

have to submit to the gouge and the saw and the knife, with all their attendant cruelties and necessary tyings and confinements, in order to perform the operation, we don't wonder they abort their calves."

A Talk in the Vegetable Garden.

EDS. COUNTRY GENTLEMAN—In a previous article I told how we managed to have a succession of peas and green corn through a long season. I believe however that I did not say that the corn may be made a week or more earlier by a little stimulating manure in the hill, but especially by early and constant cultivation. The first day you can see the corn coming through the ground, go over it with a garden rake or light hoe and break the crust, add from that time until it begins to show tassels keep it always clean and the surface mellow. This early planted corn and your first planting of beans may be caught by frost, but a little watchfulness and labor will enable you to save them. The trouble is that too often we persuade ourselves that there is not going to be a frost and take the risk, but it is wiser to protect the plants, when there is not frost, than to neglect them and run the risk of losing them. If the mercury does not go above 50° in the middle of the day and begins to fall by the middle of the afternoon, with the wind northwest and a clear sky, protect your plants. The best way I know of is to use dry saw dust, and the gardener should always have a supply of it as dry as it can possibly be. It is light and clean to handle and will not break or cripple the plant, and a single handful of it dropped on a hill of corn or beans will protect them thoroughly, and the next day with a light broom you can go over the rows very rapidly and brush it off and it will not injure the plants in the least. If any one knows a better way to protect plants from frost I should be glad to have them report it.

To have tomatoes by July 4, the seed should be sown in February. A cigar box will hold an abundant supply for a large family. Make a box 6 inches deep, and 10 by 16 inches, so that a pane of glass will cover it. This will hold two cigar boxes and enable you to start some other plant. Put two inches of saw dust in the bottom, set in your boxes and pack saw dust all around them level with the top. Now fill them with sifted earth, compact it and sow the seed. Keep the box in a south window, and protect it cold nights by an old coat. You can keep the plants in this a month, before they begin to crowd; then make a hot bed and prick them out, three inches apart each way. When they begin to crowd again, remove every other row and every other plant in the remaining rows to a cold frame, for by this time spring will be well advanced, and they will not need glass, but can be covered with boards on cold nights or cold cloudy days. If they are set ten inches apart each way they may stand here until they blossom and set fruit, and if the ground is thoroughly soaked and a ball of earth taken up with each, they will scarcely be checked in their growth by transplanting. This is some trouble but a single bushel of tomatoes the first half of July, will usually bring enough to pay for the care of all the plants. The plants for the late crop of tomatoes can be grown in a cold frame or even in the open ground with as little trouble as is required for cabbage plants. The season may be prolonged in the fall by covering a few square rods of late-set plants with light corn fodder when frost threatens, or the plants may be pulled up carefully and put in the cold frames with the fruit adhering to them.

To get the most out of a garden the land should be double-dropped as much as possible. Never let the lettuce, radishes, spinach and early peas stand a day after they are past use, but remove them, stir the land and plant with some quick maturing crop. I always plant these vegetables adjoining, as they mature about together, and I can then clear a strip

across the garden and work it with the horse and cultivator. The first planting of these will mature in June, and may be followed by beans, corn, cucumbers or late tomatoes. I always follow early potatoes with winter squashes, for as they will cover the ground if planted eight feet apart on every third row, a few of the hills can be dug early, and the seed put in and the crop have a month if necessary to mature in after the squashes are planted, before the vines will run to necessitate the digging of the potatoes. We always dig first a few hills around each squash hill. I have not failed in many years to grow a full crop of winter squashes in this way, and still not dig the bulk of the potatoes until the vines are dead, and the crop matured so as to keep perfectly. A few square rods of our garden we always devote to flowers. We plant a row of sweet peas 20 feet or more in length, and by a little care in clipping off blossoms and the pods that first set, we keep them in bloom for two months, and get a world of pleasure from them. A bed of daisies, petunias, phlox, a few dahlias and pinks, and a bed of everlasting grown in a corner of the garden nearest the house gives more pleasure, and are less trouble than if grown in the dooryard. Did I mention that our vegetable garden is directly back of the house within 25 feet of the kitchen door with no fence between it and the house, and so the good wife can look at it as she is about her work? We have a high fence between it and the orchard where the poultry run, and as we do not want chickens in the yard or garden, I prefer this to paling in the garden.

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WALDO F. BROWN.

QUESTIONS ANSWERED

"Corinthian" sends us the following queries:

3. What has been the result of your experiments with "Floats" as a supply of phosphate?
4. Is cotton-seed meal safe to feed to pigs from two to five months old in any quantity whatever, if fed with shorts, apples, etc?
5. Is linseed meal fit to feed to veal calves, or other calves one month old and over, which are being fed on skim milk?

3. While in our practice we have found the flour-fine South Carolina phosphate, called "floats," to be quite as effective a fertilizer as ground bone, yet we sometimes fear that we have committed an error in advising its use by farmers generally. Floats supplies absolutely nothing to the crop but phosphoric acid, and unless there is present with it in the soil a sufficient supply of available nitrogen and potash, you may put on floats in any quantity without appearing to do any good. It is most astonishing how hard it is to make the average farmer understand this elementary fact. Quite a number, reading what we have written on the subject, have undertaken to use the floats in place of a complete fertilizer; and these nearly all report, and some have written to the papers, that floats is absolutely useless. This is gladly picked up by fertilizer men, who make their money not out of floats, but out of the mixed fertilizer which goes by the name of "phosphate," and is printed with a sneer at our "theoretical notions." This way of calling a complete fertilizer a "phosphate," has become so general that it probably will never be corrected. The fact is very much to be deplored, for it confuses the minds of men destitute of chemical knowledge. The "floats" is a phosphate and nothing else; but the "phosphate" which is commonly sold contains not only "phosphate" but also nitrogen and potash, making it a complete fertilizer. No one who understands this would ever think of using floats alone upon land requiring a fertilizer. He must have some nitrogenous material to go with it, and usually some potash. The reason why we buy and use floats and bone is because we