

### Building the Sunken or Pit Type Hotbed

Of the several types of hotbeds in general use the sunken or pit type is, all things considered, the best for the raising of early plants from seed. This style of bed is constructed by excavating a pit six feet wide and two and one-half feet deep and as long as necessary to accommodate the number of 3-by-6-foot sash it is desired to use.

The sides of the pit are boarded up with rough lumber nailed to posts which may be placed three feet or more apart. If some degree of permanency is desired, good material will need to be used. Chestnut lumber is very serviceable and reasonably cheap; spruce comes next in point of durability and cheapness. The sides of the pit should be raised above the surface of the ground 20 inches at the back and 12 inches in front. This will provide ample pitch to the sash for shedding rain and also be of sufficient angle for good attraction of the sun's rays and heat. Good sash should be used.

The location of the hotbed should be chosen where the natural drainage is good and, if possible, where there is a good windbreak at the north side. If a suitable sheltered spot is not available then a tight board fence six feet high and extending several feet beyond each end of the hotbed should be erected to break off the cold north winds. Without such a windbreak it will be almost impossible to raise early plants successfully in the hotbed. The windbreak should be about five feet away from the north side of the frame.

The heating material for the hotbed should be horse manure fresh from the stable, to which should be added, when accessible, one-half its bulk of forest leaves. If these are not available straw or hay may be used. The manure and added material is to be thoroughly mixed and formed into a conical heap to undergo fermentation. In the formation of this heap it should be trodden down in successive layers of a foot in depth until the heap is four feet or more in height. The base of the heap should be of sufficient diameter to insure good fermentation in the severest winter weather. All the material used for heating should be well dampened before putting it in the pile or the fermentation will not be evenly distributed. Care must be taken that no frozen material is put in the heap or fermentation will be slow and may greatly interfere with the operator's plans of an early sowing of seed.—Rural New Yorker.

#### Practical Cauliflower Culture.

Many consider the culture of cauliflower the same as cabbage. In many respects it is similar, but it differs in a number of ways.

In many of the southern states the cauliflower plants are set out in Autumn and they live through the Winter and head up quite early in the Spring. In the central or northern portion of the country, the plants are grown in early Spring, and kept in hotbeds of only moderate heat, or in cold frames, and in either case should be given plenty of room and a free circulation of air to prevent the plants being too spindling or tender. For late or Autumn cauliflower, the seed may be sown in May or early June.

Very rich earth and abundance of moisture are the two most important factors in the culture of cauliflower. Close proximity to lakes, streams, or the sea helps to insure a good crop, as the dews are so much heavier.

Frequent cultivation is very essential. In field culture it is best to plant four feet apart each way to permit cross-cultivation. In the home garden the plants may be set as close as two feet each way, and with care the soil may be frequently stirred with the hoe.

The enemies of cauliflower are the same as of cabbage, and the remedies are the same. If the soil is rich and cultivation frequent, the plants will overcome any ordinary amount of insect attacks.

A solution of saltpetre, one teaspoonful to a gallon of water, is excellent for the worms and will act as a tonic to the plant.

#### Dutch Bulb Acreage.

Our Consul-General at Rotterdam, Holland, states that the area devoted to bulb growing in the Netherlands is about 5888 hectares (about 14,500 acres). About a third of this area is devoted to the growth of "top" vegetables, every other year, in order to rest the land from its drain for underground crops. The National Bulb Growers' Society has 3000 members.



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### Cherries Reliable and May Be Grown to Profit

WE all like cherries. There is no fruit grown on the farm that is more welcome, and it always finds a waiting market if one has a surplus. Other fruits may bear part of the time, some nearly every year, but none can equal the cherry for reliability in that line. It seldom fails to yield a crop.

By planting the different varieties the season can be made very long, and then they are so easily put up in so many different ways that they furnish a good winter supply. Cherries lose but little of their rich flavor in canning or putting up in any way. There are many fruits that are almost completely changed in flavor when heated, but this is not so with the cherry. Most people prefer them cooked to fresh.

The early cherries are not quite as rich as the later ones, but they are good, and they are the most certain yielders. I have had several Early Richmond trees to bear every year for seven years with not one complete failure, and only once that there was even a heavy reduction in the yield.

The Montmorencis are a fine type of cherries but they are not so reliable everywhere. In some localities they are much more reliable bearers than in others. The Early Richmond and the Morellos are both heavy bearers everywhere that I have ever seen them grow, but the Morellos are apt to be injured by dry weather in the Summer, as they are so late. I have never known my Morellos to fail to set a fair amount of fruit, but the dry weather and worms have destroyed the crop several times. Yet this occurs so seldom that one cannot afford not to grow them, for they are of the finest flavor. The fruit should be allowed to get perfectly black before picking, for they would be almost green if picked when colored like the Richmonds are when perfectly ripe. They are puckery when gathered green, but are rich and sweet when ripe.

Cherry trees do not take up as much room as apples or pears, and they succeed well as line trees, planted about 10 or 12 feet apart.

Plant cherry trees around the chicken range, and plums inside it and you will have a supply of both fruits, as the droppings from the poultry keeps the soil rich, and they will prevent insects destroying the plums. Both of these fruits are always marketable at good prices if you have a

surplus, and they are not hard to gather.

#### Giving Plants Early Start.

An Ohio farmer has provided himself with means for giving plants a start by letting them begin their growth in the warmth of a kitchen stove or the sunlight of a kitchen window. After the weather has become warm enough, the young plants are reset. Its service is appreciated where a hothouse or hotbed is not available.

It consists of a shallow wooden tray with sides about three inches high and 18 by 22 inches measurement otherwise. The tray is then filled with 20 short tubes placed on end. These are provided by removing the two ends of ordinary corn or tomato cans by melting the solder that attaches them. One of the side pieces of the tray is removable, merely resting in slots.

When the tubes have been filled with earth, the seeds planted and the time arrived for the young plants to be transplanted, the tray is carried to the garden, the loose side piece removed and a stiff piece of tin about eight inches long and as wide as a tube is slipped under a tube and the tube lifted from the tray and set in the hole previously made in the ground where the hill is desired. The tin is then withdrawn and the loose earth filled in around the tube. The tube is then worked up through the soil, leaving its contents in the hill.

The plants are thus reset without the soil being loosened from the roots, which is the fable with so many transplanting methods.

#### Celery Storage.

Hotbeds and cold frames are quite satisfactory for storing celery. They may either be dug out deeper or have another set of boards on top to give the required height. The plants are set in the frame close together and then covered with boards lapped to shed rain. In very cold localities such frames are covered with sash, over which are mats covered with boards. Ventilation must be given on warm days by blocking up the sash.

Celery is also stored satisfactorily in trenches, with the boards used in blanching nailed in V shape and placed over the top. If warm weather follows the troughs are blocked up to admit air. When frost comes a light furrow is thrown up along the boards and later manure is thrown over them, but this trench plan is usually adopted when the crop is to be sold early in the winter. Tops

of celery should always be dry when it is stored, and some soil is lifted with the plants. It must be stored before hard freezing.

#### Flower Blossoms.

The blooming season of almost all annuals may be greatly prolonged, not only by picking off the seed heads, but by cutting back severely, the entire plant, which will, except in a season of severe drouth, make a fine, new growth and blossom profusely. This is especially true of the cornflowers or bachelor buttons, marigolds, larkspurs, and candytuft, and also of those general favorites, the nasturtiums, or tropaeolums, not, however, taking off the central stalks of these, but picking closely every day to prevent the formation of seed.

Asters unquestionably take rank as the finest of midsummer annuals, and their development and training will amply repay any extra care that may be bestowed. They do not thrive in stiff clay soils, and before sowing the seed or transferring from the hotbed the border designed for them should have a specially prepared soil of loam, rich compost and sand.

Do not plant flower-plants too close together. Verbenas should be at least 18 inches apart; petunias the same; phlox a foot; balsams a foot; pansies 10 inches; zinnias 18 inches; marigold two feet; poppies 10 inches. If flowers are too close in the bed they will not make as trifty a growth nor will the flowers be as large and plentiful.

If the lawn is a little bumpy, fill the depressions a little at a time with a fine garden soil. Put half an inch of soil on at a time and let the grass grow through it before putting on any more. In this way a lawn can be made smooth in the course of a season or two without being torn up and lying bare for months.

Keep flower beds out of the center of the lawn. They show with better effect if used as borders for walks and around the sides of the lawn.

Do you want a soft, thick turf on your lawn? If so, mow it often and let the clippings lie where they fall. They will soon settle in the grass and after a while they will make a soft, cushiony coat, which keeps the soil from drying out too much and fertilizes it as they decay.

When sending eggs by parcel post wrap each in tissue paper.