vigorous and produce their flowers freely. Mixed colors. Pkt., 25c.

SONG'S Super - Giant Pansies

SUPER-GIANT PANSY PLANTS

**50 Pansy Plants for
\$1.00, Prepaid**

Hardy, outdoor grown plants from my own seed, sown last fall. The plants are wintered right out in the open, with only a slight covering of excelsior to prevent frost heaving out the roots.

Unlike most florists, I study to hold the tops back and develop a lot of strong fibrous roots for each plant. This is just the reverse from usual practice of forcing the tops by growing the plants in heavily manured ground and forcing them into bloom under glass.

My ideal plant for setting out is one with strong roots and small tops. If tops get too large I prune them back. This kind of a plant stands shipping fine, and will "take right a hold" and make good in your garden. I never transplant the large forced plants any more, but use the smaller ones described above, and my pansy beds are worth going miles to see.

I can ship these pansy plants almost any time after ground is thawed out in the spring. Along in April is a good time. Have made several sowings so as to have them coming on all spring until July. The latest plants went into winter quarters with only several tiny leaves, while the earlier ones were good husky plants nearly in bud.

I sow the seed in mixture. Plants usually sent out before in bloom, so I offer in mixed colors only.

Price: 18 plants for 50c; 50 for \$1.00; 110 for \$2.00; 300 for \$5.00, prepaid.

Pansy Plants Shipped at My Risk

My pansy plants are so hardy, and my method of packing so satisfactory, that I guarantee safe arrival anywhere in the United States. I shipped one lot to a Philadelphia customer and got a report saying the plants opened up better than others that came only a short distance.

"Many Blossoms are Frilled and Ruffled"

P1. I grow these wonderful Pansies myself and save my own seed from the finest plants, giving you a marvelous blend of rich and most pleasing colors. Flowers of gigantic size, some light, some medium in color, and some deep velvety colors that you may never have believed could be had in pansies. **Many blossoms are frilled and ruffled like a Spencer sweet pea.**

I'm proud of these pansies and am improving them from year to year. For several seasons I have called this my Giant-Mastodon strain, because it has been built up from the finest and largest selections of true Giant and Mastodon varieties. This year I have shortened the name to Super-Giants. The name Giant is applied to pansies not so large and fine as mine by many seedsmen, so I have designated mine as Super-Giants, and I believe you will agree they are well named when you see them blooming at their best in your garden.

Price: Large pkt. (250 seeds), 25c; 5 for \$1.00; ¼ oz., \$2.50.

LARGE FLOWERING PANSIES

P2. Not so large and fine as my Super-Giants, but way ahead of ordinary pansies. Some seedsmen would list this as a 15c packet of giant pansies. Pkt., 10c; ¼ oz., \$1.00.

SOME OTHER FINE PANSIES

(Seeds only, no plants.)

- P3.** Dark Navy Blue. Pkt., 10c.
- P4.** Jet Black. Of large size. Pkt., 10c.
- P5.** White. Large. Pkt., 10c.
- P6.** Golden Yellow. Large. Pkt., 10c.
- P7.** Mad. Perret. Lovely shades of pink and rose. Pkt., 15c.
- P8.** Masterpiece. (Curled, or Spencer Pansies.) Many petals are crimped or curled so the flowers appear double. Mixed. Pkt., 25c.
- P9.** Bugnot. Shades of red, bronze, and reddish cardinal. Mixed. Pkt., 25c.

Castor Bean

Sunflower

Phlox

Ageratum

Fox Glove

Petunia

Bachelor Button

"Say it With Flowers"

LONG'S

TRIED and TRUE

Flower Seeds

Flowers to the Front

During the war, flowers were given a back seat, both in my catalogue and in the gardens of many customers.

Now that conditions are slowly returning to normal it seems fitting and fair to ourselves, as well as to the flowers, to give them a prominent place in our minds and gardens.

Indeed, it seems to me that the more we think flowers, associate with them, and share them with others, the sooner we shall overcome the blight of war.

AGERATUM (Floss Flower)

Dwarf, compact plants, fine for borders, edgings or pots.

F1, Blue; F2, White; F3, Choice Mixed. Price for any kind: Pkt., 5c; $\frac{1}{4}$ oz., 25c.

ALYSSUM (Sweet Alyssum)

Exceedingly popular border plant, useful in many ways in any garden. Puts the "finishing touch" to beds, walks, etc. Snow white; comes quickly from seed, and blooms continuously.

F4. LITTLE DORRIT. Similar to Little Gem but still more compact and a finer variety. Costs me double the price of ordinary Alyssum. Pkt., 5c; $\frac{1}{4}$ oz., 25c; $\frac{1}{2}$ oz., 40c.

AMARANTHUS

Graceful plants with ornamental foliage producing a striking effect as a background or centerpiece.

F5. All Kinds Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 15c.

ANTIRRHINUM (Snap Dragon)

F7. LONG'S SPECIAL MIXTURE. Largest and finest kinds in rare variety of colors, for cut flowers or garden display. Pkt., 10c.

Separate Colors Snapdragon. White, Pink, Yellow, Red. Pkt., 10c.

"My pansy plants are growing splendidly and I have had many beautiful blossoms from them."—Maude Sheridan, Fort Collins, Colo.

Mignonette

Zinnia

Daisy

Alyssum

Snap Dragon

Canterbury Bell

Four o'Clock

BACHELOR'S BUTTON

One of the favorite flowers in grandmother's garden and still as popular as fifty years ago. Also called Blue Bottle, Ragged Sailor, Cornflower.

F8. CHOICE MIXED. Pkt., 5c; $\frac{1}{2}$ oz., 20c.

BALLOON VINE (Love-In-a-Puff)

F9. Hardy annual climber, producing white flowers and seed vessels that look like small balloons. Good for screens. Seeds hard and should be soaked 24 hours. Pkt., 5c; $\frac{1}{2}$ oz., 15c.

BALSAM (Lady Slipper)

Grows quickly from seed, producing large brilliant flowers. Also called "Touch-Me-Not." Great favorite with children.

F10 DOUBLE WHITE; F11 DOUBLE MIXED. Price for either: Pkt., 5c; $\frac{1}{4}$ oz., 25c.

CALUNDULA (Pot Marigold)

F13. One foot high. Fine double flowers of glowing colors. Pkt., 5c; $\frac{1}{4}$ oz., 15c.

CALLIOPSIS

F14. Bush plants 2 feet high, covered with showy flowers. Pkt., 5c; $\frac{1}{2}$ oz., 15c.

CALIFORNIA POPPY (See Eschscholtzia)

CANARY BIRD FLOWER

F15. Rapid growing climber, 10 feet. Flowers canary yellow, and resembling a canary bird. Fine for porches, etc. Soak 24 hours. Pkt., 5c; $\frac{1}{2}$ oz., 20c.

CANDYTUFT

F17 PURE WHITE; F18 FINE MIXED. Pkt., 5c; oz., 25c.

GIANT HYACINTH. Flowered. New. Extra fine. Pkt., 10c.

CANTERBURY BELLS

Hardy biennials, blooming second year from seed. Plants 3 feet high. Flowers bell shaped, and many colors. Very showy. Sow from May to August.

F19. LONG'S SPECIAL MIXTURE. Single, double, and "cup and saucer" varieties; all mixed; very fine. Pkt., 10c.

CARNATIONS

Biennials. These lovely fragrant carnations are the most profuse bloomers of all the so-called pinks.

F20. MARGARET. Double flowers with lovely fringed petals; delightfully fragrant; wide range of charming colors. Extra fine. Pkt., 10c; $\frac{1}{4}$ oz., 35c.

CELOSIA or COXCOMB

F22. OSTRICH PLUME. Feathered varieties mixed. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

F23. CRESTED COXCOMB. Dwarf plants with bright red combs. Pkt., 10c.

COBAEA SCANDENS

(Cathedral Bells)

F24. Rapid growing climber, 15 to 20 feet in a few months. Has lovely lilac bell shaped flowers. Plant seeds on edge. Pinching few inches off top of plant when 6 inches high or so will make it branch out and produce denser covering. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

COLUMBINE (Aquilegia)

Early blooming hardy perennial with graceful long spurred flowers. Very showy.

F25. TRUE ROCKY MOUNTAIN COLUMBINE. The Colorado State flower, and most popular of all columbines. White center with blue petals. Pkt., 10c.

F26. MIXED COLUMBINES. Good variety of colors. Pkt., 10c.

NEW EARLY GIANT COSMOS

Heretofore it has been necessary to list two strains of cosmos, the early with small flowers, and the late or giant flowering.

I now offer you this "2-in-1" strain, combining earliness with fine large flowers.

F27 WHITE; F28 PINK; F29 CRIMSON; F30 FINE MIXED. Your choice of any of these colors, or mixed: Pkt., 5c; $\frac{1}{2}$ oz., 25c.

CYPRESS VINE

F31. Beautiful rapid growing climber with feathery foliage and star-shaped blossoms. Soak seed 24 hours in warm water. Pkt., 5c; $\frac{1}{2}$ oz., 20c.

DOUBLE DAISY (Bellis)

The poet's favorite flower, perennial, blooming first year from seed. Very neat for borders.

F33 WHITE; F34 MIXED. Price for either: Pkt., 10c.

F35. SHASTA DAISY. Originated by Burbank. Large white flowers on long stiff stems, great bloomer, fine for cutting, perennial, roots may be divided after a few years and reset. Pkt., 10c.

DAHLIAS FROM SEED

Easily grown. Bloom almost as soon as tubers. Sow outdoors or start in house. Long's Special Mixture, Pkt., 25c.

California Poppy

Carnation

Cobaea Scandens

Celosia

ESCHSCHOLTZIA (California Poppy)

Blooms early and continuously from spring sown seed. Seeds itself after first year. Fine for beds or borders.

F36. GOLDEN WEST. Large yellow; the California State flower. **F37 WALLER'S CRIMSON,** the best fixed strain of carmine-crimson, extra fine. **F38 LONG'S SPECIAL MIXTURE,** grand mixture of best kinds and colors. Price, any kind: Pkt., 5c; $\frac{1}{4}$ oz., 25c.

FORGET-ME-NOT (Myosotis)

F32. Hardy perennial and one of the daintiest of garden favorites. Blooms first year and better next. Color blue. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

FOUR O'CLOCK

F39. Good old-fashioned easy-to-raise flower, splendid for hedge, center or background. Mixed colors. Pkt., 5c; oz., 20c.

FOX GLOVE

F40. Tall perennial with spikes of varicolored and spotted tube-like flowers, blooming second year from seed. Pkt., 5c.

GAILLARDIA (Blanket Flower)

F41. Compact bushy plant bearing large brilliant flowers. Fine mixed. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

GERANIUM

F42. Perennial, blooming first year from seed if started early. Extra fine mixed. Pkt., 10c.

GODETIA (Satin Flower)

F43. Hardy annual about 18 inches tall, bearing many showy flowers of satiny texture in rich and varied colors. Does well in poor soil and somewhat shady places. Fine mixed. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

GOURDS

Don't overlook these for the children. Easily grown, rapid climbers, tender, sow after danger from frosts.

F44. NEST EGG. Grow your own nest eggs. Give the hen an inspiration. Plant this seed in poor soil lest you raise an ostrich egg. Pkt., 5c; $\frac{1}{2}$ oz., 15c.

F45. DIPPER. Dippers are now so high that it might pay to grow your own dippers and be independent of the dipper trust. Pkt., 5c; $\frac{1}{2}$ oz., 15c.

F46. MIXED GOURDS. Ornamental gourds, large and small, all shapes and colors. Many odd, fantastic varieties. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

GYPSOPHILA (Baby's Breath)

Graceful plants of light fairy-like growth, covered with tiny white flowers. In great demand for combining with sweet peas and other cut flowers. Note that there are two kinds, the annual and perennial.

F47. ELEGANS (ANGEL'S BREATH) ANNUAL. Blooms first year from seed. Not so dainty as the perennial. Good plan to sow both kinds this spring, so as to have a supply this year and next. Pkt., 5c; oz., 25c.

F48. PANICULATA (BABY'S BREATH) PERENNIAL. Blooms second year from seed and increases in size of plants each year. The tiny white flowers on branched stems are so thick as to give the plant a white lace-like effect. A "perfect dream." Pkt., 10c; $\frac{1}{4}$ oz., 25c.

HELICHRYSUM (Everlasting Flower)

F49. Double flowers in various shades of light yellow and scarlet. Gather flowers when on point of expanding and will keep for winter bouquets. Fine mixed. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

HELIOTROPE

F50. Perennial, blooming first year from seed. Choice mixed. Pkt., 5c.

HOLLYHOCK

The modern double hollyhocks bear flowers as double and beautiful as the most charming rose. My double varieties in seed and plants are of the finest. Biennial.

F51. Extra fine mixture of double flowering kinds. Pkt., 10c; $\frac{1}{2}$ oz., 25c.

SEPARATE COLORS DOUBLE HOLLYHOCKS: **F52** White. **F53** Yellow. **F54** Red. **F55** Pink. **F56** Blush. **F57** Maroon. **F58** Black. Choice of colors: Pkt., 10c.

HOLLYHOCK SPECIAL

F59. SINGLE AND DOUBLE, MIXED. A gorgeous mixture of fine varieties from my trial grounds. Includes some of the charming fringed and ruffled sorts. Plant these liberally for backgrounds. Extra large package 15c; 2 for 25c.

See Plant Pages for Hollyhock Roots

JOB'S TEARS (Coix Lachrymae)

F61. Curious ornamental grass with hard seeds used for beads. Pkt., 5c; $\frac{1}{4}$ lb., 25c.

JAPANESE HOP

F62. A rapid growing climbing vine much used for covering unsightly objects and for shading windows and porches. Soak seed 12 hours. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

Mixed Gourds

Gypsophila

Japanese Hop

Marigold

LARKSPUR (Annual)

- F63.** Dwarf Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.
F64. Tall Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

LINUM (Scarlet Flax)

- F65.** Slender plant with bright red saucer-shaped flowers. Very showy and easy to grow. Pkt., 5c; oz., 25c.

LUPIN (Sun Dial)

- F66.** Ornamental plant 2 to 3 feet high, bearing spikes of pea-shaped flowers. Choice mixed. Pkt., 5c; oz., 25c.

MARIGOLDS

- F67. FRENCH DWARF.** Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.
F68. AFRICAN TALL. Mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

MIGNONETTE

No garden is complete without this old-fashioned fragrant flower. Comes into bloom soon.

- F69. LONG'S SPECIAL MIXTURE.** Extra fine varieties mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

MORNING GLORY

- F70. TALL.** Always popular for fences and screens, etc. Fine mixed. Pkt., 5c; oz., 20c.
F71. DWARF. Good for beds or borders. Pkt., 5c; oz., 25c.

- F72. JAPANESE.** Very large and beautiful flowers. Leaves as well as blossoms are ornamental. Pkt., 10c; oz., 30c.

MEXICAN FIRE BUSH

- F73.** Also called Summer Cypress. The moss-like green foliage turns to deep carmine in fall. Makes inexpensive showy hedge. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

MOURNING BRIDE (Scabosia)

- F74.** Also known as Pincushion Plant. Flower stems are long and keep well in water. Fine mixed. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

NICOTIANA (Tobacco Plant)

- F75.** Blossoms something like petunia but with longer tubes. Flowers very fragrant and showy. Pkt., 5c; $\frac{1}{2}$ oz., 25c.

Nasturtiums (Dwarf)

About one foot high and very effective. They bloom and bloom and bloom. The more you pick them the more they bloom. Fine for beds and borders, also for planting in rings around trees. Stand hot location better than many other flowers. Easy to raise. Tramp soil after planting so it will come in contact with all portions of the ribbed seed. Soaking seed 24 hours will also hasten germination. Sow any time from first of April to July. They come quickly from late plantings.

- F76. LONG'S SPECIAL MIXTURE.** Extra fine mixture of named sorts, always giving pleasing results. Pkt., 5c; Special Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Separate Colors Dwarf Nasturtiums

- F77. EMPRESS OF INDIA.** Crimson. Foliage lark.
F78. GOLDEN KING. Rich orange-yellow.
F79. KING THEODORE. Velvety crimson.
F80. PEARL. Light lemon-yellow or primrose.
F81. VESUVIUS. Rich deep apricot.

Any separate color: Pkt., 10c; oz., 20c.

Nasturtiums (Tall)

Fine for covering trellises, stumps, fences, etc. Very showy when planted at top of steep bank and allowed to run down the bank. Or may be allowed to ramble in any location. Flowers larger and stems longer than the dwarf kinds. Culture same as for dwarf, but need more room.

- F82. LONG'S SPECIAL MIXTURE.** Fine assortment of large flowering tall or climbing nasturtiums. Pkt., 5c; Special Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 45c.

Separate Colors Tall Nasturtiums

- F83. KING THEODORE.** Crimson-maroon.
F84. ROSE. Bright soft rose.
F85. SCARLET. Bright scarlet.
F86. SUNLIGHT. Clear rich yellow.
F87. VESUVIUS. Salmon-rose.

Any separate color: Pkt., 10c; oz., 20c.

PETUNIA

Great bloomer. Very showy and fragrant. My Giants of California are simply marvelous in size, forms and colors.

- F88. CHOICE MIXED.** Splendid mixture of single varieties. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

- F89. GIANTS OF CALIFORNIA.** Extra large flowers of every conceivable shade. Many blossoms ruffled.

Giant Petunias have one fault—they produce very little seed, almost none. Seed is therefore very expensive. Pkt., 25c.

PHLOX DRUMMONDII

For beds and massing nothing surpasses these beautiful annuals.

- F91. GRANDIFLORA MIXED.** Pkt., 10c; $\frac{1}{4}$ oz., 45c.

PINK (Dianthus)

Hardy sweet scented annuals blooming all summer in variety of brilliant colors.

- F94. HEDDEWIGII.** Finest of all pinks. Great variety of colors. Pkt., 10c; $\frac{1}{4}$ oz., 40c.

Morning Glory

Pink

Salpiglossis

Verbena

POPPY (Papaver)

Wonderfully brilliant and always popular flowers. Sow where wanted, as difficult to transplant.

F94½. BRILLIANT BEAUTIES. My special mixture of finest double and other charming sorts in wide range of colors. Pkt., 5c; ½ oz., 25c.

F95. "TULIP POPPY." Vivid scarlet. Pkt., 10c; ¼ oz., 35c.

F96. SHIRLEY. A beautiful single poppy, white, pink, lavender, purple, crimson, all mixed. Pkt., 5c; ¼ oz., 25c.

F96½. ICELAND. (Perennial.) Very hardy, fragrant, blooms first year from seed, good for cutting. Fine mixed. Pkt., 10c; ¼ oz., 25c.

F97. ORIENTAL. (Perennial.) Tall and showy. Scarlet flowers. Looks well among shrubs. Pkt., 10c; ¼ oz., 25c.

RICINUS (Castor Bean)

F98. Tropical looking plants growing to immense size from seed sown after danger from frost. Richer the ground the bigger they grow. Good for backgrounds and centerpieces. Children enjoy seeing them grow so quickly to size of trees 6, 8 or 10 feet tall. Pkt., 5c; oz., 20c.

PORTULACA (Moss Rose)

F99. FINE SINGLE MIXED. Pkt., 5c; ¼ oz., 25c.

F100. FINE DOUBLE MIXED. Pkt., 10c.

SALPIGLOSSIS (Velvet Trumpet)

F101. Very showy plant with trumpet-shaped blossoms in rare combinations of color, beautifully marbled and penciled. Pkt., 10c.

SALVIA (Scarlet Sage)

F102. Standard bedding plant where brightness of color is wanted. Flowers borne in spikes of firey red, lasting long time. Pkt., 10c.

SCARLET RUNNER BEAN

F103. Rapid growing "camouflage" for covering trellises, etc. Beans good to eat, too. Pkt., 5c; ½ lb., 25c, prepaid.

STOCKS—Large Ten Weeks

103½. "Cut and come again" fragrant annual. Profuse bloomer. Colors range through all the soft and distinct shades. Pkt., 10c.

HIT OR MISS

F125. Great mixture of many kinds flower seeds—as one customer said, "It's all hit and no miss." Something new nearly every day after begins to bloom. Makes a good hit with all who try it. Pkt., 5c.

SUNFLOWER (Mammoth Russian)

F104. MAMMOTH RUSSIAN. The old standby for immense blossoms that produce lots of seed. Select seed. Pkt., 5c; lb., 30c.

SUNFLOWER (Chrysanthemum Flowered)

F105. The grandest of all sunflowers, 7 feet high, with a dozen or more blossoms on each stalk. Flowers perfectly double, resembling chrysanthemums, and of a rich golden yellow color. Perfectly gorgeous for centerpiece or background, very hardy, easily grown from seed. Pkt., 5c; oz., 25c.

SUNFLOWER (The New Red)

F106. Originated here in Boulder. Is not valuable on account of seed being better for feed than any other, but popular as a novelty, because never before was a red sunflower known. Does not come all red, some flowers other colors, as color not yet fixed. Many of the combinations of colors are as interesting as the real red. Pkt., 10c; ½ oz., 25c.

SWEET SULTAN

F107. Delightfully fragrant flowers with small fringed petals. Easily grown. Something like Bachelor's Button. Choice mixed. Pkt., 5c; ¼ oz., 15c.

SWEET WILLIAM

Well known hardy perennial producing gorgeously colored fragrant flowers.

F108. SINGLE MIXED. Pkt., 5c; ¼ oz., 15c.

F109. DOUBLE MIXED. Pkt., 10c; ¼ oz., 35c.

VERBENA

F110. MAMMOTH MIXED. Also, Red, White, Purple, or Pink. Your choice, Pkt., 10c.

WILD CUCUMBER

F115. One of the quickest growing annuals, 30 feet in a season sometimes. Foliage dense, great for shade. Produces many white blossoms, followed by ornamental prickly seed pods. Will self sow after first season. Soak seed in warm water 24 hours, or cut small portion of shell away from germ end (the pointed end). Pkt., 5c; oz., 25c.

ZINNIA

See page 4 for large picture and description of this good old-fashioned garden favorite.

F116. CHOICE MIXED. Pkt., 5c; ¼ oz., 20c.

F117. LONG'S COLOSSAL MIXED. This is the marvelous giant flowering zinnia that makes 'em all sit up and take notice. See Page 4. Large Pkt., 15c; 2 for 25c.

LONG'S Nasturtiums

So easy to grow and bloom so freely that they merit a place in every garden. Long's Special Pkt., dwarf or tall, mixed colors, 10c; oz., 15c. See page 9 for separate colors and prices on larger lots.

HOLLYHOCK ROOTS

Finest double flowered. Red, White, Pink, Yellow. 5 for 50c; 12 for \$1.00. Mixed colors, 15 for \$1.00. New "Sunset" double, 3 for 50c. All prepaid.

See Page 8 for Hollyhock Seed

SHASTA DAISY ROOTS

A flower of magnificent size, yet of exquisite refinement. It is an extremely hardy perennial, blooming nearly all summer, the plant increasing in size and strength for several years, when the large clump then formed may be divided and re-set.

This year I offer Burbank's special Alaska strain of the Shasta daisy, propagated from divisions instead of from seed and therefore all true and all alike.

Most Shasta daisy plants sold are simply grown from seed, and this is a flower that varies much in height, size of blossoms and character of foliage, when grown from seed. It is cheaper to produce them from seed, but the most pleasing and satisfactory results come from divisions of ideal type plant.

Furthermore, for the first time, I offer year old and strong pot-grown plants that will not only bloom the first season but will produce a number of stems to the plant and make a big bush the first year.

Naturally, such plants vary in size, so I shall make two lots of them. Price for the larger size: 40c each; 3 for \$1.00; doz., \$3.50, prepaid. The smaller size, but good size for results this season: 25c each; 5 for \$1.00; doz., \$2.25, prepaid.

A NEW HOLLYHOCK

Fine double flowered hollyhock with rare coloring, somewhat on the bronze order, the effect being that of autumn colored foliage, described fittingly by the name given this hollyhock, "Sunset."

No seed to spare this season, but I hope to have some to offer next year.

Price for plants: 3 for 50c; 12 for \$1.80, prepaid.

"The seeds and bulbs you sent me last spring did so well. The gladioli were especially beautiful. Please send me your 1920 catalogue when ready. I want to get all the different glad bulbs that I missed last spring."—Miss Belle Rudolph, Fort Collins, Colo.

"A package of your Colossal zinnia seed produced plants and blooms that called forth remarks such as you printed in your catalogue. Many people could not believe they were zinnias. From your '33-in-1' Spencer mixture I had the first real sweet peas in five years. I planted, for experiment, a package of your dahlia seed and was astonished at results. Had several beautiful single white blossoms as large as a saucer; two equally as large yellow of the cactus type; several deep red peony type, and many others not so perfect."—Mrs. C. O. Huffsmith, Greeley, Colo.

LONG'S DELIGHTFUL DAHLIAS

New Cactus—Golden West

Show Type

Culture. Plant in open, sunny location in soil that has been well-prepared by deep digging. **Lay the tuber flat on its side** and cover 5 inches deep, pressing the soil firmly. Plant 2 or 3 feet apart.

Keep ground loose and mellow, drawing the soil to a slight hillock around the plant. Be moderate in use of manure. If ground is too rich you will get much foliage and few flowers. Water moderately until plants begin to bloom, then give a **good soaking** every week.

After frost has killed the tops, dig the tubers carefully, remove all soil and pack away in barrel or box secure from frost, covering with sand or leaves, if possible.

All clumps should be divided into several pieces before being re-set the following spring. Every tuber must have an eye. The eyes are at base of stalk. Size of tuber is not important.

TO KEEP DAHLIAS AS CUT FLOWERS

Cut the flowers late in evening or early in the morning, never during the heat of the day.

Plunge the ends of the stems (an inch or two) in **hot water** for a few minutes, being careful to hold the blossoms to one side so they will not be injured by the rising steam. Then place in vase of cool water.

DAHLIA TUBERS and DAHLIA SEED

The fine named varieties of Dahlias can be had from tubers only. These are listed on the following page and will come true to descriptions.

Dahlia Seed—Long's Special Mixture—Lg. Pkt., 25c.

IMPORTANT NOTICE.—Kindly make your selections early—the earlier the better. Tell me whether I may substitute if out of any kind ordered.

Decorative Type

Peony Flowered

FOUR TYPES OF DAHLIAS

My Dahlias may be divided into four kinds as to form or type, namely: **Show, Cactus, Decorative, Peony Flowered.** With the illustrations of each of these types before you it will be easy to connect the forms of each variety with the brief descriptions of each. **Type** is indicated with parenthesis immediately following name of each variety.

Long's Delightful Dahlias

Price following each variety is for one tuber with good eye. Each tuber makes a big plant. Why should we plant just ordinary dahlias, when for a little more we can get the newer, larger, much finer varieties?

- D1. PINK PEARL.** (Cactus.) Soft pink. 25c.
D2. MOONBEAM. (Decorative.) Canary yellow. 25c.
D3. CHARLES CLAYTON. (Cactus.) Vivid red. 25c.
D4. LAVONI. (Show.) Rich, bright pink, exceedingly free bloomer and fine for cut flowers that keep well. Not large blossom. 20c.
D5. DELICE. (Dec.) Rose pink, one of best for cutting. 30c.
D6. LA GRAND MANITOU. (Dec.) Gigantic flower, white, striped and splashed reddish-violet. Sometimes solid purple. 25c.
D7. D. M. MOORE. (Show.) Deep velvety maroon; monster flower. 35c.
D8. QUEEN WILHELMINA. (Peony.) Large fluffy white flowers with yellow center. 25c.
D9. SOUV. DOUZON. (Dec.) Red; a monster. 25c.
D10. SOUV. LISZT. (Peony.) Purplish-maroon, veined and shaded with white. 25c.
D11. BERCH VAN HEEMSTEDE. (Dec.) Monster yellow. 35c.
D12. MRS. BAGGE. (Decorative.) Old rose. 25c.
D13. W. W. RAWSON. (Show.) White, overlaid with delicate lavender. Large. Similar to Grand Duke Alexis but better. 35c.
D14. KALIF. (Cactus.) Gigantic glowing scarlet. Sold for \$5.00 a bulb several years ago. \$1.00.
D15. DR. HENRY SEWALL. (Peony.) Named for former president of Colorado University. Very large, handsome flower; pink-fawn with slight amber shading at base of petals. 35c.
D16. GOLDEN WEST. (Cactus.) So much better than Golden Gate that I have discontinued the latter, even though fine, and offer this because it excels in color, form of flower and length of stem, which though slender is very stiff and holds the blossom well. Free bloomer. Color, golden yellow or burnt orange, shading to clear yellow in center. If I were to plant but one cactus, this would be the one. 50c.
D17. "DEE-LIGHTED." (Show.) Largest show dahlia I ever saw. Makes 'em all sit up and take notice. A wonder. 40c.
D18. QUEEN EMMA. (Peony.) Hollyhock-pink; inner petals banded gold. Extra tall grower; fine. 30c.
D19. CHIPETA. (Cactus.) New. Rich amaranth-red flowers, borne on long stout stems which hold flower erect. 50c.
D20. GRAND DUCHESS MARIE. (Show.) Rich buff, overlaid orange. Fine. 35c.
D21. NAIAD. (Dec.) New. Tall, free blooming plant; stems remarkably long. Color a tinted cream pink. Beautiful by day and a dream under artificial light. \$1.00.
D23. MINA BURGLE. (Dec.) New. Said to be finest crimson decorative dahlia known. 50c.
D25. SNOWDON. (Cactus.) Exquisite snow-white. Petals sharply pointed. Fine combined with No. D3. 35c.
D26. F. W. SCHIEFF. (Dec.) Golden bronze, shaded to red. Immense flower; long stem. 50c.
D27. LAURA BARNES. (Peony.) New. Clear orange-red. Grand indeed. 60c.

DISCOUNT FOR QUANTITY

On a dahlia order amounting to \$5.00 or more, you may deduct 10%.

Liberty Iris

THE ORCHID OF THE GARDEN

The exquisite beauty of the Iris, with its soft and delicate coloring, is rivaled only by the Orchid.

Prices are for root divisions. Each division increases in size until forms large clump producing many spikes of blossoms. May remain for years without attention or may be divided and reset every few years. Iris is very hardy and it is almost impossible to fail with this inexpensive yet charming flower. The new Giant Lavender is in a class by itself—nothing else equal to it.

Class A. Center yellow, petals veined brown on yellow.

Class B. Cream or primrose.

Class C. White, tinged primrose.

Class D. Yellow center, petals veined purple on yellow.

Class E. Rich deep purple.

Class F. Lavender, edged white. Is very charming.

Prices: Any above Iris, assorted as you wish, labeled. 4 for 50c; doz., \$1.40, prepaid.

MIXED IRIS. Same quality as above, but mixed, not labeled. Doz., \$1.00, prepaid.

Wonderful New Iris

PALIDA DALMATICA. Clear lavender flower of mammoth size. Very tall and strong stem. Blossoms delightfully fragrant. Truly a wonder. A florist of 35 years' experience visited my garden and said he considers this the finest Iris of its class. 2 for 50c; 5 for \$1.00, prepaid.

Dahlia Seed

Long's Special Mixture

All new varieties of dahlias come from seed. They bloom from spring-sown seed about as early as the tubers do. Large Pkt., 25c; 5 for \$1.00.

Gypsophila Roots

Perennial-Paniculata (Baby's Breath)

See page 11 for description. Good size, strong two-year-old roots, larger than usually sold. 3 for 50c; 7 for \$1.00, prepaid.

"Had fine luck with dahlia seed you sent. One dark red double had about 50 buds and blossoms. Flowers much larger than a cup. We are very well pleased with all seeds bought of you."—Mrs. Wm. Kuhler, Fleming, Colo.

"Find enclosed \$2.00 for Darwin tulip bulbs. My other bulbs are doing nicely. All my flowers from bulbs last winter and the winter before were gorgeous."—Mrs. S. H. Horn, East Enid, Okla.

Mammoth Flowered Cannas

YELLOW KING HUMBERT

Handsome bedding plants, both foliage and lower of pleasing appearance. **They bloom and bloom and bloom.** The varieties I list are greatly improved kinds that will surprise and delight you.

Many who see my cannas in bloom exclaim: "**Why, they look like orchids!**"

Class A. King Humbert. Bronze foliage; scarlet flowers of immense size; 4 to 5 ft.

Class B. Yellow King Humbert. Green foliage; very large blossoms of deep, rich yellow, softly spotted with red; 4 to 5 ft.

Class C. Louisiana. Glossy green foliage; flowers vivid red. Very showy. 5 to 6 ft.

Class D. Loveliness. Green foliage; soft pink blossoms. "Loveliness is right." 4 to 5 ft.

Class E. Eureka. Green foliage; flowers white. Said by many to be the finest white canna. 4 to 5 ft.

Any of the above Giant, Orchid-flowering cannas, your selection, alike or assorted, each labeled, 3 for 50c; 5 for 75c; 10 for \$1.25, prepaid.

MIXED GIANT CANNAS. The above kinds or others as good, our selection, none labeled, 4 for 50c; 10 for \$1.00, prepaid.

SPLENDID PEONIES

Good divisions, each with several eyes, very fine double flowered kinds, in White, Light Pink, Deep Pink, and Red. Each, 50c; 6 for \$2.50; prepaid.

Note. Peonies should be planted early in spring or in fall.

How to Grow Gladioli

Glads are so easily grown that you are almost sure to have good "luck" with them. You must have good strong bulbs to start with. This does not mean large bulbs. A small young bulb is often better than a great big one, the latter sometimes being what we call a "spent bulb"—looks like a prize winner but may "peter out" altogether.

WHERE, WHEN, HOW TO PLANT

Plant in any good garden soil where they will have plenty of sunshine. Don't forget that Glads love sunshine. But they are not particular as to time of planting. Plant any time from early April until July. Good idea to plant some every two weeks to keep a supply of flowers coming on all summer and fall.

They bloom in about 90 days from planting, depending on variety, vigor of bulbs, depth planted, culture, season, etc.

As I've often said, "Standing room only" is all that Glads require. Mass them in rows or beds, setting the bulbs 3 to 6 inches apart. If in rows, set double or triple rows. Dig trench, set bulbs where wanted, fill trench and job is done.

Cover small bulbs about 3 inches, larger ones 4 to 5 inches. Even deeper is all right. Bear in mind that the new bulb is formed on top the one you plant and if too shallow your flower spikes will blow down. Deep planting saves staking.

Cultivate between rows, and plants in the rows, often, keeping soil loose and porous. Water frequently. Glads like lots of water, but with good cultivating will get along with less water. But soak them thoroughly and often if convenient.

USE GLADS FOR CUT FLOWERS

While Glads make a nice display in the garden, yet they are much more valuable and satisfactory as cut flowers.

Cut them just as soon as the lower blossom opens. Cut stem so as to leave 3 to 6 leaves on the plant to mature the bulb. Place in vase of water and the buds will open from day to day just as they would in the garden. As the lower blossoms fade pull them off, so as to keep the bouquet looking tidy and cheerful.

Keep watering the Glad beds after flowers are cut or have quit blooming, so as to mature the new bulbs. These do a good part of their growing after flowers appear.

DIGGING AND STORING THE BULBS

After frost in the fall dig the bulbs and cut stem off at once about one-fourth inch above bulb. (See illustration No. 6). Save the larger bulblets of such varieties that you care the most for. Do not expose the bulbs to hot sun or frost, but they may dry a day or so in the shade. Hang up in porous bags—a common sugar or burlap bag is very good. Store thus in cellar or any place where they will not freeze or get too dry.

HANDLING THE BULBLETS

Before planting remove the old bulb. Plant the bulbs and bulblets separately. Sow bulblets thick in a row like peas, 100 to a foot or two of row—and cover about one inch. Soak bulblets—not bulbs—a day or two before planting. Keep them thoroughly wet for weeks after planting, as shells are very hard and must be kept very moist else will not germinate.

These bulblets will make small bulbs by fall, which, planted again the next spring, will mostly bloom and all should make ideal bulbs for the year after that.

NOTE.—Corm and Cormel are botanical terms for Gladiolus bulbs and bulblets, but are seldom used.

LONG'S 1920 Prices For Gladiolus Bulbs

For description of each variety, refer to list beginning on next page. Note the **Special Prices**. These special prices are for customers who favor me with orders for other goods also. If glads only are ordered, then figure them at regular prices.

Half dozen of a kind at dozen rates; 50 of a kind at 100 rate. Single bulbs at one-tenth the dozen price.

Small Size Bulblets of several new and high priced kinds are offered at lower prices. These bulbs are $\frac{1}{4}$ to $\frac{1}{2}$ inch in size (not bulblets, but bulbs) and **should bloom**, though I do not guarantee them to do so. At any rate, they will make fine blooming bulbs for next year.

Important! Bulblets and small bulbs must be ordered very early. Those not sold by about April 1st will all be planted out in my own gardens, because these should be planted early to get the full season's growth.

SPECIAL GLAD PRICES

We all have our hobbies, I guess. Mine is to show my appreciation of orders by giving a little extra or offering my Glorious Gladiolus bulbs at special prices to those who order other goods.

This year I am going to make reduced prices on nearly all glad bulbs, named and mixed kinds. These prices are based on the supply of each I have in stock. On some I can save you more than on other kinds, as you will note. My regular prices are, I feel sure, as low as first-class, healthy, true stock will be offered by other reliable firms this year.

Please don't ask me to change this offer and make it apply to other bulbs, or plants. Glads are my hobby and glads I am using for this treat—meeting you part way on the price, so you can plant and enjoy lots of them.

All Bulbs Priced Prepaid

	Regular Prices		Special Prices	
	Doz.	100	Doz.	100
G1. AMERICA	\$.50	\$3.50	\$.45	\$3.25
G2. ARIZONA	1.00	7.00	.80	5.00
G3. AUGUSTA	.50	3.50	.40	2.80
G4. BERTREX	2.50		2.00	
G5. CHICAGO WHITE	.80	5.60	.60	4.20
G6. FAIRAE	2.00		1.60	
G7. GLORY (Kunderdi)	1.00	7.00	.80	6.00
G8. Glory of Holland	1.00	7.00	.90	6.00
G9. HALLEY	.60	4.20	.50	3.50
G10. HEREDA	2.80		2.40	
G10. " Small	1.00		.80	
G11. HULOT	.70	4.80	.60	4.00
G12. KING, MRS. F.	.50	3.50	.35	2.60
G13. KIRTLAND, E.	3.00		2.50	
G13. " Small	1.00		.80	
G14. LIEBESFEUR	1.50	10.00	1.20	8.00
G15. LILYWHITE	5.00		4.00	
G15. " Small	2.00		1.60	
G16. LOVELINESS	1.50	10.00	1.20	8.50
G17. MYRTLE	1.50	10.00	1.20	8.50
G18. NIAGARA	1.20	8.00	.80	7.00
G19. PANAMA	1.00	7.00	.70	5.00
G20. PEACE	1.00	7.00	.80	6.00
G21. PENDLETON	1.20	8.00	.90	6.50
G22. Pink Perfection	1.50		1.20	
G23. Prince of Wales	2.20		1.80	
G24. PRINCEPS	1.00	7.00	.80	6.00
G25. RED CANNA	1.50	10.00	1.20	7.50
G26. ROSE BUD	1.80		1.50	
G27. SCHWABEN	1.50	10.00	1.20	8.00
G28. WAR	1.50	10.00	1.20	8.00
G29. Zang, Gretchen	2.00		1.60	
G29. " " Small	.90		.70	
G30. Long's Sunshine				
Mixture for 1920	.75	5.00	.50	3.30

\$3.00 "Show Me" Assortment

Fifteen different varieties, one or more of a kind, each kind labeled; total of not less than 30 bulbs, which if bought singly at regular prices would foot up to \$4.50 or more. Selection of kinds must be left to me, as I shall vary the assortment from time to time according to the quantities of each kind I have on hand. You will get a number of new, rare kinds and all will be fine. You will also most likely get more than 30 bulbs. Price \$3.00, prepaid.

BULBLET PRICES: 100 or more bulblets in pkt. of following at 25c per pkt.: Nos. G2, G3, G5, G9, G12, G19, G24, G30.

Following at 40c per pkt. (100 or more): G21, G22, G25, G27.

Can also supply bulblets of G9, G12 and G30 in 1,000 lots at \$1.25 per 1,000 bulblets.

Mrs. Frank Pendleton

LONG'S Glorious Gladioli For 1920

A Glad Girl in My Glad Garden

"Home-Made" Gladiolus Bulbs

I grow my own Gladiolus bulbs right here in Sunny Colorado and offer to you at "Home Made" prices. Maybe I make a little on these bulbs and maybe I don't. I don't figure it down fine one way or the other. Labor is expensive and everything costs more now, but I want to place these Glad bulbs within the reach of all my customers. Notice my prices for the fine varieties and mixtures I offer.

I've had so many delightful reports from customers who planted my Glads last year that I'm going to make this another "Gladiolus Year." I'll make the price so reasonable that you can plant lots of the bulbs and bulblets. Glads don't ask for much more than standing room. The roots go straight down, nearly, and the stalks straight up, so that you can plant them so close they almost touch each other. They never fight or quarrel when crowded, but just come up smiling and eager to make you smile, too.

No matter how many Glads you plant, you will wish you had more, when they come into bloom. They are so fine for cut flowers, for yourself or to give to others. No other flower is so easy to mail. Just cut them when first bud is about open, wrap them up and send hundreds of miles by mail or express. They will go right on blooming, when put in a vase, until the last bud has opened, lasting a week or more.

Extra Fine Named Gladioli

Strong blooming size bulbs of 29 choicest varieties in a wide range of colors. Plant as I suggest and if you do not get as many spikes of blooms as bulbs you buy I will replace, free of charge, any that fail to make good.

A number of superb new varieties have been added to the splendid list I have had for several years.

G1. AMERICA. Soft lavender-pink. Has been a great favorite and always will be, but now has to take second place since the introduction of the new "Rose Bud," which is very similar in color but much better in form.

G2. ARIZONA. Fine dark pink with maroon markings on lower petals. Tall spikes that stand up well. Splendid for cutting.

G3. AUGUSTA. White with lavender anthers. Good, but now giving way to others in its class that are newer and finer—Lilywhite, Bertrex, Glory of Holland, etc.

G4. BERTREX. Immense white or almost white. New.

G5. CHICAGO WHITE. White with lavender markings in throat. **Extra early.** Good mate for Halley.

G6. FAIRAE. New. Delicate pink, blending into a cream throat. Don't know why the name is spelled as it is. I would have spelled it "Fairy," for that would fit this exquisite glad. I'm plumb crazy about this new one. Can hardly wait until some more bloom next summer.

G7. GLORY. (Kunderdi.) Pinkish-cream, almost white, with crimson stripe in center each petal. **Petals charmingly ruffled.**

G8. GLORY OF HOLLAND. Pure white with lavender anthers. Large. Better than Augusta.

G9. HALLEY. I call this "Hustling Halley," because it gets such a move on and blossoms so early. It's a beauty, too. Color salmon-pink with creamy blotch in throat; blossoms large and well placed on spike. A bunch of Halley makes a charming bouquet.

G10. HEREDA. Another new one and "Decidedly Different." Blooms of immense size on tall, straight spikes; massive in every way. The large blooms are described as pure mauve. We men folks would call it lavender, I presume. Anyhow it's a rare color in glads, and very attractive.

G11. HULOT, BARON J. This is another glad of unusual color, though no longer new. Some call it blue, others say it is purple. Let the ladies decide.

G12. KING, MRS. FRANCIS. Glads may come and glads may go, but it will be a long time yet before a better all-around, inexpensive, glad than Mrs. Francis King shows up. Magnificent light scarlet; large blossoms; tall spikes; grows like a weed; blooms from quite small bulbs, even from bulblets sometimes. Fine for garden display and great favorite with florists for cutting.

G13. KIRTLAND, EVELYN. New. The flowers, of strong substance, are a beautiful shade of rosy pink, darker at the edges, fading to shell pink at the center, with brilliant scarlet blotches on lower petals; the entire flower showing a glistening, sparkling lustre. The spike is giant in height, straight but slender, bending gracefully with its burden of blooms. Wonderfully decorative.

G14. LIEBESFEUR. This word, or part of it, means "Fire," and if I had named Liebesfeur I would have called it Fire, for short. The name describes the color, in part. It's a brilliant scarlet, **solid color**, being unusual in this respect, as most varieties have some markings on lower petals or in throat, or both. I've grown this glad for several years but never had enough bulbs before to offer. It's one of the finest, richest, glads in existence and I'm sure will please you.

G15. LILYWHITE. A new white that is taking glad lovers by storm. Originated by Kunderdi, who describes it as an early all-white of good height, nice size blossoms and plenty open at a time. It is very thrifty, growing readily from small bulbs and bulblets. My friend, Mr. H. E. Meader, an eastern gladiolus specialist, thought so much of this that he paid \$3,000 for the first lot of bulbs and bulblets the originator parted with at wholesale, and the whole works could be packed in a good sized barrel.

G16. LOVELINESS. Extra large cream colored new glad of unusual merit. **It is indeed**

lovely. Spikes tall and very strong. This is something like Niagara and in comparing the two I would call this an IMPROVED NIAGARA.

G17. MYRTLE. Another new one that has captured the hearts of all flower lovers who have seen it. The originator, Mr. Kunder, goes so far as to say, "It is the most beautiful pink yet produced in a gladiolus." He describes it as a tender and delicate rose-pink. Brings the highest price in cut flower market.

G18. NIAGARA. Flowers are a delicate cream shade, with the two lower petals blended to canary-yellow. The throat is splashed with carmine, and ends of some petals are also blushed carmine.

G19. PANAMA. A seedling of the popular America which resembles the parent variety in every way except that it is a much deeper pink. Spike very strong, with flowers large and well arranged. Great favorite with the Denver florists.

G20. PEACE. The flowers are unusually large, of good form, well placed on a tall, heavy, straight spike. Color almost pure white, with pale lilac feathering on the lower petals. Fine for cutting.

G21. PENDLETON, MRS. FRANK. The flowers are large and well-expanded, of a lovely flushed salmon-pink, with brilliant carmine blotches in the throat, presenting a brilliant contrast of orchid-like attractiveness. When cut, the stem takes up water freely, so that buds bloom to the tip of stem. Awarded highest honors of the American Gladiolus Society. Mr. Kunder says, "No grander variety in existence."

G22. PINK PERFECTION. Very large open flower of fine bright pink. Much inclined to crooked stems, but in great demand by florists. Some prefer crooked stems for part of a glad bouquet, as they can be arranged more gracefully than if all are straight.

G23. PRINCE OF WALES. This new variety might well be called a "Glorified Halley." Similar to Halley, color lighter and more dainty. One enthusiast says of it, "For sheer beauty of color tone, either in sunlight or under electricity, singly or in mass, this variety is excelled by no other; add extreme earliness, good spike with many flowers open at once, and you have an ideal gladiolus."

G24. PRINCEPS. Large bright crimson with white blotches on lower petals. I find one fault with this, in that the blossoms fade rather soon so that not many are open and fresh at a time.

G25. RED CANNA. "A red that is red." Described by some as brightest of crimson-pink, but the effect is red—at least it looks red to me; but as I have said, we men folks don't split hairs when it comes to distinguishing colors. The petals are slightly waved or ruffled, flowers large, spike strong.

G26. ROSE BUD. "Now, ladies and gentlemen, crowd up close, for I have something very wonderful to tell you," as the circus spielman would say. It's about this—how shall I describe it? I've already overworked Delightful, Charming, Superb, etc., etc. Really, I guess we shall have to coin a new adjective to do justice to this new glad, Rose Bud. However, take the short cut and plant a few Rose Bud bulbs and you will then know its rare charm.

If the naming of this glad had been left to 1,000 people, I think there would have been 1,000 names turned in and each would have been **Rose Bud**. This from the fact that just before the blossoms unfold they remind you of a dainty pink rose bud. The open flower is similar in color to America but a shade brighter. But the large, open, bell-shaped blossoms are placed on the strong, tall spike much more artistically, being less crowded. Each bud and blossom is given room enough to display its in-

dividual beauty. As my good friend, Mr. F. M. Wright, says: "Looks like some one took a handful of blossoms and threw them on the spike, which makes the effect so artistic." **Rose Bud** has broad, healthy foliage and tall spike with 6 or 8 blossoms open at a time.

G27. SCHWABEN. (Giant Primrose.) A glad of unusual vigor, many bulbs producing 2 or 3 flowering stalks, some of these sending out side branches with blossoms. Each main stalk produces about 20 large blossoms, 6 or 8 open at a time. Color is a clear canary-yellow, shading to sulphur-yellow when opening. Dark blotch in throat. Mrs. Long says this is one of the finest glads that ever bloomed in our garden, and I can't find any grounds for quarreling with her about this. "Schwabens is shore some glad."

G28. WAR. I'm mighty sorry some bone-head handicapped this wonderful glad by giving it such an unpopular name. Just forget the name, if you wish, and think of it as Long's No. G28, and by all means add it to your collection. It's a very tall and conspicuous grower, one of the real giants among glads. Color deep blood-red, shaded crimson-black. Only a few years ago this variety sold at \$1.00 a bulb.

G29. ZANG, GRETCHEN. New. Soft, melting shade of pink, blending into scarlet on lower petals. Large, heavy sparkling blooms.

G30. LONG'S SUNSHINE MIXTURE. For several years I have been improving this splendid mixture, but never before added so many right fine new varieties as will be included for 1920.

During the last five years I have planted in my own garden a mixture labeled, "Rare Kinds, Mixed." Into this mixture I have put from year to year bulbs of new varieties that I secured from many sources for trials and comparison, often finding them too nearly like others I had to make a separate class of them. Still others were added on account of labels becoming lost or accidental mixing of the bulbs or bulbets in handling. I've never sold any bulbs from this Rare Mixture, but this year am going to combine this lot with my regular Sunshine Mixture, making the latter a richer, more valuable mixture than ever before. Price will be a little higher, but very reasonable for the quality.

As I've said before, the name "Sunshine Mixture" just fits, for the bulbs have been grown in Colorado's sunshine and the flowers will bring sunshine into the lives of all who may possess them.

GLADIOLUS BULBETS. These are the little hard shell bulbs about the size of an Alaska pea, some smaller and some larger. Planted thick in a row like peas and kept real damp so as to soak up the hard shells the bulbets grow and make small planting size bulbs for the next year. Bulbets seldom bloom the first year, though some do, but nearly all of the bulbs they produce will bloom the following year. Not all bulbets germinate, but under favorable conditions most of them do, and the price is so cheap that you get a lot for your money even if many should fail to grow.

I can't spare bulbets of all varieties, but of others I am offering at prices indicated in connection with the prices on bulbs.

Bulbets are put up in packages of 100 or more in a package and sold only this way.

"My pansy plants have given the best of results."—Mrs. M. R. Day, Pocatello, Idaho.

"Enclosed find check for \$1.00 for pansy seed. I got a few pansy seed from you last fall and they are certainly fine. I have raised pansies for 25 years but these are the largest pansies I have ever had."—Mrs. J. W. McKinley, Florist, Canon City, Colo.

A section of my gladiolus garden, mostly young stock grown for blooming next year. The row of reds next to pipe line is War, from bulbs less than $\frac{1}{2}$ inch. Pipe is part of my Skinner Irrigating System—rain to order, as needed, you know. (If interested, write the Skinner Irrigation Co., Troy, Ohio.)

A Peep at Glads Under the Ground

There's a saying, you know, "You can't eat the cake and keep it, too." Whoever started that didn't know much about Glads. Glad bulbs will not only give your money's worth in lovely, lasting, cut flowers but in the fall they cheerfully hand you back all your bulbs and then some.

Every healthy Glad bulb produces a new bulb, formed above the old one.

When once you get the "Glad fever" you can hardly wait until digging time to see what has been going on under the ground while you have been enjoying the flowers above. There are always surprises in store for you. One thing you can bank on, though, and that is your original investment, and mighty good interest in the way of flowers. Who said: "You can't eat the cake and keep it, too"?

Note the finishing touch given this garden by the borders of Sweet Alyssum along the walk. The seed of this cheerful little plant is inexpensive (Pkt., 5c; $\frac{1}{4}$ oz., 25c; see page 6), and will produce charming effects in edgings, borders and beds.

LONG'S GIANT ASTERS

The above picture shows a section of my garden, looking west from middle of a patch of Long's Giant Asters. Many blooms had been cut before this picture was taken. Dahlias in the background. Back of that is a neighbor's house, across the road, the Boulder to Estes Park highway. Yes, that's "Little Sister" (Elizabeth) and brother Everett.

Below we get a glimpse of another aster field in which part of my seed is grown by Mr. Williams, an aster seed specialist, who grows 50 acres asters each year and has a reputation for highest grade northern grown seed. Northern grown aster seed produces a larger percentage of full double blossoms than the California grown seed. For this reason I have never handled the California aster seed. How would you like to be turned loose in 50 acres of asters, the finest varieties that grow?

GIANT ASTER PLANTS

I have best success with my outdoor grown hardy aster plants, setting them out along about the first of June—from that on to the 20th. The aster is essentially a fall flower and should be brought into bloom after hot weather.

This year I shall endeavor to have aster plants ready from May 25th to July 1st. You understand, however, that seasonal conditions may delay delivery.

MIXED ASTER PLANTS. Popular cut flower mixture. 18 plants (smallest quantity sold), 50c; 50 for \$1.00; 110 for \$2.00, prepaid.

PLANTS IN SEPARATE COLORS. White, Pink, Lavender, Purple and American Beauty. Your choice, 12 (smallest quantity sold) for 50c; 33 for \$1.00; 75 for \$2.00, prepaid.

JUST A WORD WITH "PA," PLEASE

Now, "Pa," if you haven't already done so, don't you think it would be quite the thing to set 'em up to "Ma" and the kiddies this spring, by starting them off with a nice big garden, with lots of flowers for part of it? Rustle a load or two of manure, get the ground well fertilized and turned over, then fall to and help care for the garden if you have a little spare time. You'll enjoy it yourself, Pa, a whole lot.

"We have used your seeds for the past three years and have had very wonderful gardens."—Mrs. N. E. Powars, Brighton, Colo.

"I had fine luck with the aster seed I got from you this spring."—Mrs. Dennis Price, Montrose, Colo.

Aster, showing type of the Royals, American Beauty, Enchantress and Pink Beauty.
All these, and others, are included in Long's Special Mixture for 1920.

AMERICAN BEAUTY ASTER

A18. Immense flowers almost identical in color to the famous American Beauty rose. The branches are exceedingly long and stiff, free from side shoots. As a cut flower it is simply wonderful, both for its beauty and keeping quality. Will keep three weeks after being cut. Rightly grown, the stems are often nearly two feet without a side branch or lateral. Pkt., 10c.

LONG'S "PINK BEAUTY"

A20. A delightful shell pink double aster of giant type that first bloomed in my trial grounds several years ago. I found no label for this at blooming time and am not sure of its name, so am calling it Long's Pink Beauty, for it is indeed a beauty. I like it even better than Enchantress and it has been greatly admired by others. Had good luck last fall in saving a nice lot of seed from this exquisite shell pink aster. Pkt., 10c.

NEW ROYAL ASTERS

A new strain of giant asters, especially valuable for cut flowers on account of their long, strong stems that are free from side shoots. Sure to please you.

A12 White; **A13** Purple; **A14** Shell Pink; **A15** Rose Pink; **A16** Lavender; **A17** Mixed. Pkt. 10c.

VICK'S ENCHANTRESS

A21. Its color is a soft delicate pink, so popular in the Pink Enchantress carnation. The flower lasts well, both as cut flower and on the plant, and notwithstanding its delicate shade, the color does not fade. Pkt., 10c.

ASTERS (In Separate Colors)

My best giant asters, selected from the different types, Semples, Crego, Royal, Aster-mum, etc. Several types in each color.

A21 Snow White; **A3** Crimson; **A4** Shell Pink; **A5** Rose Pink; **A6** Purple; **A7** Lavender. Pkt., 10c.

"No wonder your business grows, for you give a square deal."—Mrs. L. P. Weld, Greybull, Wyo.

Aster, showing shaggy, ragged, type of both the Crego Giant and Astermum, much admired by many, because they resemble the choice Japanese Chrysanthemums. These Chrysanthemum-like asters are included in Long's Special Mixture for 1920.

GIANT CREGO and ASTERMUM

These two varieties are somewhat different, yet so much alike that I am going to mix the two, giving you both in one packet of white, rose-pink and lavender. Have never been able to get Astermum in shell-pink, so give you straight Crego in that color of the shaggy type aster.

Crego branches more than the Astermum and stems are more slender, though hold the flowers well. Both, when well grown, have immense blossoms and both keep well as cut flowers. The two, Crego and Astermum, mixed in separate colors, as follows: **A8** Pure White; **A9** Rose Pink; **A10** Lavender; **A11** The three colors mixed. All at 10c pkt.

Giant Crego, **A11½** Shell-Pink, pkt., 10c.

Special Quantity Prices

All aster seed (except Long's Special Mixture) at: 3 pkts., 25c; 5 pkts., 40c; 15 pkts., \$1.00.

LONG'S SPECIAL MIXTURE FOR 1920

Might well be called my "**All-in-One**" Mixture. In making this superb 1920 mixture I have used some of all the asters and astermums offered in this catalogue, putting in most liberal amounts of the kinds best for cut flowers—plenty of white and pinks as well as the new American Beauty.

Price for Long's Special Mixture: Pkt., 15c; 2 for 25c. In bulk at: ¼ oz., 50c; oz., \$1.50.

"DULL AS A HOE"

But what's the sense of working with a dull hoe? Unless you have a grudge against yourself or are paying an election bet by trying to kill weeds and loosen up the soil with a dull hoe, you should invest a quarter in a 10-inch flat file and keep your hoe good and sharp. Just see how much better it works that way. Sure, the hoe will wear out faster, but there will be hoes a plenty after you and I are gone.

Beautiful, Bountiful, Brittle Beans

"Stringless String Beans"

(Same dope that I gave you last year, but still true. Prices, however, are new—and lower, much lower.)

Years ago Grandmother spent a lot of time "stringing beans" for dinner. She cheerfully "did her bit" in this way, because she didn't know that some day we would have "string beans without the string."

That day has arrived. Yes, it's here, thank goodness. But a lot of people do not yet know about the "stringless string beans," and still plant some of the old varieties that have to be labored with to take out the strings. Hard to get them all out.

Personally I prefer to take my beans straight. If I want to chew strings I will tackle a spool of thread or ball of twine.

All of which leads me up to telling you about several varieties of these "Stringless String Beans." They are not exactly new.

Some of the best stringless, or practically stringless, bush varieties are: Brittle Wax and Pencil Pod Black Wax in the yellow pods; Burpee's Stringless and Giant Stringless in the green pods. I'm strong for Brittle Wax. **Get the true Brittle Wax** if you want the best. See next column for description and price.

My Brittle Wax seed was grown at an altitude of over 6,000 feet.

Burpee's Brittle Wax

V4. Talk about "Beautiful, Bountiful, Brittle Beans"—if you want the real thing the plant my extra fine seed of Burpee's Brittle Wax. Several years ago I bought some of the introducer's stock of this famous brittle bean and have been growing it here in Colorado until I now have fine acclimated stock of this splendid variety.

I could say much more about this wonderful bean and quote many letters from my customers who are delighted with it and write me: "I must have some more Brittle Wax beans—be sure and save me some for next spring." The name alone tells the story. If I were to suggest any other name it would be "**Ice Bean**." Notice above how Brittle Wax breaks without the sign of a string.

I want you to take special notice that my stock of Brittle Wax is Colorado grown, the seed matured to perfection, glistening though each bean hand polished. The round fleshy pods are golden yellow.

Special Pkt., 10c; ½ lb., 20c; 1 lb., 35c; 3 lb. for \$1.00, prepaid.

5 Lb. Lots. 2nd zone, \$1.25; 3rd, \$1.34th, \$1.39; 5th, \$1.48.

10 Lb. Lots. 2nd zone, \$2.40; 3rd, \$2.54th, \$2.69; 5th, \$2.88.

Ask for prices on larger lots.

"We eat what we can, and what we can't eat we can"

Burpee's Brittle Wax

If you plant just one, make this the one. It is plant Long's extra select mountain grown seed to insure satisfaction. See description and prices on preceding page.

GOLDEN WAX

2. One of the old standbys. If pods picked when quite young they are tender, but later come tough and stringy. Should be retired, now that we have better wax pod varieties such as Brittle Wax, Pencil Pod and Sure Crop.

PENCIL POD BLACK WAX

3. Pods round, long, tender, golden yellow, stringless.

4. **SURE CROP WAX.** A new black seeded, yellow pod variety that is meeting with much favor; stringless all at stages of growth; big yielder.

5. **DAVIS WHITE WAX.** Pods yellow and flat. Beans white. Also used as shell bean. Good yielder but inclined to strings. Brittle Wax much better for use when green.

6. **WARDWELL'S KIDNEY WAX.** A favorite market variety. Pods large and attractive yellow color. Practically stringless.

7. **STRINGLESS GREEN POD.** This bean is far ahead of Valentine and Six Weeks. It is hardy, early and good yielder. Pods round and tender.

8. **GIANT STRINGLESS.** Similar to Burpee's Stringless Green Pod, but bean lighter green and pods a lighter shade of green. Many now prefer Giant Stringless to the better known Burpee Stringless. Is more hardy, better yielder and pods are more tender.

9. **KENTUCKY WONDER POLE.** After all said and done, this well-known variety pole bean is one of the best. Great yielder, pods large, fleshy and long. If used when young they are entirely stringless.

PRICES: All beans in this column (not brittle Wax) at same price: Special Pkt., 5c; ½ lb., 15c; 1 lb., 25c, prepaid.

5 lb. Lots. 2nd zone, \$1.15; 3rd, \$1.20; 4th, \$1.29; 5th, \$1.38.

10 lb. Lots. 2nd zone, \$2.05; 3rd, \$2.15; 4th, \$2.34; 5th, \$2.53.

Colorado Cream Butter

V7. Great big snow white bean, shape of navy, but about six times larger. Also called Colorado Lima. Is a western bean, having been grown for years in New Mexico and Colorado. Immense yielder under irrigation and does very well on dry land. Is earlier than other large limas. As a shell bean it cooks in short time and has a pleasing lima flavor. Cream Butter is classed with the bush beans, but if ground rich and heavily irrigated the plants will throw out runners something like pole varieties. All my seed grown on good land as bush beans and never needed staking. The beans are beauties. One customer grew Cream Butters so large that he said they would almost do for nest eggs!

Prices: Same as Golden Wax, etc. See bottom of other column, this page.

Note. All the foregoing beans are bush varieties.

HENDERSON'S BUSH LIMA

V10. White lima that does especially well in Colorado. Although the beans are smaller than Fordhook or Burpee's lima, yet the yield is heavy.

Prices: Same as Golden Wax, etc.

BURPEE'S FORDHOOK BUSH LIMA

V9. Bushes stiff and erect, branching freely but all branches held upright. Stalks that produce the blossoms are thrown out from the lateral and main stalks; the pods are borne in clusters of from four to eight. Fordhook Lima is early, a heavy cropper, and the beans are large, tender, juicy and sweet. My seed was grown at an altitude of over 6,000 feet.

Prices: Same as Brittle Wax.

DRY LAND TEPARY BEAN

V8. Similar to navy in shape and pure white, but smaller. Generally outyields the navy. Does especially well on dry land. Some say it almost hates water. My seed true Colorado grown, clean hand-picked stock. Pkt., 10c; lb., 15c, prepaid.

5 Lb. Lots. 2nd zone, 65c; 3rd, 70c; 4th, 79c; 5th, 93c.

10 Lb. Lots. 2nd zone, \$1.25; 3rd, \$1.30; 4th, \$1.49; 5th, \$1.68. Ask for prices on larger lots.

PINTO and NAVY BEANS

Prices subject to market changes. Small lots at 15c lb., prepaid.

Asparagus

CULTURE.—Soak seed 24 hours, sow thick, thin to 1 inch in row. The following spring set to permanent bed, in very rich soil, cover crown of plant 4 to 6 inches. Ask Uncle Sam for Bulletin No. 61 on Asparagus.

GIANT ARGENTEUIL. Is dark green, large, quick growing, very productive.

BARR'S MAMMOTH. Large thick stalks with close round heads.

PALMETTO. Prolific early variety.

Prices: All at Pkt., 5c; Special Pkt., 10c; oz., 15c; ¼ lb., 35c.

"Enclosed find \$1.00 for more Paper White narcissus bulbs. The first lot has done so well that I want more. They are splendid bulbs."—Mrs. James True, Cheyenne, Wyo.

Beat the Bean Bugs

Some of you folks don't need to read this, because you live in favored localities not yet discovered by this pest, the bean beetle, which I shall call bug, for short.

I think Boulder was their first stop when Mr. and Mrs. Bean Bug came to Colorado. Maybe they got hold of some of our Commercial Association propaganda on **Beautiful Boulder, the Place to Live**, and their honeymoon trip was planned accordingly. True to the traditional western hospitality, Boulder people said: "Welcome to our city. The town is yours. Help yourselves to anything you like." That was some years ago, and we have dined and entertained the Bean Bug family right royally ever since. At least, very little has ever been done to interfere with their plans.

But of late there seems to be a growing sentiment that our hospitality has been abused—that our guests have worn out their welcome and should at least be investigated. Some there are who declare the bugs sit around waiting for the beans to come up, while it has even been rumored that early last spring several were discovered looking over Long's order book to see who had bought bean seed.

Investigations seem to be the thing these days, but I'm strong for action. I'm going to tell you how to put a crimp in the bean bug and then it's up to you whether you grow beans for your own use or to make Boulder, or any other place, the "Place to Live"—for the bugs.

Planting beans in partial shade often, not always, but sometimes, saves them from attack, but it is not necessary to plant in any favored location, since the pests can be controlled by spraying the plants. The best dope for spraying beans is arsenate of lead (obtainable at drug stores), dissolved in water in proportion of one ounce to six quarts water.

Unless your neighbor has a good sprayer and a heap better disposition, you better buy one, and get it early so will have it just when needed. Better order it right along with your seeds, then you won't forget it.

For the ordinary home garden or small market garden, that dandy hand sprayer, No. 25-C, will fill the bill. There are cheaper tin sprayers, but they lack the continuous spray feature and the special nozzle for spraying under the leaves. This No. 25-C sprayer is extra well made, has brass atomizer and will last a lifetime—not just the lifetime of the bug, but of any gardener.

If fond of outdoor sports you may anticipate with glee the advent of the first bug of the season. If only a few arrive, they may be picked off by hand before many eggs are laid. Any eggs found under the leaves should also be pinched off with a portion of the leaf. No eggs, no young bugs, you know.

Spraying does not kill the adult bug, because he is a wise guy and will not eat the poison; but if a patch is well sprayed the bug seems to fold his tent and steal away to more hospitable accommodations. For this reason it is advisable to speed the parting guest by spraying the plants as soon as the first bug arrives.

Not all by any means, but some of the adult bugs live over from one season to the next—more some years than others. These old-timers eat some, but are not the ones that do the main damage. They lay the eggs that hatch out the small woolly worms. These worms or small bugs feed on the leaves, creating great havoc if allowed their own way.

Bear this in mind, that the bugs, large and small, work mostly on the **under** surface of the leaves and the dope must be applied so as to cover this under surface. This can be done by using the special nozzle on No. 25-C sprayer or having an assistant lift and bend the vines to one side. Another plan is to slide a board along under the row, spraying directly against it. The board will splash much of the liquid back under the plant. I know a gardener who tied a small board to one foot and accomplished this without stooping.

Sprays should be timed so as to have the arsenate of lead all spread out, especially under the leaves, ready for the young bugs when they hatch. In other words, have the table all set and dinner served **on time**. If another crop comes on later, set the table again.

All this takes more time, almost, to explain than to do the spraying. It really isn't such a big job at all, but is simply a matter of having the tools to work with and getting at it—at the right time. Spraying should be done before pods attain much size. Don't waste time spraying a patch after bugs have ridden the vines. Do the bean bug as he would do you—but do him first.

After you have become accustomed to spraying as a regular part of your garden work you will not mind it much more than planting, hoeing, weeding or picking posies. In fact, you may deem it great sport. Here's hoping you do, for there's nothing finer than tender "stringless string beans," especially Long's select Brittle Wax.

Carrot

CULTURE.—Sow in deeply tilled mellow soil in April or May. Later plantings up to August will still make good roots for table use. Sow in drills 12 to 18 inches apart. One ounce to 200 to 300 feet; 2 to 3 lbs. to acre. Slow to germinate. Cover $\frac{1}{2}$ inch, keep soil moist until plants are up.

Raise more carrots for home use, market and for stock. Carrots are even better than mangels for producing milk. A mixture of the two makes splendid combination.

For stock I would plant some each of Danvers and White Belgian.

PRICES: All Carrots at same price. Pkt. 5c; Special Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 35c lb., \$1.00, prepaid.

V40. OXHEART. Short but thick roots bright orange flesh; best for heavy soil; good table sort and all right for stock also.

V41. DANVERS HALF LONG. Smooth medium length, orange color roots. A standard for table or for stock. Heavy yielder.

V42. CHANTANEY. Similar to Danvers but not quite so long; fine grained and sweet.

V43. GIANT WHITE BELGIAN. Grows one third out of the ground, top somewhat green and portion under ground white. Heavy cropper and a great stock carrot.

Table Beets

DETROIT DARK RED

PRICES. All Table Beets at same price: Pkt., 5c; Special Pkt., 10c; oz., 15c; ¼ lb., 35c; lb., \$1.00, prepaid.

V15. EXTRA EARLY EGYPTIAN. Very dark, rather flat, smaller than Eclipse and Crosby's.

V16. CROSBY'S EGYPTIAN. Almost as early as V15 and a better beet, not so flat. Quick grower, flesh dark red, tops small.

V17. EARLY ECLIPSE. Egg shape, light red, good for bunching or slicing.

V18. DETROIT DARK RED. Globular shape, deep red, smooth beet. Good for medium early or late. One of the very best.

V19. EARLY BLOOD TURNIP. An old kind but still "one of the best sellers."

Swiss Chard

Grown for tops only, which look like celery and are cooked for greens. Good substitute for spinach. Also used same as asparagus; cut stalks once across and once lengthwise.

Great feed for chickens also. Pull off outside stalks, others keep growing from inside. Pkt., 5c; Special Pkt., 10c; oz., 15c; ¼ lb., 45c.

Mangels, Sugar Beets

Mammoth Long Red

CULTURE.—Sow 4 to 6 lbs. to acre, in rows 24 inches apart. In good ground you can raise 30 to 40 tons per acre. Very valuable for feeding stock, especially milch cows. A mixture of mangels and sugar beets is good combination. Then if you grow carrots also and feed part of each you will have a great milk ration, with some hay and grain, of course. With high prices of all feeds you will do mighty well to grow more mangels and carrots this year for stock.

Golden Tankard

Sugar Beet

PRICES: All mangels and sugar beet, also Long's Special Mixture of mangels and sugar beet, at same price. Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c; 5 lbs., \$3.50, prepaid. Ask for prices on larger lots.

V22. MAMMOTH LONG RED. Great yielder.

V23. GOLDEN TANKARD. Roots rather short.

V24. DANISH SLUDSTRUP. Ovide shape; reddish-yellow; heavy cropper.

V25. GIANT HALF SUGAR. Claimed by some to contain more food value than other mangels.

V26. WANZLEBEN SUGAR BEET. The standard sugar beet.

Long's Special Mixture

V27. A well-balanced mixture of mangels and sugar beet, such as I found especially good for feeding milk cows. Mixed by myself from our tested seed. Better than all mangels or all sugar beet.

HOW TO GROW "LIVE BEETS"

CULTURE.—Plant any time from early spring to August. Most people make a mistake by not planting beets along in summer, as well as in spring. They come quickly, the small half grown size being best for canning and fine for summer use also. An ounce of seed will sow 50 feet of row. Cover 1 inch, press soil firmly so the soil comes in contact with corrugated surface of the seed.

Cabbage

Culture

For early plants start seed in box, cold-frame or hotbed. For main crop sow seed in garden. Transplant where wanted. Cabbage responds to very frequent cultivating and hoeing. Set early plants April and May. For winter use set plants in June.

PACKET PRICES. Small Pkt., 5c; Long's Special Pkt., 10c, any variety cabbage.

V28. WINNINGSTADT. Heads firm, slightly pointed, standard early sort, but good also for winter. Oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.50.

V29. EARLY JERSEY WAKEFIELD. Small, pointed head. Very early. Oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.50.

V30. ENKHUIZEN GLORY. About same season as Winningstadt, but head is round instead of pointed. Yields heavy crop and does well even on rather poor soil. Oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.75.

V31. COPENHAGEN MARKET. The earliest round headed cabbage. Runs Wakefield a close race for earliness; heads larger and very solid; stem short. While this is usually planted for early use and marketing, yet it is most excellent for winter use, set out later. Is sweeter than the regular winter kinds. Try some for winter as well as for early. Oz., 40c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

V32. SUREHEAD. Round head main crop variety for fall and winter. Oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.50.

V33. ALL SEASONS. So named because good for early or late. Heads round. Oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.50.

V34. LATE FLAT DUTCH. An old variety but still a favorite with many. Very large. Oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.50.

V35. DANISH ROUND HEAD. (Short Stemmed Hollander.) One of the best main crop varieties. Heads very solid; good keeper. This is the main variety grown by large gardeners and shippers for fall and winter use. It's the standard best late cabbage. Oz., 40c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00; 2 lbs., \$7.50.

V36. MAMMOTH ROCK RED. Large sure-heading red cabbage. Oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.75.

V37. SAVOY CABBAGE. Leaves beautifully crimped. Finest flavor. Oz., 40c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.75.

V38. BRUSSELS SPROUTS. Miniature cabbages, grow closely on stalks. Oz., 40c; $\frac{1}{4}$ lb., \$1.00.

CHINESE or CELERY CABBAGE

V39. Tastes more like lettuce than cabbage or celery. Early plants often run to seed. Sow in June. Tie up like cauliflower to blanch. Oz., 45c; $\frac{1}{4}$ lb., \$1.00.

No gentle reader, this is neither a large family group nor a Sunday school picnic on the Chautauqua grounds here at Boulder. What has this to do with a seed catalog? The lawns on these grounds bear in mind that a large part was seeded with Long's "T. M. Smith, superintendent of the grounds, takes such good care of this beauty spot for new lawns or renewing old ones. (See page 51 for

Cauliflower

CULTURE.—Same as for cabbage, but when heads are small the leaves should be tied up over the heads to keep head snowy white.

V38. EARLY SNOWBALL. Standard early and main crop variety.

V39. DRY WEATHER. Very large, and fine white heads. Resists drought well. Some gardeners prefer this to Snowball and grow it exclusively.

Price for either variety: Small pkt., 10c; 200 seeds (or more), 25c; $\frac{1}{4}$ oz., 75c; $\frac{1}{2}$ oz., \$1.25; oz., \$2.25; $\frac{1}{4}$ lb., \$8.00.

CAULIFLOWER PLANTS

Plants ready from about May 20th to July 10th. Cauliflower does well if set out rather late so as to head up in the cool fall weather. 25 for 50c; 50 for 90c; 100 for \$1.60, prepaid.

"I like your seeds and your way of doing business."—Col. W. H. May, Basin, Wyo.

Celery

CULTURE.—Sow in protected bed; sow thin and cover lightly. Transplant in June. Ask your County Agent or Agricultural College for special information on celery growing.

V44. GOLDEN SELF-BLANCHING. One of the best early kinds for fall use. Pkt., 10c; $\frac{1}{2}$ oz., 30c; oz., 50c.

V46. GIANT PASCAL. The best late celery for winter use. May be blanched in garden, but to get those brittle sweet white stalks it should be taken

up, trenched or banked up in cellar so as to grow new stalks from the old roots. Pkt., 10c; $\frac{1}{2}$ oz., 25c; oz., 40c; $\frac{1}{4}$ lb., \$1.20.

V45. WHITE PLUME. Preferred by some to Self Blanching. Fall variety easily blanched. Pkt., 5c; $\frac{1}{2}$ oz., 25c; oz., 45c.

V47. CELERIAC or TURNIP-ROOTED CELERY. Little known, but fine for seasoning meats and soups, also for salads. Grown exclusively for its turnip-shaped roots. Pkt., 5c; oz., 25c.

"The cauliflower plants came a few days ago, rather dry, but are growing. 'As usual, you overcounted. For your generosity I take off my hat. Everything received from you has been satisfactory and I have tried to 'carry the news to Mary.'"—James M. Alter, Colorado Springs, Colo.

It is just a bunch of happy children who, with their parents, are spending the summer here? Well, you just come along to Boulder and when you see the acres of beautiful and True" Blue Grass and White Clover. But I don't claim all the credit. Mr. E. I never worry about results when I deliver a bag of seed into his hands for making prices on lawn seed, also "How to Grow Dandelions.")

Cabbage

Culture

For early plants start seed in box, cold-frame or hotbed. For main crop sow seed in garden. Transplant where wanted. Cabbage responds to very frequent cultivating and hoeing. Set early plants April and May. For winter use set plants in June.

PACKET PRICES. Small Pkt., 5c; Long's Special Pkt., 10c, any variety cabbage.

V28. WINNINGSTADT. Heads firm, slightly pointed, standard early sort, but good also for winter. Oz., 30c; ¼ lb., 90c; lb., \$3.50.

V29. EARLY JERSEY WAKEFIELD. Small, pointed head. Very early. Oz., 30c; ¼ lb., 90c; lb., \$3.50.

V30. ENKHUIZEN GLORY. About same season as Winningstadt, but head is round instead of pointed. Yields heavy crop and does well even on rather poor soil. Oz., 35c; ¼ lb., \$1.00; lb., \$3.75.

V31. COPENHAGEN MARKET. The earliest round headed cabbage. Runs Wakefield a close race for earliness; heads larger and very solid; stem short. While this is usually planted for early use and marketing, yet it is most excellent for winter use, set out later. Is sweeter than the regular winter kinds. Try some for winter as well as for early. Oz., 40c; ¼ lb., \$1.25; lb., \$4.00.

V32. SUREHEAD. Round head main crop variety for fall and winter. Oz., 30c; ¼ lb., 90c; lb., \$3.50.

V33. ALL SEASONS. So named because good for early or late. Heads round. Oz., 30c; ¼ lb., 90c; lb., \$3.50.

V34. LATE FLAT DUTCH. An old variety but still a favorite with many. Very large. Oz., 30c; ¼ lb., 90c; lb., \$3.50.

V35. DANISH ROUND HEAD. (Short Stemmed Hollander.) One of the best main crop varieties. Heads very solid; good keeper. This is the main variety grown by large gardeners and shippers for fall and winter use. It's the standard best late cabbage. Oz., 40c; ¼ lb., \$1.25; lb., \$4.00; 2 lbs., \$7.50.

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LONG'S Acclimated SWEET CORN Seed

Extra Early "Peep O' Day"

V48. It's the early bird. Stands early planting and hustles right along as though knew how eager we are for first roasting ears of the season. Originally this variety was quite small, but my Colorado grower has been selecting for size, and you will find a decided improvement in size of this favorite early corn. A money-maker because people will pay almost any price for first roasting ears on the market. Size is not so important then as later in the season. Select, thoroughly matured, Colorado seed.

Long's Improved Golden Bantam

V49. If you plant just one kind of sweet corn, then make this the one.

My Colorado strain has been improved the same as my Peep O' Day, by selection year after year, so that my stock now runs considerably larger than the regular Golden Bantam. Instead of just 8 rows, many ears will have 10 and 12 rows. One of the many good points about Bantam is that the silks or "whiskers" come out easily and leave a nice clean ear for cooking, while its special advantage over other varieties always has been and always will be its sweetness. In this it delivers the goods.

V50. BANTAM-EVERGREEN. Result from a cross between the two popular early and late varieties, combining good features of both, season about midway between these.

V51. EARLY MINNESOTA. Well known medium early variety. Others are better.

V52. BLACK MEXICAN. Medium early; very sweet.

V53. STOWELL'S EVERGREEN. The standard big late sweet corn. My Evergreen seed was grown in Northern Colorado. Germination strong.

V54. COUNTRY GENTLEMAN. Tall, late, very sweet, with grains set zig-zag. Also called "Shoe Peg."

SWEET CORN PRICES. All sweet corn at same price: Small Pkt., 5c; Special Pkt., 10c; ½ lb., 20c; lb., 30c, prepaid.

5 Lb. Lots. 2nd zone, \$1.15; 3rd, \$1.20; 4th, \$1.29; 5th, \$1.38.

10 Lb. Lots. 2nd zone, \$2.20; 3rd, \$2.30; 4th, \$2.53; 5th, \$2.72.

Mr. G. L. Crookham, a seed corn specialist out near Caldwell, Idaho, who grows sweet corn seed by the carload, wrote me Oct. 17 1919, that he found my Bantam strain the **BEST HE HAD EVER GROWN.**

CULTURE.—For a succession of roasting ears you may plant one kind at different times or some of the early, medium and late sorts at one time. Many now plant just two kinds—Peep o' Day for extra early and then plant Golden Bantam every few weeks until early in July. You can't go wrong by planting Golden Bantam early, medium or late.

Avoid planting corn deep if ground is not thoroughly warm. Cover early plantings shallow. Plant in drills or hills. I prefer drills for sweet corn, thin to one stalk every ten inches or so.

NEW JAPANESE RICE POP CORN

Grown by My Small Son, Everett

Ears are short and "stubby," but so "heavy set" or big around that the yield is something astonishing. This also because each stalk has several good ears. Some ears have as high as 32 rows, and the grains are very deep and slim.

The big thing about this new pop corn is the fact that it is almost without hulls. Hulls so thin and transparent that the pop corn just melts in your mouth. Is also called Tom Thumb Rice and several other names.

Price: Pkt., 10c; ½ lb., 20c; lb., 35c, prepaid.

Two Other Good Kinds

V56. WHITE RICE. Small pointed grains. Kind used by the pop corn wagons in cities. Pkt., 5c; ½ lb., 15c; lb., 25c, prepaid.

V57. MAMMOTH WHITE, or SPANISH. Extra large, sweet and tender. Great seller. Usually sells on cob in grocery stores. Pkt., 5c; ½ lb., 15c; lb., 25c, prepaid.

Ask for prices on larger lots Pop Corn.

A POP CORN SECRET: In our dry climate pop corn often gets too dry to pop well. Put the shelled corn in cloth bag, dip bag into water few minutes, let water drain off, hang up near stove for day or so, then "try your luck" again. Good stunt!

Cucumber

CULTURE.—Very easy to grow. Tender, and should not be planted until after frosts. May be planted any time from then on to middle July. Plant in hills or rows allowing a few feet each way for vines. Most varieties are good for pickles when small or will do for slicing if left to grow larger. Early Fortune is especially good for either pickling or slicing.

Prices. All Cucumbers at: Pkt., 5c; Special Pkt., 10c; oz., 15c; ¼ lb., 40c; lb., \$1.10.

V60. KLONDIKE. Very early strain of white spine type with dark green skin. Use this or Early Fortune in place of Early Russian or Early Short Green. I have dropped these because not needed when we have the better ones.

V61. EARLY FORTUNE. Fine for pickles when small, and good slicer if allowed to grow to large size. Fruits very uniform.

V62. EARLY WHITE SPINE. An old favorite, still good.

V63. BOSTON PICKLING. Standard for pickles.

V64. IMPROVED LONG GREEN. Always good.

V65. DAVIS PERFECT. So nearly perfect in shape that often brings extra price in the market. Very good.

V66. JAPANESE CLIMBING. Used same as any other cucumber. May be trained over fence or trellis. Or let vines run on ground.

V67. WEST INDIA GHERKIN. Small "cuc," 2 to 3 inches. Fine for pickles. Seeds very small. Pkt., 5c; ½ oz., 15c; oz., 25c.

Loose Leaf Lettuce

V77. BLACK SEEDED SIMPSON. Grows quickly, making fluffy loose bunch of tender creamy leaves of delicate flavor. Fine.

V78. GRAND RAPIDS. Makes large compact bunches of light green leaves with fringed edges. The kind to grow in hothouses and hotbeds or coldframes. Good for open garden also.

Head Lettuce

PRICES: All varieties Lettuce at same price. Pkt., 5c; Special Pkt., 10c; oz., 15c; ¼ lb., 45c; lb., \$1.40.

V70. IMPROVED HANSON. Good heading variety and may also be used as leaf lettuce when young.

V71. ICEBERG. Similar to Hanson. Crisp and tender.

V72. LOS ANGELES. (Also known as New York or Wonderful). Makes very large heads. The crisp heart blanches beautifully. This, of course, when well-grown. Oz., 20c; ¼ lb., 60c; lb., \$2.00.

V73. BIG BOSTON. Popular market variety.

V74. MAY KING. Extra early, cabbage-like heads.

V75. DENVER MARKET. Rather loose head; leaves light golden green, beautifully savoyed or crimped.

V76. EARLY PRIZE HEAD. Forms large loose head. Leaves crimped; tinged brownish-red. Tender, crisp and sweet.

CULTURE.—In the first place, lettuce should be grown on very rich ground. Sure, you can grow it fairly well on any good soil, but the richer the ground the better. Lettuce is hardy and will stand early planting. Should be planted every few weeks, though, for a continuous supply of nice crisp leaves or heads.

Sow in rows or beds, cover half inch, keep moist. Lettuce is peculiar in some ways. Seed does not germinate well if real fresh, does not germinate well in hot weather, will not head up worth a cent in hot weather unless shaded. Lettuce will not head if too thick in bed or row.

Extra fine lettuce seed is a hobby of mine. I pay 25% extra for special selection of lettuce seed.

Don't forget that lettuce is great for chickens. Will produce a lot of greens for them. Sow liberally and often. Will pay in extra eggs.

BUY WESTERN SEEDS IN THE WEST

Lest you forget, I say again, that the majority of seeds used the country over, east, west, north and south, are grown in the west. I figure that around 98%, by weight, of my seeds, sets and bulbs are grown in the west. Carloads, trainloads, of grown in the west. Carloads of western seeds are shipped east, then back again.

Water Melon

Kleckley's Sweet or Rocky Ford

Culture. Suggestions as given for musk melons will apply about same to water melons. New ground is excellent for melons.

Kleckley's Sweet (known also as Rocky Ford) is by far the best Colorado melon. **Ice Cream** is smaller and earlier, and a great favorite with some. **Tom Watson** has been tried out by some of our market gardeners and is remarkable for its size and quality. Add to these **Cole's Early** and you can cut out all the rest. I don't mean to say there are no other good melons, but these fill the bill. But of these Kleckley's Sweet is the best all around Western melon.

Pkt. Prices. All Melons at: Pkt., 5c; Special Pkt., 10c.

V92. KLECKLEY'S SWEET. The skin is dark green, flesh bright scarlet, ripening close to the skin. Seeds white, lying close to the rind, leaving a large solid heart which does not crack open when ripe. The scarlet flesh is sweet and sugary and of such texture that it leaves no strings of pulp whatever in eating. Oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 90c.

V93. TOM WATSON. Great shipping melon. Larger and firmer than Kleckley but not quite so sweet. Oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 90c.

V94. ICE CREAM. Fine, sweet, early melon for home use or close market. Will not stand shipping. Oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 70c.

V95. COLE'S EARLY. Black seeded early variety. Oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 70c.

EGG PLANT

CULTURE.—Start plants in box or hotbed. Do not set out until quite warm weather. Very tender. Ground should be rich.

V68. BLACK BEAUTY. An early improved variety. Pkt., 5c; $\frac{1}{2}$ oz., 30c; oz., 50c.

NO PLANTS

Am not lined up to supply Egg Plant plants this season.

"Sure had a nice garden. Every seed made good but Pear tomato."—Mrs. John H. Becker, Fleming, Colo.

Musk Melon

Prices: All Musk Melons, except Greeley Wonders, at same price. Pkt., 5c; Special Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.20.

V80. ROCKY FORD. The well-known thoroughbred strain.

V82. ROCKY FORD. Rust Resistant or Pollock Netted Rock strain.

V83. ROCKY FORD. Pollock No. 10-25 Salmon Tint. New. Now the great favorite in salmon flesh cantaloupe.

V84. KNIGHT'S EARLY. New. Taking the lead of all early varieties in the Rocky Ford district. Similar to Thoroughbred but larger and earlier.

V85. EMERALD GEM. Not large, but early and very sweet. Does not stand shipping. Is home or nearby market melon, and a good one. Salmon flesh.

V86. BURRELL'S GEM. Good market variety; salmon flesh. Keeps well.

V88. BANANA. Long, cucumber-shaped melon.

V89. HONEY DEW. A large late melon of the Casaba class. If fails to ripen before frost it may be covered with straw and will ripen for later use. Keeps long time.

V90. GARDEN LEMON. Used for sweet pickles and preserves. Pkt., 5c; oz., 20c.

CULTURE.—Somewhat sandy soil is ideal, though not necessary for musk melons. Ground should be rich for best results. After ground is warm and no danger from frosts, plant in hills 6 feet apart, 8 to 12 seeds in hill, thin to 4 plants. Most successful growers of musk melons and water melons make two plantings, one early and a week or so later another, in same row, so in case frost, insects or hail kills off first plants the second lot comes on quickly to fill the row.

Parsley

Culture. Soak seed in tepid water a few hours before planting. Cover $\frac{1}{2}$ inch.

V125. DARK MOSS CURLED. Fine for garnishing. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

MUSTARD

One of the substitutes for spinach. Easily grown.

V122 $\frac{1}{2}$. WHITE. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c.

V123 $\frac{1}{2}$. OSTRICH PLUME. Leaves long, ruffled and curved. Cook it like spinach. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 40c.

LONG'S Select (COLORADO GROWN) MELON SEED

Long's Greeley Wonder Melon—"Sweet as Honey"—Sure "Yum-Yum"

Greeley Wonder Musk Melons

V91. Seven years ago I discovered this melon growing in a few of the best market gardeners' fields around Greeley. No one seemed to know the exact history of the melon, though it was originated by a Greeley gardener some years before.

This melon was so truly wonderful that I named it Greeley Wonder and was the first to introduce it outside the Greeley district.

It has been one of my big specialties ever since, and I have taken great pains and pride in keeping the strain pure and improving the quality. I offer you this selected seed that will produce melons three times the size of Rocky Fords and a week to ten days earlier.

Just think what that means! It means that you get highest prices on account of being first in the market. It means that each melon will bring you several times the price of ordinary melons, on account of size and quality. It means that when you sell one of these melons you have made a customer for more, as long as you have them to sell.

The picture gives you an idea of the shape of Greeley Wonder. It has salmon flesh, ripens close to the rind, and the flavor is best ever. In size it runs 12 to 16 to full size crate, 6 to 8 to the flat.

In weight, Greeley Wonder runs from 4 to 6 pounds under average conditions, though 7 to 9 lb. melons are not uncommon, while one grower reports a 12-pounder last season.

Greeley Wonder melon seed, that is, good seed, will never be cheap, for two reasons: It yields a small amount of seed for its size, and the demand for the melons is so great that gardeners make more selling melons than they could make to save seed even if they got more than retail prices of ordinary melon seed. The 1919 seed crop of good Greeley Wonder was very short.

Greeley growers make \$250 to \$400 per acre from Greeley Wonder fields, shipping large lots to Denver markets. Seldom have they been able to supply the demand in full.

Greeley Wonder has no competition when displayed beside Rocky Fords and other com-

mercial varieties. It sells when they are a drug on the market.

Price: Pkt., 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.10; lb., \$4.00.

Mr. Hafendorfer's Field, Where I First Saw Greeley Wonder Melons

Under date of Nov. 21, 1919, a large grocery firm wrote to Mr. Hafendorfer as follows, which indicates the growing popularity of Greeley Wonder: "We are in receipt of your letter in which you state you are again going to grow those large cantaloupes in the season of 1920. You may count us in on the deal. We can use a lot of them. If it is not treading upon the toes of anyone, we would like to have all that you ship to our city. Would want them packed in flat crates and if we have the exclusive sale of them here we certainly can show you a volume of business that will be entirely satisfactory to you. Please answer."

LONG'S High-Grade Tested Onion Seed

Long's Improved Mountain Danvers "Made in Colorado"

V103. This most excellent variety was given a whole page in my last year's catalogue, and I'd like to give it two pages this year in order to tell you the interesting history

of its development or evolution in the high altitude of Colorado (over 6,000 feet).

For years Mountain Danvers onion made a great record as a flat to medium globe and not uniform in color or type. Then my friend, A. L. Franklin, took it in hand and by years of selection brought it up to an ideal globe of unvarying golden yellow color. The bulbs are as sound as baseballs and almost as perfect in shape. Necks thin; few or no scullions.

Long's Improved Mt. Danvers is extra early, often being ready for market before main crop varieties come on, when it brings much higher prices. It is also one of the best main crop kinds, keeping and shipping especially well.

Long's Improved Mt. Danvers insures a crop in many localities where season is short and where ordinary kinds would not make good. Yet it is also meeting with much favor in lower altitudes. In some localities it does not attain as large size as the Southports and other globes, while in others it has been grown to weigh a pound, record yields of 600 sacks to the acre being made under ideal conditions over on the western slope where this onion originated.

Pkt., 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.00.

"Please give me price on Improved Mt. Danvers onion seed, the kind I got last year. They are just fine and I want to plant some this fall."—Mrs. Chas. Rice, Douglas, Wyo.

Ohio Yellow Globe

V106. Ohio Yellow Globe has proven a sure cropper and large yielder, and is among the earliest to ripen. It's a mild onion of true globe shape, but bottom flatter than the Southports; neck very small. Oz., 25c; ¼ lb., 75c; lb., \$2.25.

Yellow Flat Danvers

V96½. Medium size yellow onion, good for general use and used largely for growing onion sets. Oz., 25c; ¼ lb., 75c; lb., \$2.25.

Red Wethersfield

V99. An old red variety of the flat type, very popular in the South and does well in our section, though the Red Globe is now taking first place. Most red sets are grown from Red Wethersfield seed. Oz., 25c; ¼ lb., 75c; lb., \$2.25.

Long's Select Prize Taker

V96. The big yellow variety, acclimated from the popular Spanish onion. Takes full season to mature; is poor keeper; should be used or marketed early. Oz., 30c; ¼ lb., 85c; lb., \$2.50.

Except where noted, all Onion Seed at:
Pkt, 5c; Special Pkt., 10c.

White Silverskin

V102. (Also called White Portugal and White Danvers.) About size and shape of Yellow Flat Danvers, but pure white. Is early, mild and long keeper. The standard for growing white onion sets. Also planted largely for bunching and pickling onions. If for pickling the seed should be sown very thick to prevent bulbs becoming too large. Oz., 35c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.00.

Yellow Globe Danvers

V97. Similar to the Flat Danvers but thicker, or more globe shape. Long's Improved Mt. Danvers is fast taking the place of this variety. Oz., 25c; $\frac{1}{4}$ lb., 80c; lb., \$2.40.

Australian Brown

V100. Very solid onion of light brown color; matures early; keeps well. Color not uniform. Has been the favorite early long keeping onion until Long's Improved Mt. Danvers was introduced, which is now preferred by many. Oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.25.

Early Barletta

V101. An early white variety used for pickling. Supply was very short during the war and many gardeners found they could use the Silverskin instead. Plant very thick. Oz., 40c; $\frac{1}{4}$ lb., \$1.20; lb., \$4.00.

Long's Extra Select Southport Red Globe "Made in Colorado"

V104. Grown from carefully selected bulbs of the popular market variety large red globe—ideal type, deep rich red color. A money-maker for market and splendid for the home garden. My Colorado grown select seed of strong vitality goes a long ways towards insuring your onion crop. Oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$2.50.

Long's Extra Select Southport Yellow Globe "Made in Colorado"

V105. A good running mate for my select Colorado grown Red Globe. Highest grade seed, grown only from carefully selected bulbs true to type and color. Oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$2.50.

SPECIAL Hazel Size Onion Sets

1,000 SETS (YELLOW).....	\$1.00
1,000 SETS (WHITE).....	\$1.15
Prepaid to Your Door	

If you want the most and the best sets for your money, then order my special hazel size sets. They are just like other bottom sets except that they run smaller in size. The smaller size not only gives you about twice as many sets to the quart as you get when buying ordinary size sets, but also gives you a better set, for this reason: A good many sets of the size usually sold, will send up a seed stalk. This does not matter so much if onions are grown for early green onions, but if wanted for mature dry bulbs the seed stalk causes a hard, woody center.

But with hazel size sets you rarely if ever have any trouble with seed stalks. They make the finest green onions and the best of matured bulbs, and the crop is ready for market before onions from seed come in.

Honest to goodness, I do believe my hazel size sets are worth four times as much per quart as lots of sets doled out from stocks that are sprouted, soft and punky. I've seen such sets sold that contained only 75 or so sets, such as they were. If a quart of my hazel sets doesn't count out almost if not fully 300 sound, solid sets I want you to holler and I'll give you more to make 300.

ACTUAL SIZE OF SPECIAL HAZEL ONION SETS

The largest of these sets is diameter of a dime. Was going to put some dimes among the sets to show the size, but the photographer said it is against the law to photograph money. Don't know whether this is the case or not, but took no chances, for believe I can be of more service to you on the job here than in the pen at Canon City.

This tray of sets shows actual size of **Long's Special Hazel Sets**. Of course some may run a little larger and some will be smaller, but this gives you a good idea of the size and quality. You may be sure I picked out the nicest sets for this picture, pinched off pieces of stems, arranged them "nice and purty" and told them to look pleasant.

I'll be honest and say that you will not get finer looking sets than shown in this tray, but I will also admit they will be mighty fine sets—sound as bullets, dry and unsprouted, and actually "hand polished," this being done in rubbing them to remove dirt, stems and other trash. (Now then, if some of these sets **should** sprout before you get them, you will have the laugh on me. Well, if they do I'll put in extra quantity.)

Prices for Hazel Sets

Colors. Can supply Hazel Sets in two colors only, Yellow and White.

Yellow Hazel Sets at 35c quart; 3 quarts (1,000 sets) for \$1.00, prepaid.

White Hazel Sets at 40c quart; 3 quarts (1,000 sets) for \$1.15, prepaid.

8 quarts Yellow Hazel Sets: 2nd zone, \$2.40; 3rd, \$2.48; 4th, \$2.63.

16 quarts Yellow Hazel Sets: 2nd zone, \$4.30; 3rd, \$4.46; 4th, \$4.77.

8 quarts White Hazel Sets: 2nd zone, \$2.80; 3rd, \$2.88; 4th, \$3.03.

16 quarts White Hazel Sets: 2nd zone, \$5.10; 3rd, \$5.26; 4th, \$5.57.

Ask for prices to other zones.

LONG'S Colorado

Colorado produces the best onion sets in the world. Eastern seedsmen are falling over themselves to get Colorado grown sets, which they sometimes list as Mountain Grown onion sets, at fancy prices. Buy your Colorado sets at headquarters in Colorado.

Long's Colorado onion sets, regular size, are not over one inch in size. Some dealers run in larger sizes, making fewer to the quart.

I sell sets by weight, figuring the standard weight of 32 pounds to the bushel, making one pound equal one quart.

Plant sets thick for growing green onions. It's a waste of space to string them out several inches apart in single row. Make furrow two inches deep with hoe and place the sets in double or triple rows an inch apart each way. For growing large dry bulbs from sets place the sets two inches apart each way. Cover with hoe. The job is easily and quickly done this way.

For a succession of fresh green table onions, plant sets at different times, from early March until July. Odds and ends of ground, beds from which early vegetables have been removed, can be utilized to good advantage by planting to sets.

Large dry onions for fall and winter use are easily raised from sets. Costs more than to plant the seed, but returns are quicker, and most of the tedious hand labor of thinning and weeding is obviated. Use the smaller size sets for growing large bulbs. Plant hazel or tiny size, not the larger unless you have to, as the smaller sets are cheaper even at higher price per quart and make better onions. In case seed stalks appear they should be pinched out at once.

Prices for Regular Size Sets

RED SETS, quart, 25c, prepaid.

YELLOW SETS, quart, 25c, prepaid.

WHITE SETS, quart, 30c, prepaid.

Prepaid Wholesale Prices on Regular Size Sets in Larger Lots

	2nd	3rd	4th	5th
RED and	Zone	Zone	Zone	Zone
YELLOW SETS.				
8 qts. (peck).....	\$1.52...	\$1.60...	\$1.75...	\$1.90
16 qts. (½ bu.)...	2.72...	2.88...	3.18...	3.48
32 qts. (bu.).....	4.96...	5.28...	5.91...	6.54

WHITE SETS.

	2nd	3rd	4th	5th
8 qts. (peck).....	1.90...	1.98...	2.13...	2.28
16 qts. (½ bu.)...	3.04...	3.20...	3.51...	3.82
32 qts. (bu.).....	5.60...	5.92...	6.55...	7.18

No charge for bags. Bags not weighed in.

Long's Special "TINY" ONION SETS

The smallest of all onion sets, about the size of a large garden pea. You don't need to set them, just sow in a row like peas and cover about one inch. They make early green onions a little later than regular sets and much earlier than seed.

"Tiny" sets are especially valuable for growing regular onions for winter use. Being so small you get all the way from 600 to nearly 1,000 Tiny sets to the quart, and practically every set will make an onion, the crop maturing earlier than onions from seed.

Will have a limited supply of Tiny sets, in Yellow and White. Price for Yellow: Pint, 35c; quart, 60c. Price for White: Pint, 40c; quart, 75c; prepaid.

HARVESTING COLORADO ONION SETS

What Onions to Plant

While this depends some on local conditions and also local demand, yet you will find the country over that the globe shape onions take the lead. Large market growers plant the globes almost exclusively because they yield heavy, keep well, are in best demand and bring highest prices. For the same reasons the globes are among the best for home gardens.

On account of their shape the globes are most economical in space required when growing, as being deeper from top to bottom they will make more tonnage than the flats on same area. Among the best globes are Red and Yellow Southport, these being heavy yielders and standard market sorts; Yellow Globe Danvers; Improved Mountain Danvers; Ohio Yellow Globe and Prizetaker. The latter is a fine large mild onion and good yielder, but not so good keeper or shipper as the others.

How to Grow Onions

Culture. Give onions your richest and cleanest ground. Have seed bed very fine and level. Sow early. Use one ounce seed to 100 to 150 feet of row, 4 to 5 pounds to the acre. Rows or drills may be 12 to 16 inches apart for field culture, closer for small plots worked by hand. Thin if very thick, and large bulbs wanted, to about two inches, but onions will grow a good deal thicker, almost on top of each other, just so their roots are in the ground. Do not hill up the rows, but work soil away from bulbs instead. Water moderately until begin to bowl, then give plenty water.

"I raised a bushel of nice onions from one quart of your Hazel sets last year, and they were not half tended either."—Mrs. I. S. Doggett, Chugwater, Wyo.

LONG'S Western Grown Garden Peas

All Peas at 10c per Large Pkt.

LONG'S Laxtonian

V113. EXTRA EARLY DWARF GIANT. Peas as early and fine as American Wonder and twice as large. Vines medium, do not require staking, pods nearly as large as Telephone, filled with large, melting, luscious peas. Splendid for home use as you can pick and shell a mess in half the usual time. In the market they sell ahead of the small podded kinds, as good large peas always do. $\frac{1}{2}$ lb., 25c; lb., 40c.

Early Blue Bantam

V113 $\frac{1}{2}$. EXTRA EARLY DWARF GIANT. Nothing small about this but the vines. Blue Bantam is so similar to Laxtonian that it's a toss-up as to which is the better. In fact, as I told you last year, it is largely a matter of stock seed selection. There's too much hair splitting about the difference between some of these varieties. Furthermore, Laxtonian, Blue Bantam, Pioneer and Peter Pan are so much alike that they are often substituted one for the other.

Blue Bantam as first introduced has lighter foliage than Laxtonian. The vines are medium height, pods and peas very large and fine. Like Laxtonian, it is certainly a grand variety. $\frac{1}{2}$ lb., 25c; lb., 40c.

V114. ALASKA. Very hardy; stands earliest planting. $\frac{1}{2}$ lb., 18c; lb., 30c.

V114 $\frac{1}{2}$. PROLIFIC EXTRA EARLY. Similar to Alaska in season and hardiness. Peas smooth and of light color. $\frac{1}{2}$ lb., 20c; lb., 35c.

V115. ENGLISH WONDER. Similar to American Wonder in season, growth and quality, but a little larger. Might be called Improved American Wonder. $\frac{1}{2}$ lb., 25c; lb., 40c.

V115 $\frac{1}{2}$. AMEER, or GIANT ALASKA. Similar to Alaska but larger and few days later. $\frac{1}{2}$ lb., 20c; lb., 35c.

V116. DWARF CHAMPION. A dwarf growing Champion of England. Vines vigorous, but medium and do not require staking. Pods large and well filled with luscious peas. Good substitute for Dwarf Telephone. $\frac{1}{2}$ lb., 20c; lb., 35c.

V116 $\frac{1}{2}$. AMERICAN WONDER. An old favorite. Seed scarce. $\frac{1}{2}$ lb., 25c; lb., 40c.

V117. GRADUS, or EARLY TELEPHONE. Season and size of pods same as my Dwarf Giant, but vines taller. $\frac{1}{2}$ lb., 25c; lb., 40c.

V121. DWARF TELEPHONE. The small quantity I have of this variety got slightly mixed with Yorkshire Hero in cleaning. $\frac{1}{2}$ lb., 20c; lb., 35c.

V121 $\frac{1}{2}$. DWARF DEFIANCE. A second early, of the very best. Vines very rank growing, yet not so tall as to require staking. Pods dark green and of immense size, large as Telephone and as rich flavor. $\frac{1}{2}$ lb., 25c; lb., 40c.

V122. STRATAGEM. Fine large pea. An extra good second early sort. $\frac{1}{2}$ lb., 25c; lb., 40c.

V123. TALL TELEPHONE. Rugged tall growing kind with largest and finest of peas. $\frac{1}{2}$ lb., 25c; lb., 40c.

V120. EVERBEARING. Large late pea that bears for long time. $\frac{1}{2}$ lb., 25c; lb., 40c.

V124. EDIBLE POD PEA, DWARF GRAY SUGAR. Cook pods and peas like green beans. Use when quite young. $\frac{1}{2}$ lb., 20c; lb., 35c.

GARDEN PEAS SCARCE Order Your Supply Early

About the only item in the list of garden seeds that will be short this season is garden pea seed. Seed crop was very small last year. All kinds should sell 5 to 10 cents a pound higher than I have priced them, and no doubt will be sold around 50c a pound by many firms.

Culture. Sow in single or double rows, inch in row, cover 2 inches. Sow smooth kinds like Alaska early, as will stand cold weather where the wrinkled sorts might rot. Bear in mind that Alaska is especially valuable only on this account—that it stands early planting and comes on early. A little later it is much better to plant the sweeter, larger, wrinkled varieties. It is poor business to plant Alaskas after ground is warm enough for other and better kinds. Canning factories use Alaskas because crop matures all at one time.

Prices for 5 and 10-Lb. Lots

For prepaid prices on peas in 5 lb. lots, deduct from single pound price, 5c for 2nd zone; 4c, 3rd zone; 2c, 4th zone.

For 10 lb. lots, deduct from single lb. price, 6c for 2nd zone; 5c, 3rd zone; 3c, 4th zone.

Ask for prices to other zones.

Radish

Culture. Radishes must grow quickly to be tender. Sow a few early—just take a chance on them—and then sow every few weeks all spring and summer, to have fresh, crisp radishes whenever wanted.

All Radish, Pkt., 5c; Special Pkt., 10c

V135. EARLY SCARLET TURNIP, WHITE TIP. Quick growing variety, very attractive for bunching account rich red color, except bottom, which is white, as illustrated above. Oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 90c.

V137. GLASS, or CINCINNATI MARKET. Corresponds to Icicle but color is red. The best long red. Oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 85c.

V138. FRENCH BREAKFAST. An old favorite of the half long type. Color red, shading to white at base. Soon gets pithy and should be sown often to provide supply crisp radishes. Oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 90c.

V140. WHITE STRASBURG. Similar to Icicle but later; grows to larger size, lasting quite a while without getting pithy or tough. Oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 90c.

V141. CRIMSON GIANT. Here's a hummer! Round, bright red, growing quickly to bunching size, but will keep right on growing to large size without losing its crispness. I planted Crimson Giant on September 1st, and we had the finest radishes until November. Oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.00.

V142. CHINESE ROSE (Winter). Pink, oval or half long. Oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 85c.

V143. WHITE CHINESE (Winter). Very large, mild and juicy. Extra fine. Oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.00.

V144. BLACK SPANISH (Winter). Long, almost black. Oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 85c.

V139. MIXED RADISH. Good mixture of all sorts but Winter. Oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 75c.

THIS CATALOGUE DESERVES HANGING

You'll find it handy to have around when you need to order seeds, and as a reference book on gardening it sure helps some. Better give it a hook or nail where it will "stay put" when not in use. Hanging is none too good for it.

V136. WHITE ICICLE. Not in a thousand years could you think of a better name for this popular radish. The name just fits. Is one of the earliest long radishes, good for sowing every few weeks from early spring until September. My stock of this is very fine. Oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.10.

Parsnip

Culture. Sow early in deep mellow soil, pressing soil after planting. Slow and difficult to germinate.

V126. HOLLOW GROUND. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 80c.

Pumpkin

V132. SMALL SUGAR. The good old yellow pie pumpkin. Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

V133. LARGE FIELD. Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 70c.

V134. KING OF MAMMOTHS. Largest of all pumpkins, yet good for pies as well as for stock. Pkt., 10c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

SALSIFY or VEGETABLE OYSTER

V176. Good substitute for oysters. Sow where may remain until late in fall, or may be left in ground and dug as needed in winter. Pkt., 5c; Special Pkt., 10c; oz., 25c; $\frac{1}{4}$ lb., 75c.

V177. RHUBARB. Pkt., 5c; oz., 20c.

V124 $\frac{1}{2}$. OKRA. Pkt., 5c; oz., 15c.

Tomato

CULTURE.—Start the plants in hotbed or in house. You can grow your own plants. Gradually harden the plants to the outdoor temperature.

Except where noted, all tomato seed at 5¢ for small pkt.; Long's Special Pkt., 10¢.

V154. EARLIANA. Is somewhat small, but earliest of all. Select seed. $\frac{1}{2}$ oz., 20¢; oz., 40¢; $\frac{1}{4}$ lb., \$1.00.

V155. BONNY BEST. Bright scarlet. Few days later than Earliana but larger and smoother. Good for early, medium and late. $\frac{1}{2}$ oz., 20¢; oz., 35¢; $\frac{1}{4}$ lb., \$1.00.

V156. CHALK'S EARLY JEWELL. Deeper red than Earliana, larger and better for main crop as well as good for early. $\frac{1}{2}$ oz., 20¢; oz., 35¢; $\frac{1}{4}$ lb., \$1.00.

V157. LIVINGSTON'S BEAUTY. Medium early, smooth, prolific, purplish-red. Standard main crop variety. $\frac{1}{2}$ oz., 20¢; oz., 35¢; $\frac{1}{4}$ lb., \$1.00.

V158. NEW STONE. Apple-shaped; large, heavy, deep red. Earliest of the large tomatoes. $\frac{1}{2}$ oz., 15¢; oz., 30¢; $\frac{1}{4}$ lb., 90¢.

V162. PONDEROSA. Largest of all tomatoes, sometimes rough, few seeds. $\frac{1}{2}$ oz., 25¢; oz., 45¢.

V163. NEW JOHN BAER. Similar to Chalk's Jewell, yet better, for medium early or main crop. Highly recommended by our Agricultural College and County Agent, after several years' trial. Pkt., 10¢; $\frac{1}{2}$ oz., 25¢; oz., 40¢; $\frac{1}{4}$ lb., \$1.25.

V164. YELLOW PEAR. Small pear-shaped tomato for preserving. $\frac{1}{2}$ oz., 20¢; oz., 35¢.

V165. GROUND CHERRY. Also called Strawberry or Husk Tomato. Each fruit in husk. Sweet and fine for preserving or pies. $\frac{1}{2}$ oz., 20¢; oz., 35¢.

New Early Red Head

V160. Many new varieties of tomatoes have been introduced, but few indeed have made good as has the Red Head. I made some strong assertions last year about Red Head, but after crops were ripe I have not had one bad report, but have received many good words for this really valuable variety. One large grower here at Boulder said it was the only variety on which he made any money,

because it was ripe and on the market while the prices were high, but by the time his Beauty came on, the price had gone down so it hardly paid to pick them.

Red Head is a "Red that is Red," real early tomato of medium size, almost round, solid and smooth and of good flavor. Sets heavy, and keeps right on bearing during the whole season. As I said last year, some vines are so loaded that it looks like a bucket of tomatoes had been poured around the plant.

I'm not so lop-sided as to claim this is the only tomato. My list contains other right good kinds, Best for the West.

But Red Head is a dandy and a money-maker. Best of all, my seed is all Boulder grown, acclimated, and, I believe, will produce ripe tomatoes still earlier than seed grown in other sections. Prices a little lower this year, also.

Small Pkt., 10¢; Large Pkt. (200 seeds or more), 25¢; $\frac{1}{4}$ oz., 75¢; oz., \$2.50.

Pepper

Culture. Peppers hard to germinate. Do not blame yourself, your hotbed or the seed if you fail to make them come through. Start them indoors or in hotbed. Transplant after frost.

V127. RUBY KING. Standard sort large sweet pepper. Pkt., 5¢; $\frac{1}{2}$ oz., 25¢; oz., 45¢.

V128. CHINESE GIANT. Larger than Ruby King; mild. Pkt., 10¢; $\frac{1}{2}$ oz., 35¢; oz., 65¢.

V129. LONG RED CAYENNE. Pkt., 5¢; $\frac{1}{2}$ oz., 20¢; oz., 40¢.

V129½. RED CHILI. Small, red, very hot. Pkt., 10¢; $\frac{1}{2}$ oz., 25¢; oz., 45¢.

V130. PERFECTION PIMENTO. Sweetest and mildest of all peppers. Flesh very thick. Pkt., 10¢; $\frac{1}{2}$ oz., 30¢; oz., 60¢.

V131. NEAPOLITAN. Earliest of all red mild peppers; fruit grow upright. Pkt., 5¢; $\frac{1}{2}$ oz., 20¢; oz., 40¢.

V131½. NEW ROYAL KING. Similar to Ruby King but larger and flesh much thicker. Superior to Ruby King. Pkt., 10¢; $\frac{1}{2}$ oz., 30¢; oz., 50¢.

PEPPER PLANTS

LARGE SWEET MANGO. Ready from about May 15th to July 1st. 24 for 50¢; 100 for \$1.60, prepaid.

Spinach

V145. BLOOMSDALE, SAVOY LEAVED. One of the best early varieties.

V146. MONSTROUS-LEAVED VIROFLAY. Vigorous growing early kind with large, thick dark green leaves.

Price for either the above: Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

V148. BOULDER "TREE" SPINACH. This is a decidedly different sort of spinach but a fine kind. Seed looks something like parsnip seed—a little larger and lighter. Seed so light that a little goes a long ways. May be cut as other spinach, but if allowed to grow it will attain a height of 6 feet. You can pick the leaves off at any stage of growth and will find them nice and tender. Flavor milder than other spinach. Pkt., 10c; oz., 20c; $\frac{1}{4}$ lb., 50c.

LEEEKS

788. BROAD LONDON, or LARGE AMERICAN FLAG. This is a strong-growing variety, producing large thick stems of sweet flavor when properly blanched. Pkt., 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.25.

Squash

All Squash: Pkt., 5c; Special Pkt., 10c.

CULTURE.—Plant in May; hills 8 feet apart; thin to 3 plants in hill.

V149. TRUE HUBBARD. The good old green, solid, long keeping Hubbard. Oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

V150. SWEET POTATO. (Pike's Peak). Large oval fruits tapering at the blossom end. Skin dark olive-green. Light golden flesh that when baked is even superior to many sweet potatoes. Certainly fine. My seed extra select Colorado grown. Oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

V151. DELICIOUS. Varies in form and color but always good. Oz., 15c; $\frac{1}{4}$ lb., 40c.

V152. WHITE BUSH SCALLOPED. For summer use. Oz., 15c; $\frac{1}{4}$ lb., 40c.

V153. GIANT CROOKNECKED. Best of summer squashes. Oz., 15c; $\frac{1}{4}$ lb., 40c.

Turnip

Culture. Turnips do best in rich, loose soil, but thrive under less favorable conditions. May be sown from early spring until August. For main crop for winter use sow in July.

I would sow sparingly of the Milans, because the White Egg and Purple Top White Globe are also good for early, more attractive, and better yielders.

All Turnips and Rutabagas, Pkt., 5c; Special Pkt., 10c.

V170. EXTRA EARLY PURPLE TOP MILAN. The earliest of all turnips. Medium size. Somewhat flat. Oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.60.

V171. EXTRA EARLY WHITE MILAN. Similar to V170 but pure white. Oz., 25c; $\frac{1}{4}$ lb., 70c; lb., \$2.00.

V172. PURPLE TOP STRAP LEAVED. Good for early or main late crop. Grows to large size. Oz., 15c; $\frac{1}{4}$ lb., 35c; lb., 90c.

V173. WHITE EGG. Quick growing, egg shaped, pure white variety, for spring or summer growing. Good size. Oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.10.

V174. PURPLE TOP GLOBE. Similar to White Egg in shape but with purple top. Superior to the old Purple Top Strap, which is flat. Has been difficult to get this variety true to type, but my stock is "Tried and True" because the new crop seed came in last July just in time for me to plant a long row for trial. It proved true to type and color and I'm pleased to offer such select seed. Oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.10.

V174½. AMBER GLOBE. Another good globe about same shape as White Egg, but color nearly yellow. Seems to do especially well in the mountains. Oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

RUTABAGA

V175. AM. PURPLE TOP. Color purple above and yellow under the ground. Flesh yellow and solid; few leaves and small neck. Oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.00.

V175½. WHITE RUSSIAN. Large white. Good for table or stock. Oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.

Kohl-Rabi

Culture. Sow in rows outdoors about May 1st. Thin to 8 inches. Cultivate like cabbage.

Kohl-Rabi is grown for its turnip-shaped bulb, which is formed above the ground. The bulb should be used while young and tender. Set plants 8 inches apart.

786. EARLY WHITE VIENNA. The best for table use. Pkt., 5c; oz., 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

HERBS—ALL AT 10c PER PKT.

*Caraway	*Fennel
*Catnip	*Lavender
*Coriander	*Marjoram
Dill—Oz., 15c	*Rosemary
*Sage	Savory

Long's Certified Grimm Alfalfa Seed

One Plant of Grimm Alfalfa, Grown by Mr. Piercy and Photographed by the County Agent

Looking at it from one angle, it appears foolish for me to devote any space to Grimm alfalfa seed this season, for the reason I could sell every pound I have without mentioning it in my catalogue. What seed of true Grimm I have is of the best, but my supply is so small that it will be gone long before planting season is on.

But I intend to make Grimm alfalfa seed one of my specialties and never sell anything but the genuine certified seed, so that my customers can bank on the genuineness and high quality of whatever seed I may offer. When I am sold out of this grade of seed I am done for the season.

It hardly seems necessary to say much about the merits of Grimm alfalfa, yet for the benefit of those who have not posted themselves as to this I shall mention, briefly, some points in its favor:

Grimm alfalfa thrives where any other kind will grow and in many localities where common alfalfa will not make good one season with another.

Grimm is exceedingly hardy. Stands drought and cold, will grow where water comes close to surface or in soils with hardpan near the surface. This on account of its producing lateral as well as tap roots.

Each Grimm plant stools or spreads out, making a bush of many fine stems. The quality of hay is finer and more leafy than that of the common, and yield heavier.

In appearance, Grimm alfalfa differs somewhat from common in that the blossoms are of various colors, running from medium to light blue, cream and even white. On account of its extreme hardness, Grimm alfalfa may be pastured off close in fall. In spring Grimm starts growing earlier than common alfalfa.

On account of the formation of large bunches from each plant, less seed is required to get a stand, 6 to 8 lbs. per acre being sufficient. Even at the higher price of Grimm, the cost of seeding a field is not much more than would be if seeded with common. And in view of the fact that a dozen to 25 crops of hay will be cut from a field after stand is once secured, the first cost shrinks to very little per crop. You could, of course, cut 100 crops after one sowing, but it is

better to rotate the crops and plow up alfalfa field every four to six years.

Grimm alfalfa seed cannot be distinguished from common by appearance of the seed. To get true Grimm you must depend on the knowledge and honesty of the man you buy from. It is a lamentable fact that owing to the high price of Grimm seed some common alfalfa seed has been sold as Grimm. For this reason I refuse orders when my own stocks that I know to be true are sold out. I could buy here and there and sell again, but I could not look you in the eye and swear it is Grimm.

At the time of writing this catalogue I have just one lot of Grimm to offer. Possibly I might get hold of another lot later, but it is doubtful. If I do it will be absolutely true and certified.

Now the Grimm seed I have provided comes direct to me from the grower, Mr. George L. Piercy, up in northeastern Montana, where it is grown without irrigation and stands the hard, cold winters of that far north section.

Mr. Piercy says they have had it 52 below zero at times and 40 below with no snow to protect the Grimm alfalfa, yet he has never lost any of his crop from freezing.

I had 1,000 pounds of Grimm seed from this same grower last season and it proved true in my trial grounds. The stock has a definite history or pedigree tracing from the field in that locality grown under government contract from seed introduced by R. A. Oakley, agronomist, Washington, D. C. Mr. Piercy grows no other alfalfa and takes great pride in sending out true seed that will maintain his reputation for doing business on the square. A certificate giving all data will be supplied with each lot Grimm sold by me.

My suggestion is that you plant some alfalfa, Grimm or common, this year, but not so much as usual, for here's hoping the price will be lower next season—but who knows, these times, but what it may be still higher! Sure hope not.

Prices. Small lots at 80c lb., prepaid. 25 lbs. at 73c; 50 lbs. at 71c; 100 lbs. or over at 70c, f. o. b. Boulder; no charge for bags, and bags not weighed in.

Common Alfalfa Seed

I may have some this seed later but don't believe I shall be in a position to supply you to advantage. If I have any it will be good, but the price will be high, because I shall have to buy at prevailing prices. I lost out on a bunch of this seed I had hoped to secure before prices went up.

"Seeding Alfalfa"

This is the title of a condensed bulletin written by Prof. Alvin Keyser, with the Colorado Agricultural College, Fort Collins, Colo. Write to the College for one of these free bulletins. Will give you more and better information than I could offer in small space I might devote to the subject.

I am often asked about the necessity or advisability of inoculating alfalfa seed. This is absolutely unnecessary in most if not all part of Colorado and most other sections where my catalogue goes. Ask your county agent about this before spending any money for inoculating. Most likely your soil does not require this.

"Seems like every seed of the 100 pounds Grimm alfalfa I bought last spring grew. Want you to save me 200 pounds for 1920."—Ernest Grill, Boulder, Colo.

Progressive Everbearing Strawberry Plants

Not so long ago it was a great treat, and an expensive one, to have strawberries on the table out of season.

But thanks to the **EVERBEARING**, anyone can now enjoy the luscious strawberry nearly six months a year.

The little old patch of **Progressive Everbearers** you see here is in my trial grounds and has made the following record: Was planted in spring of 1918, began bearing in July, produced all we could use and a number of crates for market the same season plants were set out. That fall was especially favorable, so we had plenty of berries right up to Nov. 15th. In addition, several thousand new plants were produced from runners.

The next spring, 1919, **Progressive** was on the job as early as the ordinary varieties, and never quit bearing until last November.

There are seven rows, each 120 feet long, rows about 30 inches apart, making less than 1-16th of an acre. From this patch we sold 23½ crates, receiving \$4.80 a crate at wholesale, had all we wanted for the table, canned a "right smart" and, last but not least, pastured the three kiddies, as well as some of their playmates at times, all summer long on this small tract. I presume a complete record would show a gross profit at the rate of fully \$2,000 per acre. Maybe some of you have done still better. I have not paid much attention to such reports, but am simply telling you about this small patch.

"Owing to lack of rain (we had no rain for 63 days) the late planting of your Improved Mt. Danvers onion was almost a failure, but early planting all got ripe and there were no scullions among them. The experiment proved that this variety will ripen here and I plan to put in about two acres next year."—E. E. Gillard, Craig, Colo.

"The pansies came yesterday and are splendid."—Mae H. Smith, Salida, Colo.

But I haven't told all—the three rows to the right produced more than half this crop, that strip of ground being richer than the balance of the patch. For a bumper crop of strawberries you should manure the ground heavily and give the plants lots of water. These had overhead sprinkling from the pipe seen at the left, but ditch water is fully as satisfactory, just so the plants get the water. Lack of water can be partially made up for by frequent cultivation.

After two years' comparative trials I am offering just one variety, and that the **Progressive**. Superb does all right under certain conditions, but if ground is real rich it runs to too many leaves and too few berries. The more you feed **Progressive** the more and better berries it produces. This has been my experience and is corroborated by the U. S. Dept. of Agriculture. I've plowed up all my Superbs.

There is no set rule for distance apart plants should be set. In small garden set them 12 to 18 inches in the row and rows 24 to 30 inches apart. Some pinch out blossoms first few weeks, but **Progressive** seems to come right along if left to its own ways. Plants should be set out early in spring—early in April for many localities. I do not favor setting plants after June 1st, and think that is late.

Prices: 25 plants, \$1.00; 50 for \$1.60; 100 for \$2.70; 200 for \$5.00, prepaid.

"Must tell you about those Red Head tomatoes. Though flooded twice from Dead Head creek, which left a layer of red mud that dried like crockery around the plants, later checking into squares, and the plants frosted twice, we had loads and loads of the finest, sweetest tomatoes you ever saw. We moved before all were ripened, but we pulled the vines and brought them along, and are still gathering ripe tomatoes (Nov. 25). Please send catalogue."—Mrs. Jonah Noe, Wheatland, Wyo.

White Sweet Clover

Not the small clover for lawns, but the tall biennial sort now planted so much for hay, pasture and renewing of soils. Many will sow it instead of alfalfa this year. Have extra fine seed, all hulled and scarified. Grown near Boulder. Small lots, 40c lb., prepaid. Larger lots, not prepaid, 25 lbs. at 36c; 50 lbs. at 34c; 100 lbs. at 32c.

Sudan Grass

Sudan Grass has proven exceedingly valuable for feeding stock, which will eat it in preference to all other hays, including alfalfa.

Sudan Grass is an annual and has about the same growing season as corn. Care must be taken not to sow too early, as ground must be warm to germinate the seed. May be sown in our section any time from along in early May to July 4th. Makes quick

growth and for this reason is valuable as a catch crop. Good idea to keep a supply of the seed on hand to sow on short notice if some other crop fails. Mr. Ed Jacobson, of Carpenter, Wyo., one of the most successful dry land farmers in Wyoming, keeps a supply of Sudan Grass seed for this purpose and says he can figure on a crop in that locality if seed is sown any time up to first week in July. Furthermore, he says that he has noticed that no matter how dry the season they are nearly certain to get some rain about the first of July, which will germinate the seed and practically insure a crop.

Sudan Grass may be planted in rows and cultivated like corn or sown broadcast. Takes about 4 lbs. to acre in rows, and 20 lbs. if drilled in like wheat.

Sudan Grass is a great dry land crop, often making good where all other forage crops fail. This is one of its important features. The yield of hay is astonishing, 3 to 5 tons to the acre often being obtained. It is not "choicy" as to soil, altitude or season, but the warmer and longer the season the more hay it will produce, several cuttings being made from one planting.

So much for Sudan Grass in general. Now for Long's Colorado Dry Land seed:

My present supply, this being more than twice as much as I ever sold in one season and just about enough, I believe, for my 1920 orders, was grown about 100 miles northeast of Boulder, out in the dry land country, by Mr. Howard Rile, one of the most enthusiastic and successful dry land farmers in all that section.

Price for this Howard Rile stock: Small lots at 30c lb., prepaid; larger lots, not prepaid, 25 lbs. at 22c, 50 lbs. at 20c, 100 lbs. at 18c.

Two Good Sprayers

Here's a dandy sprayer that will fill the bill for the average home garden, and will do the job right. It is No. 25-C, made with two nozzles or spray caps, as shown, so that will reach under the leaves.

No. 25-C is so constructed that it operates continuously on both the up and down stroke and throws a fine misty spray. Will handle all the usual solutions and is fine for rose bushes, poultry houses, etc., as well as for general garden use.

The reservoir and spray caps are made of brass, and other parts durable tin, the whole being built for service and durability. Capacity of reservoir, one quart. Price, \$1.50. As the shipping weight of this sprayer is very light, I will prepay within first four zones. Ask for price to other zones.

COMPRESSED AIR SPRAYER, No. 1-D

Price \$7.50, Not Prepaid.

This is the larger sprayer, with a solution tank holding 3½ gallons. It is the strongest and most simple in its working parts of any compressed air sprayer. Two pumpings of about 15 strokes will discharge the contents under high and constant pressure. After pumping, the operator has nothing to do but direct the spray. It is equipped with non-clogging nozzle. Tank is made of heavy galvanized steel. The air pump is brass. Entire machine is made without screws or bolts, and no tools are required to take it apart.

Price \$7.50, f. o. b. Boulder. I can also supply this Compressed Air Sprayer with brass tank, price \$11.00. Both are fitted with special Auto-Pop automatic shut-off, in connection with nozzle, as shown. Shipping weight, 11 lbs. If wanted by mail, add parcel post at zone rate.

I plan to keep both No. 25-C and No. 1-D in stock here at Boulder so as to make prompt shipment, but in ordering it is well to order some weeks in advance of time needed, for it is hard for me to forecast the demand, and I may have to order from the factory.

If larger or different kind of sprayer is desired, drop me a line for complete factory catalogue.

Sprayer No. 25-C. Price \$1.50, Prepaid.

Sure, it's hard luck when seeds don't grow—after you've prepared and planted your garden with great care and fond anticipations. I know all about it. Have inside information, as have been there myself.

Sometimes, if the gardener looks around he can determine the cause of failure, but more often the cause is difficult to locate and then it is that the seedsman gets his. Now as a matter of fact, failure to germinate is seldom due to the seed. With the constant testing and checking up of my stocks there is scarcely one chance in a thousand that Long's Tried and True seeds will not grow if conditions are right.

I really receive very few complaints, and usually the customer is sincere and considerate in reporting failures. Sometimes—thank goodness not often—there isn't much left of me after it is all over.

As I say, the cause puzzles us at times and all indications would lay the blame at the seedsman's door. Permit me to mention a few actual instances of this kind.

A Boulder gardener of long experience planted some of my lettuce seed in his hot-bed. Not a plant came up. Now some would have come right into my store and bawled me out before a bunch of customers. Not so with this man. He had a hunch. He knew that lettuce germinates best in rather cool soil. So a little later he planted from the same package out in the open garden, getting a fine stand. Told me the hot-bed must have been too warm—heat had not subsided enough for lettuce though fine for peppers and tomatoes. Later it would have been O. K. for lettuce.

Mr. Peter Moss of Loveland, Colo., and his neighbor ordered their carrot seed of me together, all in one bag. Peter put all the seed in the drill box and ran his rows. Neighbor took the drill and planted the rest in his garden. Mr. Moss got fine stand and good crop. Neighbor got only a few scattering plants, plowed up the patch and planted to something else. You bet I was glad Peter had a hand in this, otherwise it would have looked bad for me. My guess is that Mr. Moss's patch was worked up real fine, held more moisture and held it longer, and the drill was run at the right depth, about $\frac{3}{4}$ inch.

A sister over at Steamboat Springs wrote

me last summer that my alyssum seed did not grow. Did not say was "no good," but I gathered from the way she stated the case that she thought so. How many of you had good "luck" with my alyssum seed last season—Hands up, please—Thank you. I knew that seed was O. K., but I sent her another package, for she no doubt was sincere in believing the seed was to blame.

Mr. Wm. Joss, 1740 Ninth street, here in Boulder is some gardener; few, if any, better in Boulder county. Of course he plants Tried and True seeds. In the summer of 1918 Mr. Joss called me in to see his freak onion patch. Mr. Walt Pitzer of the Henry Field Seed Co., was visiting me that day, so we drove over together.

There we found the finest peas, lettuce, carrots, beets, in long straight rows across the garden, with a section about two rods wide given to onions from seed. All across each end of the onion rows was a strip some 20 to 30 feet wide in which there was a good stand of onions, growing nicely. Between these two ends a large section of the patch had no onions and never had any, at least none visible to the naked eye. All rows had been drilled the full length of the patch. Why did they not grow all the way through the patch? Search me. Search Mr. Joss. Search Walt. Believe me, I was glad to see the onions growing at the ends of the rows anyhow. Once more my life was saved, though in this case I was safe. Mr. Joss appreciates the fact that seeds may be good and still not grow even when conditions seem all to the good. I seldom have complaints from real gardeners, but could you have blamed anyone for kicking, if conditions had been same all over the patch as in middle of this one, and not an onion showing up, while on both sides were carrots, beets, etc., planted the same day, all growing full length of the rows?

Over at Lodgepole, Neb.—but my page is about full and I must stop, though could go on and on citing such cases. In conclusion, let me ask you to "have a heart" if seeds don't grow. Tell me your troubles, but break the news gently, please. I'm liberal about helping you out, if you have real hard "luck;" though, for reasons stated, I cannot guarantee seeds to grow or be responsible for the crop.

LONGS PEDIGREED MINNESOTA NO. 13 SEED CORN

Tried and True—Best for the West

"Takes me back to Old I-o-way"

My first summer and fall (1900) in Boulder county was spent on a ranch a few miles east of town, where I received \$1.00 a day, whether I earned it or not. I remember husking some small Swadley corn that fall. Coming from an Iowa farm, I thought corn growing in Colorado quite a joke. Seemed like most everyone else thought so too, and for some years after that.

But land sakes! How styles have changed! Now we are growing corn, real corn, lots of corn, corn that makes an old Iowa farmer stroke his chin, rub his eyes and wonder if he has lost his bearings and is really in Colorado.

We are learning how to grow corn; how to make the best use of our short season. Best of all, we are getting wise to the varieties adapted to our high altitude conditions.

The one variety that is doing more than all others to put Colorado on the corn map is the yellow dent variety, Minnesota No. 13. It is practically as early as the small, low yielding varieties, such as Swadley and White Australian and gives the corn belt favorites, as grown in the east, a run for their money in the race for yield. That's what we've got to have—earliness and a yield worth while.

Minnesota No. 13 is not a new variety. You hear so much about it on all sides here in Colorado of late because it is only within the last few years that its merits have been appreciated and exploited here to any extent.

Minnesota No. 13 was not originated by the Minnesota Experiment Station, as many think. The Station procured the seed from

a Minneapolis seed house, the firm invoicing it simply as No. 13, little dreaming how valuable this variety would prove to be. Comparative tests showed No. 13 to be a wonder in combining earliness with high yield, so that the Station began at once to give it special attention and improve the stock from year to year, which work is still continued. The variety is now known as Minn. No. 13, a mighty lucky number for northern and high altitude corn growers.

The name has been fixed, but the type still varies considerably, depending on where grown and the selection different growers have made from year to year, according to their personal ideas of what it should be or what they like.

The Minnesota Experiment Station keeps the following ideal in mind as the standard type: Ears cylindrical, 8 to 8½ in. long, 6 to 6½ in. in circumference. Cob comparatively small, the average run of ears shelling 83 per cent of corn, some records as high as 90 per cent having been made.

Kernels wedge shape with square shoulders at cap and tip, about twice as broad as thick, dented and slightly rough—only a suggestion of roughness, caps saucer-shaped and slightly wrinkled. Color rich old gold, bright and of good lustre but not shiny.

There's a lot more that might be said in detail, but for general purposes it is sufficient to know that it delivers the goods, and on time.

As I've said, the type keeps breaking and will not "stay put," except under careful breeding and selection. It has a tendency to revert to too smooth or flinty type, so that in selecting seed it is advisable to use some ears that themselves are too rough, but they will help to hold the type nearer to the Minnesota Experiment Station standard or ideal. Minnesota No. 13 never has been and may never be a fancy or show variety. It's a rough and ready sort, handicapped in appearance when compared with some other yellow dents. Like the Swede's mule, it's "not very purty, but hal fer strong."

Minnesota No. 13 might well be called the dual purpose corn, for it yields well in shelled corn and also produces heavy tonnage for the silo. We do not claim that it will make as heavy a silage yield as some late maturing kinds, but it is not a small corn by any means. Many farmers now prefer the richer silage from Minn. No. 13 to the greater tonnage of immature corn carrying less nutriment. The number of such farmers is growing from year to year.

On the State Experiment Farm near Rocky Ford, Prof. P. K. Blinn made a comparative test of 29 varieties of corn last summer. I have not learned the final results, but have before me the record as to date of tasseling, showing Minn. No. 13 only 3 days behind Swadley and White Australian and 14 days ahead of Reid's Yellow Dent.

Owing to the growing popularity of Minn. No. 13, scarcity of the seed, heavy demand, high prices it brings, it appears that other yellow dent varieties have at times been sold as Minn. No. 13; also, that Minn. No. 13 from southeast Nebraska has been sold in competition with northern grown, acclimated seed, so that planters are getting justly particular and want to know, as they have a right to, just what they are getting when buying seed of Minn. No. 13.

For this reason, and because I take pride in handling "Tried and True, Best for the

West" seeds, I offer nothing as Minn. No. 13 but what I know to be genuine, northern grown. Furthermore, with each lot of seed, I furnish a signed certificate not only to this effect but giving also the pedigree or history of the stock and the name of the farmer of whom I obtained this seed.

If my policy suits you, we will now proceed to business.

Now I have four main lots this season. Have small quantities of several other lots, equally as good, but cannot list them all in detail.

Each different lot of my Minn. No. 13 seed corn is kept to itself, carefully labeled, just as though different varieties, so I can give you the pedigree of any seed I sell. All seed tested and graded.

For convenience in designating each lot, also for ordering, I shall call these: **LOTS 1, 2, 3 and 4.** They are all so good that I hardly know which to lead off with, but will call **GILFILLAN'S PIONEER** stock No. 1, because it has been grown in Colorado the longest.

LOT No. 1—Gilfillan's Pioneer

In 1911, Mr. J. A. Gilfillan obtained his stock of Minn. No. 13 corn from Henry Field Seed Co., they getting it from a South Dakota grower whose stock came from the Minn. Ex. Station, through the South Dakota Ex. Station.

Mr. Gilfillan has grown this stock continuously ever since and claims to be the pioneer grower of this variety in Colorado. So far as I can learn he stands at the head of the Colorado class of Minn. No. 13 corn growers. But this alone would not necessarily recommend Gilfillan's Pioneer stock, so I am pleased to tell you more about it. Mr. Gilfillan took such a liking to his Minn. No. 13 that he has made it a specialty, almost a hobby, you might say, and has done splendid work in selecting and improving the variety since it came into his hands.

For one thing, he has grown it every year on dry or non-irrigated land over east of Platteville. Crops have varied with seasonal conditions, but the average has been most gratifying. Largest yield was 60 bushels to the acre, tallest crop nearly 11 feet average, with one stalk over 12 feet, which won the prize at the Platteville Fair—this dry land grown, you understand.

Mr. Gilfillan claims—and backs his claim with the goods—to have improved his stock decidedly in earliness of maturity, drought resisting, and size, which is going some. Speaking of the small cob weight, he told me the percentage of shelled corn obtained at times, but I'm afraid you might not believe it, though I do, because I know "Jack," as he is known to his friends. Down in Missouri they grow a certain variety of white corn primarily for the corn cob pipe factories, the essential part of the ear being a fine big cob, while the corn itself is thought of more as a by-product. That's all right if you are growing corn for making pipes, but Jack had no market for the cobs, so did his derndest to eliminate the cob—and came mighty near doing it!

So much for Gilfillan's Pioneer. It's a hummer for dry land and still better if moderately irrigated.

LOTS 2 and 3, Longmont Grown

Lots 2 and 3 have so much in common that I shall describe the two in the same breath, as it were.

As you may know, the Great Western Sugar Company maintains at Longmont, Colo., an experimental, testing and breeding farm or Station. The major project of this Station is improving their seed stocks of sugar beets. To do this properly a certain system

of crop rotation has been adopted. Corn has been found valuable in carrying out their plan of rotation.

Mr. Asa Maxon has charge of the Station. Mr. Maxon is also a Minnesota No. 13 corn fan, having grown this variety back in Minnesota 14 years ago. Naturally, he grows no other variety than Minn. No. 13 here. Naturally, also, because he is with the G. W. S. Co., and because he is Asa Maxon, he believes in growing only the best true stock of this variety.

So some years ago Mr. Maxon secured seed from a champion Minnesota No. 13 seed corn grower in North Dakota, and has since been growing and selecting his seed from this stock. This lot, which I shall designate as **LOT No. 2, North Dakota—Colorado**, has been kept to itself, no other variety being grown near it. It has proven true, early and a good yielder. One season the field was not planted until June 12th, yet the crop matured before frost.

Last spring Mr. Maxon obtained seed direct from the Minnesota Ex. Station, and grew it as a separate lot, for comparison. This I list as **LOT No. 3, Minn. Ex. Sta.—Colorado**. I was up there when they were selecting seed and we could see little if any difference one way or the other between the two lots. Irrigation water had been scarce and the beets got most of it, the corn coming in for the leavin's, which wasn't much and could not be impartially distributed, so no fair comparison could be made. Both lots made good under adverse conditions and both lots of seed have been carefully selected.

Both lots, No. 2 and No. 3, are registered with our county agent, having passed every requirement of the committee on registration.

The Longmont Station does not care to handle the details of retailing seed corn, so I arranged to take over and distribute all their selected seed, 1919 crop, except what they reserve for their own planting and additional trials.

LOT No. 4—Beach's Select

Lot 4. Last spring I "blowed myself" for 400 ears of extra selected Minnesota No. 13 seed corn, costing me, at wholesale, nearly three times as much as I offer this variety at retail. Got these selected ears from one of the champion Minn. No. 13 growers in Minnesota, who has won a number of prizes, including the state sweepstakes, and who is highly recommended by the Minnesota Ex. Station.

Placed this special lot of seed in hands of my friend Clarence Beach out near Valmont, three miles east of Boulder. Mr. Beach is an experienced corn grower. I told him to grow me the best seed he could from this and if he would select me still better ears for seed than I gave him there would be no kick coming. This stock is also registered with our County Agent.

In ordering any one of the four lots mentioned and described, you may simply say **Lot 1, Lot 2, Lot 3, or Lot 4**, for short. We will know what you want.

Prices. All four lots at same price. Small quantities at: Lb., 20c; 2 lbs. for 35c, prepaid. Larger quantities, not prepaid, f. o. b. Boulder: 25 lbs. at 12c; 50 lbs. at 11c; 100 lbs. at 10c. No charge for bags, and bags not weighed in.

Note. Early shipments of Gilfillan's Pioneer, Lot No. 1, can be made from Platteville, at rate of \$9.50 per 100 lbs., f. o. b. Platteville, in lots of 100 lbs. or over, as this saves me freight and handling. You pay freight from Platteville, which in most cases, will be about same as from Boulder.

Important. Freight shipments now slow and uncertain. If seed ordered near planting time, better have come by express.

"Yours truly"

LONG'S SHORT TALKS

There now, for the 'steenth time I have pounded out copy for my little old seed catalogue. Every year I think, "Maybe next year I will sit back and let a real catalogue artist write me a professional catalogue—a catalogue like they tell me will sell more seeds and at higher prices." Then after the season is over I have another think or two and the next fall go at it again in my weak and wobbly way, doing the best I can according to the dictates of my own conscience. So if you don't like this catalogue, don't blame anybody else, for, like another famous character, I cannot tell a lie—"I did it with my own little typewriter," except such portions as I clipped from other catalogues!

Doubtless before reading far you guessed the truth—that I carry most of my education in my wife's name. However, in self defense, I'm going to do something I never did before. Mine is a modest and retiring nature, as you must have noticed all through this catalogue! So it is not surprising that I've never bragged about it, but I really did go through our splendid state university here, before engaging in the seed business. In fact, as with many others, I discovered Boulder on the map largely on account of its being the home of the university.

So, soon after locating in Beautiful Boulder, I applied for admission to the university. I remember it well. Seems as yesterday. The day was fine. I enjoyed everything from start to finish, especially the museum on top floor of old Hale building. I still look back to those old college days—I mean that old college day—with pleasure, even though I never made the football 'leven, strummed a guitar under the windows of fair co-eds nor joined a fraternity (I'm strong for the Alfalfa Belta Delts). Yes, I'm a booster for my Alma Mater. It's getting bigger and better every year. The summer school, like our delightful chaquetaqua, offers a rare opportunity for one to take an outing and go to school at the same time.

But I've gone to seed since, and must brush aside these fond memories and get back to earth and seeds.

Speaking of seeds, isn't it grand that there is one thing, thank goodness, that does not cost more now? My 1920 prices for Tried and True seeds, Best for the West, actually average less than last year. I speak advisedly and say they average less, otherwise someone in the audience will hop up and say, "What about alfalfa seed?" Now don't pick out just the few, the very few, items that run higher, but look at dozens that are priced lower. Don't be a pessimist that sees only the hole in the doughnut and hears only the scratching of the Victrola needle. Look at the rim on the doughnut, and train your ear to hear something else than the faint scratching of the needle.

"I am glad that my subscription to Long's Catalogue has not expired, for it is used about as much as the dictionary in our house. I keep it handy and refer to it often."—Mrs. Katie A. Beer, Greeley, Colo.

"I received First Prize on the petunias bought of you."—Mrs. C. W. Morris, West Liberty, Iowa.

Save Catalogue One Year

Right now thousands of newspaper publishers are up in the air. Newsprint paper, the grade they use, is very scarce and high in price. Big publishers have grabbed most of the supply and there is talk of the smaller ones having to suspend publication for a time.

All paper is getting scarcer and higher, the production not keeping up with the demand, and who knows but that before this time next year I may have lots to say again about new crop Tried and True seeds, but will lack paper to impart the glad tidings to you in detail. Things happen suddenly these times, you know. It does not require a great stretch of the imagination to grasp such a contingency.

So, while I still have paper to say it on I want to tell you that I expect to be selling seeds next year, and in case nearly all the available supply of paper is required to print the Congressional Record I may get out a simple four-page folder giving just the names and 1921 prices of the various items in this catalogue. So if you keep this copy you can refer to it for descriptions and cultural suggestions. All you will really miss will be these few pages in back of catalogue, which some of my friends call "Back Talk"—and maybe you will not miss that very much!

Seriously, now, please keep the catalogue 12 months, or until a new edition shows up. Give it a place on the clock shelf, the library table, the what-not, or anywhere just so the pup does not get it and chew it up. Don't cut portions of the catalogue out and pin to your orders. It is not necessary, and always makes me feel sad to think of a mutilated catalogue in some home. Save the catalogue and the catalogue will save you—both money and crops, if you read it and follow suggestions.

In case you make out an order for next season from this catalogue, please understand that the prices will be adjusted, higher or lower, to conform to my 1921 price list. I trust the prices will run lower, but make no promises that I might not be able to keep.

CHAMPION EAR SELLS FOR \$13.00

"The champion ear of corn, meaning the one picked out by the judge as being the best of the show, sold to J. D. Long Seed Co., of Boulder, for \$13.00. It was a Minn. No. 13 ear from the ten-ear exhibit of Bernard Buster. This is probably the highest price ever paid in Colorado for one ear of corn."—FARMERS' EXCHANGE BULLETIN, December, 1919.

The above refers to the Grand Champion-ship ear I bought at the Boulder County corn show, December 10th. "The best is good enough for me." You will hear more about this ear later.

I ALMOST HAD WRITER'S CRAMP

Last season I was simply snowed under with orders for certified Minn. No. 13 seed corn, and had to refund so much money to those whose orders I could not fill that I almost got writer's cramp signing checks! Have about three times as much this seed for 1920 orders and think will have just about enough, though the way the inquiries and orders are already coming in, it looks as though there is going to be a landslide for Long's Certified or Pedigreed Minn. No. 13. First order I got, several weeks ago, was for 800 lbs.

I recommend THE FLOWER GROWER to my friends and customers. Published monthly. All flower lovers should be regular subscribers. Subscription price, three years, \$2; one year, \$1. Deal direct with Madison Cooper, publisher, Calcium, N. Y.

Stop! Look! Listen!

If the war, and the peculiar conditions following, have taught us anything, we have certainly learned this: That to make sure of having what we want, and have that on hand right when it is needed, it behooves us to "do our Christmas shopping early." Certain stocks are always sold out during the season, deliveries are often slow these times, account congested transportation conditions.

At this end of the line we can give you better service if you will speed up your ordering and try to snow us under early in the season, the earlier the better, after January 10th.

SYNONYMS: CUSTOMER—FRIEND

Mrs. Della Fox, who has been with us ever since I mailed out my first catalogue, will tell you that I've always said to her and our other assistants: "Now I want you to fill every order just as though you were putting it up for one of your best friends." That's what we try to do. Of course, we make mistakes, but we want to handle every order, whether over the counter or through the mails, with the feeling that it is for a good friend whose friendship we try to merit and hope to retain. Mrs. Fox is my "right hand" and, with her willing assistants, "delivers the goods" promptly.

WATCH OUT FOR BARGAIN SEEDS

The Department of Agriculture at Washington is much concerned about large quantities of European seeds of doubtful quality now being dumped into our markets. It is true that some high-grade seeds are produced in Europe, but it appears the accumulation of some four or five years is being cleaned up and offered American seedsmen and jobbers at very low prices. Believe me, I'll stick to my Tried and True growers, most of whom are my personal friends, who know that I want the best and will pay for it, but will see that I get what I pay for.

"NOVELTIES" AND "NEW CREATIONS"

A fellow seedsman said to me one day: "Long, you ought to list a lot of novelties. I don't think much of them myself but the people do fall for them—and it's most all clear profit."

I approve of new varieties of real merit, if they are really new and really have merit, but it is my ambition to supply high-grade stocks of varieties that I know will give good results. When I do list something new it's Tried and True, and the price is within the reach of all.

Eventually, you'll plant "stringless string beans"—Why not now?

PANSIES 11 MONTHS A YEAR

Two days before last Thanksgiving day Mrs. Long picked a dishpan full of large, long stemmed pansy blossoms from our outdoor beds. Dec. 17th I picked a good bunch, just after the deep snow had gone. I'm sure we will have pansies in bloom during February and possibly in January. As a matter of course, they will bloom all spring and summer, so that we shall have blossoms almost the year round. That's getting your money's worth and then some.

"PERSONALLY CONDUCTED"

I do not attempt to handle all the many items there are in seeds, plants and bulbs, but specialize on those used by most people in most gardens and that give planters the most pleasure and profit for the investment. Instead of scattering my energy over too wide a field I limit myself to what can be given my careful, personal attention. Yet my list is by no means small. It covers most requirements of every garden. Whatever you find in this catalogue can be depended upon. It's a simple matter to order from my list for most, if not all, your needs, and the balance from other sources. I used to think that customers would prefer to order from firms that carried just about everything, but find most people appreciate "personally conducted" high-grade goods and send me their orders so far as I can supply, thus making sure of getting best stocks and good service.

WHAT ABOUT THESE "SHORT TALKS"?

Some advertising critics say it's not good business to devote so much space to "free air." They say people may read it but will order their seeds from a more dignified, uncommunicative seedsman. I'd like your vote on this. There are two methods of voting. You can vote **for** the talks by sending me an order, or saying you care for the talks. To vote **against** them, don't send me an order; or, say "Little seedsmen should be seen and not heard—so much." If the "Short Talks" are voted down, I'll shut up like a clam and give you just strong medicine next year—descriptions and prices, undiluted.

Then, too, these high-brow ad experts nag me about putting my picture in the catalogue. Personally, I wish I had a picture of the writer every time I receive a business letter or order, even if it was taken four years ago, like mine.

"I am mailing you a picture of my dahlias, all grown from bulbs you sold me. They were beautiful. Ladies from five different states came to see my dahlias while visiting in town and all said they were the largest and prettiest dahlias they ever saw. Tourists from eastern states stopped to take pictures of them. I want to get all the dahlias you will have next spring that I do not now have."—Mrs. Julia F. Donald, Wheatland, Wyo., December 8th, 1919.

100 Degrees Below Zero

December 13, 1919

Yesterday was the day that certain planets were slated for a terrible rumpus over the right-of-way in which mix-up the innocent bystander, our mutual friend, Old Mother Earth, was supposed to sustain fatal external injuries.

In view of the fact that I quit worrying some years ago (except on special occasions!) I took only a mild interest in reports supposed to have been given out by some high-brow skylogger who had inside information to the effect that on the 17th day of December, 1919, the thermometer would drop to 100 degrees below zero. Yet there was so much talk, talk, talk, on all sides about this ill-fated day that I confess it did get on my nerves just a bit, though I tried to visualize the silver lining to the threatening cloud, and felt that this might settle the profiteering question, as all profiteers as well as their goods would go into cold storage, and that would hold them for a while.

I became concerned about all those fine glad bulbs stored away so nice and dry in our basement here, many of these being the new and rare kinds I am offering this year for the first time. I was so eager for you to see them in bloom that it just took all the pep out of my spirits when I realized that no matter how many more gunny sacks I might tack over the windows those noble bulbs would never pull through if the forecast for December 17th, as indicated by the Denver newspapers, was correct.

Then, too, there were those ninety thousand Super-Giant pansy plants out in my garden, some covered lightly with excelsior, some with a few dahlia stalks thrown over the beds, and still others with no covering but the snow—could they weather the storm? Yes, and the hens were just beginning to lay and brag about it.

Furthermore, the strike might last all winter—100 below zero and the coal bins empty! And the bandit, Carlisle, was still at large, jeopardizing that appropriation you had set aside for another order for Tried and True seeds. Certainly plenty to worry about.

But today the sun shines; no glad bulbs have been lost; pansy plants are all alive and happy; Carlisle has been captured; many miners and some hens are on the job. So I'm feeling benign and cheerful, thankful for the privilege of living a while longer in this world, which, after all, is a pretty good old world. It's getting better and brighter, too, as we make two flowers grow where one weed grew before, and use some of the flowers to carry sunshine and cheer to others.

GOOD SEEDS—GOOD SERVICE

Please take notice that I list only two items in vegetable plants, namely, Cauliflower and Pepper. Offer these two because I have a place in my garden where I can grow the Cauliflower plants to perfection, and have a gardener friend who will grow for me a fine lot of Pepper plants.

Am cutting out most the vegetable plants because I expect we will be just about swamped with orders for pansy and aster plants, also the bulbs and roots I have listed, and there's no use taking more orders than we can fill right, and on time. Last spring we almost failed to get our orders out and I vowed I would not undertake more this season than we can deliver in good shape and with reasonable promptness. It's my burning desire to give good service as well as good seeds, and seeds have the right of way in this service.

If you can't get vegetable plants elsewhere, write me about April 10th and I'll try to help you out some way.

Another Ford Story

Once upon a time I bought a Ford. Was sold me as a used Ford, but was a misused one. Had taken the bit in its teeth, ran amuck, turned turtle and outlaw. Took me months to subdue that obstreperous Ford. It almost subdued me. Had never driven before. They say old people make a hard job of it, and I believe this. Henry was sure headstrong and ran into most everything but the road. Why, for a while I averaged about eight ditches, three fences, one telephone pole and two dizzy bicycles a week. Had a self-starter but I soon wished to swap it for a self-stopper. Believe me, I failed to see how one could ever care to drive a Ford. No joy riding about it for me. I still recall the anxiety of those cold mornings when Henry had sinking spells and was dead to the world.

And I had tire trouble. My, how I hated to tackle those tires with the toy tire tools wished on me with the Ford (I'll never vote for Henry Ford until he throws in a pair of life size tire tools and puts another spring under the back seat). I'd bribe some other Ford traveler to help me, or run in on the rim. And patching a tube was indeed a serious operation, to be avoided if possible.

Finally I noticed that the garage men used large, powerful tire tools. So I had a set made from old buggy springs, and soon got on to the curves of those tires, and took it all as a part of the day's work if I had to change tires and patch tubes. I learned also to dress for the job and not risk my "other clothes." In time, too, driving became easy and almost second nature, as you no doubt well know.

All of which illustrates how we learn to do by doing (and being done). Gardening may be hard work at first and you may make mistakes, just as I did driving the Ford. But practice makes the work easier and produces better results. Dress for the job. Provide good seeds and good tools, including a sprayer. Life is too short to work without suitable tools. Read Long's catalogue, ask your county agent for additional suggestions.

ALL SIGNS FAILED—BUT ONE

For several years we have all been guessing and predicting and have missed on nearly every guess except one—that a good garden would help hold down the high cost of living. Just look at the prices every item that can be grown in a home garden is bringing today! What's the price of a good sized seed order amount to compared with what a family pays out every few days for eats?

And how about flowers? Have you noticed what it costs to buy flowers from a greenhouse? Better patronize your own garden as much as possible when you want flowers. Even outdoor flowers cost a plenty these times. Glads sold in Denver last year for weeks at \$1.00 to \$2.00 a dozen—more, much more, than I ask you for the bulbs, and you have the bulbs left after cutting the flowers.

"WHY SOME SEEDS DON'T GROW"

Last summer a Boulder lady complained that our rutabaga seed was poor. Said it came up in bunches instead of evenly. That's easy. Can you imagine such small seed as rutabaga forming little cliques or exclusive societies, the good seed in one bunch and the poor in another, and after the packet had been handled and shaken a number of times? No, the seed was sown in bunches or the moisture, depth or other favorable and unfavorable conditions were in bunches.

I Was Here—Now I'm There

After the San Francisco earthquake, so the story goes, a First Aid party came upon the following sign, tacked to the wreckage of what had been a residence the day before:

I Was Here—Now I'm There.

During the past year a large percentage of our population have been selling their homes or having them sold, buying, selling and moving again, and, as the cowboy would express it, are still milling around restlessly so that it is indeed difficult for a seedsman to keep tab on his own family and close friends, not to mention thousands of other friends and customers on his mailing lists.

In various ways I've been trying to locate and round up these good people, but the most I can find out about some of them might well be expressed by the sign referred to above—"I was Here—Now I'm There."

Still it might be worse. I'm glad to know—at least I think this—that most of my customers will hunt me up before planting time, even if I can't locate them. But I want some new customers every year, also names of other sensible people who might sooner or later appreciate Long's Best for the West seeds.

Now you, my good friends and customers, have a rare opportunity to do some good missionary work within the next few weeks. Look around you and see if you have any new neighbors who have never heard of Long's Tried and True seeds.

What better service could you render them than to loan them your catalogue? Or, give yours away and ask me for another. It's very important, you see, that you do this right soon—before your neighbors order seeds. Just think how sad they would feel if they fail to get Long's Decidedly Different catalogue until after they had sent their money to some of my competitors! Think what this would mean to them, not to mention the cloud of gloom that would settle down over "Yours truly."

LOAN YOUR CATALOGUE

Tell you what makes me feel fine! It is to get an order from some new customer with a note saying: "Mrs. So-and-So loaned me your catalogue." Sometimes I've traced half a dozen orders to one catalogue and one good satisfied, appreciative, customer. Why, up in Salida one of my catalogues went just about the rounds in a whole block, picking up orders and new customers. That's fine, friends, and I appreciate it very much. I do not issue such a lot of catalogues as many seedsman do, but those I send out bring home the bacon, thanks to my friends and their missionary work.

SAMBO AND THE DIAMOND

When Sambo flashed a big diamond, one of his admiring friends inquired: "And is it a real diamond, Sam?" The impressive reply came back: "Well, if it isn't a real diamond, then I've shore been skun out of a half dollar." Now you are supposed to laugh—at Sambo. But listen! How about that time you wouldn't pay the price of good lawn grass seed—told the seedsman, "I kin beat yer price,"—went off down street and bought some "bargain seed" containing only a small per cent of vital seed of good grasses for lawn and a pile of weed seeds. You were skun out of more than the price of the seed. Better sow a few packages of breakfast food on your lawn, rather than some of the dope put out as "Superfine Mixed Lawn Seed," for the breakfast food will at least do no harm.

"You may be interested to know that I took First Prize on pansies (which I got of you) at the Southern Iowa Fair. Every one remarked about the beauty of these pansies."—Mrs. J. D. Hawkins, Oskaloosa, Iowa.

About That Garden of Mine

This catalogue is printed in four sections or "forms" as the printer calls them. First we ran the cover, then the middle 16 pages, then a large sheet with one form on one side and another on the other, which, folded a certain way, brings forth the first and last 16 white pages. Thus I can keep rig, on talking up to the hour the last form is put on the press.

I'm glad this is the case, for it gives me a chance to correct a misleading impression that the few lines on first page of cover may give. What I meant to say is that such flowers as are seen in my gardens are grown for the bulbs and seeds, and not that all the bulbs and seeds I offer are grown by myself on my place.

After looking that cover page over I realized the embarrassing position I might be in if some of you call to see my garden for the first time next summer. So I'll pave the way by explaining that this garden consists of three acres and is devoted to growing only a few items, mainly glads, pansies, dahlias, zinnias and some other items in spring planted bulbs and seeds, and lots of Darwin tulips, of which I have a bed of 30,000 due to bloom next May.

Most my seeds are grown for me under special contract by seed experts in various parts of the west where each kind can be handled in large lots and kept to itself to prevent mixing. It is not practicable to grow many kinds near together.

My garden is my work shop. Here I test out different stocks of seeds. Much of the garden is "all tore up" all summer long as one crop is taken off and ground prepared for another or planted to some green crop for turning under. So it is not primarily a show place, but you will find it interesting, especially when the glads are in bloom from early July until October.

I have no greenhouses, but sell cut flowers whenever we have them in bloom in the garden, making a very reasonable price for the flowers so all can afford to buy for yourselves or to give to others. We mail flowers for orders of \$1.00 or over. Time of blooming depends on season, but tulips generally in bloom the first three weeks of May. If I had shade for them they would last until May 30th, when most wanted, but it is not likely they will. Indeed it is hard to bring many outdoor flowers into bloom for Memorial day, so it would be almost necessary for you to write some days ahead, if at a distance, and find out what we might be able to supply.

After glads begin blooming well soon after July 4th, we can always fill orders for them. If shipped, we cut in the bud and can ship them 1,000 miles. They will open up after arrival. Should arrive a day or two before wanted. Do not have any set price list. Will give you your money's worth and then some.

Pansies cut with six-inch stems and leaves are becoming more and more popular with many who buy flowers from my garden. We sold bushels of them for last Memorial day. Cutting pansies with such long stems is unusual and the effect is indeed charming.

"SAY IT WITH FLOWERS"

Everyone understands the language of flowers. They often carry our messages of affection, sympathy, congratulation, better than spoken or written words.

Few flowers are so easily grown or give so much pleasure as the Gladiolus.

"The Night Before Christmas"

Just a few hours more and I shall have pacified the printer, who has been pounding me on the back for copy to complete this catalogue. Have this one page left and want to use a part of it for a little Christmas message, even though the message will not reach you until weeks, maybe months, after Santa Claus has retired from the limelight and countless New Year's resolutions have been broken.

For a week or so the mails have brought us many kind Christmas messages from friends far and near, some whom we have never seen, but all wishing us full measure, heaped and running over, of happiness and prosperity. Fearing that I'll never get around to acknowledge all these kind remembrances, personally, I'm taking this method of thanking you. Here's a hearty "The same to you."

As the holidays drew near, and I was writing this catalogue, my thoughts naturally were often with you who shall read this. In fact, I always feel that I am writing to you—just a big "Long" letter, instead of a catalogue and price list. And I often tried to think of some way I might devise for making each of you a little Christmas present. No feasible plan, that my limited finances would permit, has come to my mind. And yet, as I go over the prices I've made, connecting them with the high quality of seeds I've provided, I can put my finger on many items on which you will be able to make a positive saving over prices I am sure will be charged by many seedsmen who may offer stocks of equal quality. Perhaps, after all, I may have the pleasure of saving you enough to buy yourself something worth while, though I realize giving in this way is so subtle that the recipient seldom recognizes or appreciates the gift.

In this connection I wish to take you into my confidence and tell you of a perplexing problem I have had to deal with in determining prices at this time. Some of my well-meaning friends tell me I'm a fool—some even classify fools and tell me just what class I belong to. They say that right now people are spending money as never before—the higher the price the better it suits them. That now is the time to get while the getting is good. "Soak 'em," they say, "for you may never get another such a chance," all of which sounds good to me, viewed from one angle, for no one could use the extra change better than I.

But, even granting that would be allowable under present conditions, I'm just old fogey enough to remember that not every one has prospered this past year. On the contrary drought and other unfavorable conditions have dealt severely with many farmers, while not a few in towns are up against it on account of the new level of prices affecting everything needed in the home.

It is true that the present cost of doing business is appalling, and it's no doubt good business to get a plenty while the getting is good. However, I've tried to strike the happy medium and trust that my policy and plans will work out to our mutual interest and welfare. * * * As I read what I've just written it seems that I have not expressed my sentiments just as I intended—seems as though I should have avoided "talking shop." Yet I shall not take time to rewrite this, for the phone may ring now any moment, and tip me off that the kiddies have at last gone to sleep, which will be the signal for me to put our little collection of gifts into the Ford waiting at the curb, lock the door and call it a day.

"Garden seeds received O. K., and meet with my approval. Gave them all a 'close once over' and I must say I never received better seeds from anyone."—E. E. Kirkpatrick, Great Divide, Colo.

Grow Your Own Sugar

One guess that shot wide of the mark was that after the war the price of sugar would come down. Hasn't come down so that you could notice it, has it? If keeps going up some enterprising manufacturer will make a fortune by turning out coffee cups with very rough finish on the bottom, inside of cup, so as to fool hubby into thinking he has sugared his coffee a plenty and then some.

You can grow syrup and even sugar right in your own garden. Plant the genuine sugar beet seed, same as used by the sugar factories, and extract the sweetness as recommended by the Department of Agriculture. I'll furnish the recipe free if you ask for it when ordering. I'm not saying you will get rich growing syrup and sugar, but if you have the room in your garden it is worth trying out. Sugar beets are excellent for table use and valuable for stock, so you can't very well lose, even if do not care to use them all for sweetening.

It so happens that I have an extra fine lot of genuine sugar beet seed, that I got from the Government Experiment Station out in Idaho. Sure good seed. A quarter's worth ($\frac{1}{4}$ lb.) will be enough, and even a dime's worth (1 oz.) will give you a lot of sugar beets for your experiment. For larger lots see page 25. I include a liberal percentage of sugar beets in Long's Special Mixture of mangels and sugar beets, which makes a rich and well-balanced mixture for stock.

"Too Late to Classify"

Just before printing these last pages I got the promise of some more of that fine dry land Wyoming grown common alfalfa seed. Shall also have some Swadley, White Australian and White Dent seed corn. Ask for prices.

Business Terms

Terms cash with order. Old as well as new friends please comply. C. O. D. orders cost you extra fee and should be avoided when possible. Send one-fourth the amount of order if wish goods sent C. O. D.

Send money any way you wish. We take your personal check. Coins, if wrapped in soft paper and mailed in my strong return envelope, may be thus sent with little risk. **Send stamps as a last resort only.**

All seeds, plants and bulbs are priced prepaid, unless otherwise specified.

If you fail to receive goods or hear from us in a few days, drop me a line.

LONG PAYS THE WAR TAX

I guarantee safe delivery on all goods sent by parcel post and pay the war tax on all packages requiring the tax. Small orders are mailed at my risk, larger ones insured at my expense. I also pay postage unless otherwise noted. Express companies stand good for losses in transit, if reported at once to them on proper forms. Freight shipments are also safe, but slow. Onion sets and other perishable items should not be shipped by freight.

Pester the Garden Pests

I'm writing a page or so on this subject. This will be included free with each order, each other.

CULTURE OF FLOWERS

This is a very condensed but helpful page on flower growing. Free with each order.

LONG'S Safety-First Lawn Grass Seed

It is safest and cheapest to buy the very purest and best White Clover and Blue Grass seed for your lawn, because: You avoid seeding your lawn with the noxious weeds found in cheap grass seeds, you get so much higher germination that a pound of the best will cover as much as two pounds of the cheap, chaffy, low germinating seed.

LG1. PUREST WHITE CLOVER SEED. Lb., 80c, prepaid. 5 lbs., 2nd zone, \$3.79; 3rd zone, \$3.84; 4th zone, \$3.93, prepaid.

LG2. BEST KENTUCKY BLUE GRASS SEED. Extra heavy and clean. Lb., 50c; 2 lbs., 95c, prepaid. 5 lbs., 2nd zone, \$2.09; 3rd zone, \$2.14; 4th zone, \$2.23, prepaid. 10 lbs., 2nd zone, \$3.94; 3rd zone, \$4.04; 4th zone, \$4.23, prepaid. Write for prices on larger lots.

NOTE. The Government standard germination of blue grass seed is 45 to 50%. My cleaned, heavy, purest seed tests 75 to 90%. Lots of blue grass seed is sold testing 40% or less.

Sow about one part clover to three or four parts blue grass, using one pound, of the two mixed, for 300 to 500 square feet. Thicker will be still better but not necessary with my best seed. Sow any time from spring to fall, being careful not to let the soil dry out a single hour in hot weather until grass is started. Read "Germinating the Seed" under head of Flower Culture in this catalogue.

Harvesting Kentucky Blue Grass

These machines do not mow the grass but strip the seed from the stalks by whipping the heads with revolving cylinders. This method saves the seed with the minimum amount of straw and foreign seeds.

Now to get the purest, cleanest grade this Blue Grass Seed has to be run through the mills again and again until all the light seed and chaff is eliminated, leaving nothing but the very heaviest and plumpest seed which, of course, is the seed with strongest vitality. This is the grade I sell.

OPEN SEASON FOR LAWNS

The entire grounds around the Boulder High School were seeded with my lawn seed late in August and a splendid stand secured. New lawns may be started or old ones renewed or renovated any time from earliest spring to October. Sowing the seed on top of spring snows is one good plan.

Every year I sell the City of Boulder a lot of blue grass and white clover seed. The beautiful lawns on the Chautauqua grounds are living testimonials for Long's Safety First lawn grass seed.

HOW TO GROW DANDELIONS

Dandelions thrive well on front lawn with street exposure. Nature supplies the seed gratis. After the plants are well started dig a part of the roots out, cutting them off just a little below the surface. This causes the roots to branch, sending out new shoots of luxuriant growth. Thus you make two or more dandelions grow where but one grew before. Avoid cutting too deep or extracting more than half the root, lest you ruin the plant.

Do not sow blue grass or white clover on your lawn after digging if you want the floating dandelion seed to lodge and take root wherever the ground has been disturbed. Avoid, also, raking the lawn and sowing pure grass seed from March to September. While the grass seed may not entirely run out the dandelions, it will at least cause a weak and sickly growth of them.

Sowing cheap light-weight blue grass seed is a harmless practice, as little will grow and most of it will blow away. But with white clover seed it is different. Most cheap white clover seed contains a large per cent of plantain seed and the plantain will choke out the whole works, dandelions, grass and all. It is almost impossible to get rid of the plantain.

To keep a green lawn and discourage dandelions sow grass seed every year, several times during the season is a good plan. Pure blue grass and white clover are the best grasses. Buy a good dandelion rake and exercise it daily.

NOTE. Write the Agricultural College at Fort Collins, Colo., for Prof. B. O. Longyear's bulletin No. 236, THE DANDELION IN COLORADO.

Colorado Chautauqua auditorium in city park, Boulder, Colorado. "Flat Irons" in background. Great place to combine education with recreation. Drop a line to Secretary Chautauqua Association for interesting booklet. Drop another line to Secretary Boulder Commercial Association for illustrated "Beautiful Boulder" literature, and still another to Secretary University of Colorado.

SONG'S Decidedly Different Seed Catalogue

Long's Pedigreed Minn. No. 13 Corn

THE J. D. LONG SEED COMPANY
BOULDER, COLO.