GARDEN TOOLS.

Large Pruning Shears, For lopping off branches. Ladies' Fancy Pruners, For Rose Bushes, &c., Grass Shears, Long handles and wheels Hedge Shears, Different Sizes. Edging Irons, Cast Steel. Turting Irons, Cast Steel. Garden Hoes, All Sizes. Dutch Hoes, Garden Rakes, Green-house Syringes.

Gravel Rakes, Lawn Rakes, Garden Forks, Digging Forks, Toy Spades, Čast Steel, Fancy Setts Garden Tools, For Ladies. Garden Lines & Reels, Thistle & Dock Spuds, Transplanting Trowels, Saynor's Pruning and Budding Knives, Watering Pots, Steel Spades & Shovels, Books on Horticulture.

No. of Plants or Trees that can be planted on an Acrc of ground,

at the following distances apart, in fect.

| Distance apart. | No. of Plants. | Distance apart. | No. of Plants | |
|--|---------------------------|-----------------|---------------|--|
| 1 by 1 | 43,560 | 7 " 7 | 838 | |
| 1, 13 | 19,360 | 8 ** 8 | 680 | |
| $\frac{1}{2}$ · · $\frac{1}{1}$ | 21,780 | 9 " 9 | 537 | |
| 2 ·· 2 | 10.890 | 10 ** 10 | 435 | |
| 21 " 21 | 6,969 | 11 " 11 | 369 | |
| 3 - 1 | 14,520 | 12 . 12 | 352 | |
| 3 4 1 | 7,260 | 13 . 13 | 257 | |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | 4,840 | 14 . 14 | 222 | |
| $3\frac{1}{2}$ · · $3\frac{1}{2}$ | 3,555 | 15 ** 15 | 193 | |
| $3\frac{1}{2}$ · · · $3\frac{1}{2}$ 4 · · · 1 | 10,890 | 16 . 16 | 170 | |
| $\begin{array}{cccc} 4 & {}^{\prime\prime} & 1 \\ 4 & {}^{\prime\prime} & 2 \end{array}$ | 4.445 | 17 . 17 | 150 | |
| 4 2 | 3,630 | 18 . 18 | 134 | |
| | 2,722 | 19 . 19 | 120 | |
| | | 20 20 | 108 | |
| -29 - 28 | 2,151 | 21 . 24 | 75 | |
| v 1 | 8,712 | 25 . 25 | 69 | |
| 4 ** 2 5 ** 3 | 4,356 | 27 . 27 | 59 | |
| 5 ** 3 | 2.904 | | 48 | |
| 5 + 4 5 + 5 | 2.178 | 1 00 00 | 27 | |
| | 1,742 | 40 • 4') | | |
| $5\frac{1}{2}$ " $5\frac{1}{2}$ | 3,417 | 50 "30 | 17 | |
| 6 ** 6 | 1.210 | 60 ** 60 | 12 | |
| 6 <u>1</u> · · · (1 | 1,031 | 66 " 66 | 10 | |

Ritchen Garden & Agricultural Seeds.

ASPARAGUS. CABBAGE. ENDIVE. Green Curled New Giant. Early York White Curled BEANS. Large York EGG PLANT. Sugar Leaf Early Mazagon White Early Battersea Broad Windsor Purple Early Vannack Taylor's Large do LEEK. Atkins'Matchless) Long Pod Large Flag "hilling's Queen KIDNEY BEANS. Musselburgh [true] Enfield Market) Neu Yellow hix Weeks Late Quintal 8c. LETTUCE. Black Speckled fine St. Denis Paris Coss White do Large Drumhead Curled Silecia Royal Dwarf Late Bergen True Malta Early Valentine Flat Dutch Victoria Cabbage 'Lima or Butter Beans Red Dutch Case Knife MANGEL WURZEL. Savov Green Curled Scarlet Runners Red Globe " Marcilen (New BEET. Long Red " Cattle's (new Long Blood New Yellow Globe Dwarf) Extra Long White Sugar Beet Early Turnin-rooted CELERY. MUSK MELON. BORECOLE or GREENS Fine Green Fleshed. White Solid German Greens Fine Scarlet Fleshed Scotch Greens Led Solid Mmorea BROCOLI. Seymour's Superb Nutmeg [*fine*] Early Purple Cape Cole's Solid Red Several other choice New Crystal Early White Cape " sorts New Walcheren (*fine* White [superb WATER MELON. CAULIFLOWER. CRESS. Long Island Early London Citron Common " French . MUSTARD. Late French Curled Extra White Large Asiatic (New) NASTURTIUM. 🖱 CUCUMBER. CARROT. Yellow Early Horn Long Prickly New Dark Dutch Horn Short Prickly ONION. Long Orange Early Frame Large Pale Red Red Altringham Long Ridge Weathersfield Large Fine Selected do Manchester Prize Red Red Surry And several other White Silver Skined White Belgian (for choice sorts. Large Yellow field culture)

PEPPERS, RHUBARB, HERBS. Summer Savory Large Red Scarlet Winter Savory Small Red Giant Sweet Marjoram Myat's Victoria Cherry Pot Marjoram PARSLEY, SOUASH, Sage Curled Thyme Acorn Double Curled SummerBoston Squash Fennel Myat's Matchless, for Winter Balm do garnishing; Vegetable Marrow Lavender Rosemary PARSNIP. SEED POTATOES. Rue Dutch Hollow Crown Early Ash-top Basil " June do Long Smooth White Carraway " Gold Finder PUMPKIN. MISCELLANEOUS, " Shaws Salsity Common Field Several late varieties Scorzonera New Large, yellow SPINACH. Sea Kale PEAS. Round English Rye Grass Early Frame American Red-top do Prickly Early Emperor Kentucky Blue Grass TOMATO. Early Kent American Orchard do Bishop's fine Long English Lawn Grasses Large Red Podded **English Potatoe** Yellow Burbridge's Eclipse Onions ŝ New Red, very large Тор Fairbeard's Champion 44 TURNIPof England Shallots Royal Dwarf For Garden Culturc. Knight's Tallow Mar-Asparagus Roots Early White Stone row Giant Rhubarb Roots " Snow Ball Knight's Dwarf Do. Cabbage, Cauliflower, " Maltese, yellow White Spanish dwarf Celery and Brocoli Flack's New Imperial plants in their sea-TURNIP. Blue Imperial son For Field Calture White Marrowfat Plum, Cherry, Apple Dwarf Sugar, with eatand Pear Trees Swedish or Ruta Baga able pods Purple top Swede, fine Red, White & Black Laing's Improved **Currant Bushes** RADISH, Swede Gooseberries, fine sorts Early Frame Green Top Swede Hardy Roses, all sorts Long Salmon Yellow Alteringham Flowering Shrubs Herbaceous Scarlet Short-top Robertson's Golden Flower Scarlet Turnip Yellow Roots, &c.,) new With a general assort-ment of all other Hor-White Turnip Orange Jelly (sorts) Black Spanish Yellow Aberdeen ticultural and Agricul-Rose Olive Shaped White Globe Seeds and Roots.

FLOWER SEEDS.

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| ANNUAL, BIENNIAL AND PERENNIAL. | | | | |
|---------------------------------|--------------------------|--|--|--|
| African Marigold | Eutoca viscida | Palma Christi | | |
| Agrostis Pulchella | " Wrangleana | | | |
| Ammobium Alatum | Flos Adonis | Penstemon, sorts | | |
| Anagallis Indica | Foxglove | Petunia, white | | |
| W New Blush | French Marlgold | " Red | | |
| Anterrhinum,finemix'd | | Pheasant-eyed Pinks | | |
| Browallia Elata, blue | Gillia, mixed " | Phlox Drummondii | | |
| Brachycoma Iberidi- | Globe Amaranthus | Polyanthus | | |
| folia | Godetia vinosa | Poppy, carnation | | |
| Balsam, fine dbl. sorts | " Rubicunda | " double white | | |
| Bartonia, Golden | Helichrysum (var.) | " new French | | |
| Briza maxima | Hibiscus Africanus | Portulaca splendens | | |
| Cacalia Coccinea | Hollyhocks, fine sorts | Russian Violet | | |
| Calandrina grandiflora | Ipomea Burredgii | Salpiglossis Picta | | |
| Candytuft, White | Ice Plant | Schizanthus [var.] | | |
| " Purple | Indian Pink | Sensitive Plant | | |
| " Normandy | . broad-leaved | Sphenogyne Speciosa | | |
| Canterbury Bells | Ipomopsis picta | Stock, ten week … | | |
| Carnation | Jacobea double | " scarlet | | |
| | Kalfusssia Dwf blue | " German in ten | | |
| China Aster[fine Ger- | | " varieties | | |
| man sorts | Larkspur Dwarf | " Brompton | | |
| Cleome Speciosa | " Rocket | " Virginian | | |
| Clarkia grandiflora | " Tall Rocket | | | |
| " Pulchella | " Branching | Sweet Peas, fine mix'd | | |
| " Alba | " Double White | | | |
| Cockscombs,fine Dw'f | | Sweet Sultan | | |
| Columbine | Lavatera, mixed | Sweet Scabious | | |
| Convolvulus Major | Lavender, sweet | Sweet William | | |
| " Minor | Lotus Jacobeus | Tropæolum canariensis | | |
| Coreopsis Drummondi | Lupins [fine sorts] | Thunbergia alata | | |
| " Tinctoria | Malope trifida | Viscaria oculata | | |
| Cowslip | Martynia Proboscida | Wallflower, dark | | |
| Collomia Coccinea | Madia Elegans | Zinnia elegans | | |
| Cuphea Viscosisima | Nemesia floribundia | | | |
| Daisies, single | Mignionette, sweet | | | |
| Datura Alba | Nasturtium, tall | NOTE. | | |
| Dolichos Lablab | " new crimson | The assortinent of Fields | | |
| Ecremo caspus scabra | | Seeds embraces a great | | |
| Eschscholzia Cristata | " grandiflora | many more varieties, but the want of space prevents | | |
| Camorinea | " striata " A tomaria | enumeration of all their | | |
| Erysimum, orange | 11(0)///14 | names. PRICE, 3d. per | | |
| flower | l Nigella, dwarf | paper, or 2s. 6d. per doz. | | |

Directions for Sowing and Raising ANNUAL FLOWERS.

(From Breck's Book of Flowers.

The plants generally known as Annnals, are raised from the seed, perfect their flowers, mature their seed the same season, and then perish. There are some flowers, however, cultivated as Annuals, that are such only in a northern climate, being in their own more congenial region perennials, or blemuials.— Among them are the Verbena, Chriscis, or Eschscholizia, as it was formerly called, Commelina, Mirabilis, and many others. This class of Annuals may be kept through the winter in green-houses or in any light cellars. Annuals are most appropriate for these who are changing their abode from year to year, as from these alone a fine display may be kept up the whole season, with the exception of the versal months, and this deficiency may be supplied by having a choice collection of perennials, grown in pots, which can be plunged in the ground, and thus removed at any time when it is necessary to change the residence.

No collection of plants can be perfect without an abundance of Annuals, as they can be disposed of such a way as to succeed the perennials, and keep up a continuous bloom in all parts of the garden through the season.

Annuals may be divided as follows :---hardy, half-hardy, and tender.

Hardy Annuals are such as may be sown in autumn or very early in the spring, as all the Larkspurs, Chriseis, Clarkea, Asters, Candvutts, &c. Halfhardy are those which will not bear a hard frost, and therefore not proper to plant in the open ground before the middle or last of May, as the Balsam Cockscomb, Marigold, &c. Tender Annuals can hardly be brought to perfection without starting them in artificial heat, in a hot-bed or otherwise, and are very sensitive of cold, as the Cypress vine, Thumbergia, Ice Plant, Sensitive Plant, &c. Many of these, in a very warm season, will succeed tolerably well if planted about the lst of June; but to have them in perfection they should be raised in a hot-bed, in pots, and turned out in the ground the middle of June.

Before sowing Annuals, the soil in which they are to be grown should be made light and rich, and very finely pulverized, as many of the seeds are very small, and require every advantage and care to get them up. The small seeds must receive but little covering, and of the finest earth. In sowing these, my practice is to sow them in patches six or eight inches square. The soil having been well prepared, I settle the ground well with the foot or a small piece of board, so as to make an even, somewhat firm, surface. Then take some very fine soil and sift or strew over them, covering the seed not more than one eighth of an inch deep, after which press the soil again with the board gently. It is now of great importance that the seeds, as they vegetate, should be protected from the scorching sun; an evergreen bough is as good as anything to shade them. The soil must not be permitted to get dry until the young plants have acquired some strength; after which they may be left to take their chance from the effects of sun or dryness. When the plants are of a proper size, and the weather suitable, they may be taken up with a transplating trowel, and set where wanted. A small patch of this description will afford plants enough for any common garden. In removing them a number of them may be taken up together without disturbing the roots; but when the plants have become established, all may be cut off except the strongest ones. As a general rule, a single plant gives better satisfaction than when a number are grown together, except when planted in nusses, or where there is to be a group. The beauty of many Annuals is completely destroyed by huddling them together. Give every plant room according to its habits. A single plant, well trained, may be made very beautiful; while a number of the same species, grown together without sufficient room, would be worthless.

Laikspur, and many other seeds, should be sown where they are to remain. A bed of Double Rocket Larkspur, well managed, is almost equal to a bed of Hyacinths, when in bloom. This succeeds best when sown late in autumn or very early in the spring. The seed may be sown in drills, eight or ten inches apart, in beds, and plants well thinned out. Larkspur, and many other hardy annual seeds, if sown late in autumn, and lie dormant all winter, will give much stronger plants than the same kinds of seed sown very early in the spring, notwithstanding those sown in the spring may appear above ground as soon as those sown in autumn. The reason probably s, that the autumnal sown seeds are so prepared, by the action of the frost, that they start will greater vigor, and consequently are more robust than the spring sown seeds.

Some seeds are difficult to germinate. Cyprus vine is an example. This requires scalding, to facilitate its germination; or if the hull is carefully taken off with a penkuife, so as not to injure the germ, the object is effected, and it will immediately vegetate. The seeds of Gomphena globosa (Globe Amaranth) is encased in a thick coating of woolly substance, which greatly retards vegetation. This, with the hull, if taken off, causes the germ to push immediately; or, if the seed is soaked in milk twenty-four hours, it will soon start; but, if planted with the coating on, or without soaking, vory few will appear abovo ground.

As a general rule, the depth of planting flower seeds is to be governed by the size. For example, the Sweet Pea and Lupine may be planted an inch deep, and so in proportion. Annuals have a pleasing effect when planted in masses, particularly when the pleasure-ground is extensive. For this purpose the Verbenas, of various colors, Portulaccas, Nemophylla, Chriseis, Phlox, Drummondii, Coreopsis Drummondii, Candytufts, and many other dwarf plants, are desirable. Beds of any of these, or others of similar habit, in a well managed grass-lawn, are very ornamental. The beds should be either round, oval, starry, but never square, diamoned-shaped, or triangular. Masses of Annuals may be so arranged as to make a grand display in the common flower-garden. We have seen the walks of an extensive flower-garden deeply edged with a wide border of crimson and scarlet Portulaceas; and, throughout the whole garden, all the annuals, and other plants, in fact, were planted in masses. We have never seen a better managed garden than this one. It contained about an acro of ground. Not more than twenty or thirty kinds of annuals were cultivated in, the garden, and of this class of plants mo e than one half of the ground was filled. They consisted of every variety of Doubles Balsams, Gorman Asters, Drummond Phiex, Coreopsis, Amaranths, Verhenas, Portulaccas, Double-China Pinks, Petunias, Mignionette, Cockscombs, Gilliflowers, &c.

Brief Hints on Sowing and Raising CULINARY VEGETABLES.

In selecting seeds, the first thing to be attended to is to choose the best to be had, and, if possible, obtain them from a responsible seedsman. Never buy those which are "cheap" because they cost less, for they will prove the "dearest" in the end.

Most kinds of Seeds grow more freely if soaked in soft water from 12 to 48 hours before sowing. Seeds of a hard nature, such as blood-beet, mangel wurzel, nasturtium, &c., often fail from want of attention to this circumstance. Indian Corn, Peas, and numerous others, soaked four hours in a tepid solution of chloride of lime and water, mixed in the proportion of one-fourth of an ounce of the lime to a gallon of water, and then sown in the ordinary way, have been known to throw out germs in twenty-four hours.

The seeds of common garden cress, immersed in oxygenated muriatic acid, will germinate in six hours; whereas, when immersed in water alone, they will not show signs of vegetation in less than thirty hours.

Rolling the ground, after sowing, is very beneficial; and will assist in making the seeds vegetate more freely. Where a roller is not at hand, it may be done with the back of a spade.

Kidney, or *French Beans*, may be planted any time in May, in drills two inches deep, the beans two inches from each other; the drills about 18 inches apart. If a regular succession is required, sow a few every few weeks, from the 1st of May to the 1st of July.

Broad, or Windsor Beans, do not succeed well in this climate, the summer heat coming on them before they are podded, which causes the blossoms to drop off. The best soil to grow them in is a rich, stiff clay, and on a northern border, shaded from the mid-day son. Sow in drills two feet apart, the drills two inches deep, and the seeds three inches apart.

Blood Beet, Long and Turnip, may be sown in a good, rich, deep soil, about the first week of May. Draw drills about a foot apart and one inch deep; sow moderately thick; when the plants are up strong, thin them out the distance of six inches from each other in the rows.

Brocoli and Cauliflower require a deep, rich soil, of a clayey nature, and highly manured. To produce early Cauliflower, or Brocoli, the seed ought to be sown in a hot bed, early in March. When the plants are quite strong and hardy they may be planted out in the garden, about the middle of May. Plant in rows, two feet square. The kinds that will do well in this climate are the Early London and French Cauliflower, Purple Cape and Walcheren Brocoli.

Cabbage, both early and late, may be sown any time in May. The best situation for raising the plants is a rich, damp piece of ground, partially shaded. Seed sown in a situation of this kind is not so subject to be destroyed by the black flea. When the plants are strong they may be planted out in rows, and managed the same as directed for Cauliflower. The best kinds for summer use are the Early York, Battersea, and Vannack; for winter use the Drumhead, Large Bergen, and Flat Dutch.

Cucumbers may be sown in the open ground any time in May.— They require a good, rich soil. Sow in hills, four feet apart, leaving only three plants on each hill. The cucumber and melon vines are liable to be attacked by a yellow fly or bug. Soot, charcoal dust, or soap suds, applied to the plants, will assist in keeping them off.

Musk and Water Melons may also be sown at the same time, taking care to sow the different kinds a good distance apart from each other, as they are apt to mix. Plant in hills, six fect square, leaving only three plants on each hill. When the plants have grown about six inches, stop or pinch out the top of the leading shoots; which will make the plants throw out lateral shoots, on which you may expect to have fruit.

Carrots.—The most suitable ground for growing Carrots is a deep, rich soil, that has been well imanured the previous year. Sow any time in May, in drills one foot apart, and one inch deep. When the Carrots are up, thin them out, four inches apart, and keep the ground free from weeds. The kinds that are generally sown in gardens are the Early Horn, Long Orange, and Red Surrey; for field culture the White Belgian and Altringham. The produce of one acre of field Carrots, when properly cultivated may be rated at from 500 to 800 bushels. In cultivating them on the field system, the drills ought to be two feet apart, and the Carrots thinned out, at least, twelve inches asunder.

Celery.—This vegetable is much esteemed as a salad. It requires considerable attention to grow it to perfection. To have early Celery the seed requires to be sown in a hot-bed, in the month of March; for winter Celery, the seed may be sown in the open ground, any time before the middle of May. Sow on a small bed of fine, rich earth, —beat the bed down with the back of the spade; sift a little fine earth over the seed; shade the bed with a mat or board until the plants begin to appear. Celery plants ought to be picked out into a nursery-bed as soon as they are two or three inches high. Cut their roots and tops a little, before planting; water them well, and shade them from the sun until they begin to grow. Let them remain in the nursery-bed about one month, after which they will be fit to transplant into the trenches. The best sort of soil to grow Celery in is a deep, rich loam, and in an open part of the garden. Mark out the trenches a foot wide, and three fect between each trench. Dig the trenches one foot deep, laying the earth equally on each side.— Put three or four inches deep of well rotted manure into the bottom of each trench; put a little of the surface soil over the manure; dig it well-up, incorporating the soil well with the manure; dress the plants by cutting off the long leaves and the ends of the roots. Plant in single rows, along the centre of each trench, allowing six inches between each plant. Water them well, and shade them from the sun until the plants begin to grow. In earthing up Celery great care should be taken not to cover the heart of the plant.

Lettuce is easily raised from seed, which may be sown from the 1st of April to the end of June. If good headed Lettuce is wanted, the plants should be transplanted out on a rich piece of ground, in drills, 12 inches apart, and six inches in the drill. The Malta, Green Coss, and Victoria Cabbage are the most suitable kinds to sow, as they head without tying up.

Onions.—The yellow and large red are the best for a general crop. The ground for Onions should be well prepared, by digging m plenty of well-rotted manure. The seed may be sown from the middle of April to the middle of May. Sow in drills, one inch drep and 12 inches apart. When the young Onions are up, thin them out to the distance of three inches apart.

Parsnips require a deep, rich soil. Sow in drills, one inch deep, and the drills 15 inches apart. Cultivate the same as directed for Carrots.

Radishes should not be sown in the open air sooner than the middle of May. They require a deep, sandy soil, that has been well cultivated and manured the previous year.

Rhubarb is a perennial plant, and may be raised from seed. Sow about the middle of May. When the plants are one year old, they should be transplanted into a very deep, rich soil, in rows three feet apart. The foot stalks of the leaves should not be cut until the plants are two years old.

Saisify is an excellent vegetable. The roots, when properly cooked, resemble oysters in flavor. The seed may be sown from the 1st of April to the middle of May. They require the same kind of soil and cultivation as directed for Carrots.

Spinach is an useful vegetable, and very hardy. Seed sown in the month of September will stand over the winter, and come in for early greens in the spring. For summer use, seed of round Spinach may be sown from May to July. It requires a rich soil. Sow in drills, one foot apart.

Tomatos are much cultivated for their fruit. To have them early, the seed should be sown in a hot-bed, early in March. When the plants are a good size, and Spring frosts are over, plant them out in the garden ; let the plants be four feet apart. Plant on a south border near a fence, and they will produce abundance of fruit.

- Turnips.—One of the best sort for the garden is the Early White Stone, which may be sown from the middle of May to the end of Aug. Sow in drills, fifteen inches apart, and thin out the plants to eight inches asunder. Field Turnips, such as Swedish, Aberdeen Yellow, &c., may be sown in drills, two feet apart, about the middle of May. White Globe, and Flat Norfolk, will do to sow about the middle of July. Turnips are very apt to be eaten by the black flea. A good remedy is to steep the seed one night in train oil. This will greatly promote germination, and the growth of the young plants.

JAMES FLEMING.

Seedsman and Florist, Yonge st., Toronto.

List of Books for sale by James Fleming.

Prize Essay on Manure. An Essay on Manures, submitted to the Trustees of the Massachusetts Society for Promoting Agriculture, for their Premium. By Samual L. Dana. Paper, 25 cts.

American Bird Fancier.

By D. J. Browne. 25 cts.

Family Kitchen Gardener.

By Robert Buist. \$1 25.

American Flower Garden Directory.

By Robert Buist. 25 cts. Johnson's Agricultural Chemistry.

New edition with Appendix. \$1 25. The Rose Culturist.

A Practical Treatise on its Cultivation and Management. 25 cts. The American Fruit Book.

By W. S. Cole. 50 cts.

Book of Flowers.

By Joseph Breck. 75 cts.

The Young Gardener's Assistant.

By Thomas Bridgeman. §1 50. The Florist's Guide.

By Thomas Budgemon. r. 50 ets.

The Kitchen Gardener's Instructor.

By Thomas Bridgeman. 50 cts.

Ladies' Companion to the Flower Garden. By Mrs. Louden. Edited by A. J. Downing.

