

to leave it at a depth of not more than twelve inches beneath the surface of the earth. Where the surrounding land is level this tank may be located quite close to the building where, if covered with earth (and sodded over if desired), it will not cause any inconvenience. If more convenient, it may be placed any distance from the house, and the inlet pipe "E" laid along a mound or ridge of earth, and covered with earth to protect it from the frost; this pipe must, under any circumstances, have a slight continuous fall from the building too, and must enter the tank at the top as shown. If, however, there is a considerable slope to the land, the tank may be buried beneath the surface, it being borne in mind that the branches from pipe "D," which may be taken off at any distance from the tank, must not be more than twelve inches beneath the surface and must be perfectly level. From pipe "D" about every two feet ordinary "T" fitting will give just the desired length, are run branches of field tiles (Fig. 2). 4 inches in diameter, the total contents of which should be equal to the amount of water which will be discharged at each operation of the valve, and allowing 13 tiles to every cubic foot to be discharged, the

number required will be readily found. The bend connecting the tank to the system of sub-surface tiles should be of iron, solidly cemented into the bottom of the tank to allow of the caulking in of the valve with lead.

The valve described in this article, which is manufactured by the Dominion Flushing Valve Co., of 558 Dufferin street, Toronto, is the only thing of its kind which can be set at any level, will open and close automatically, and, as it needs no adjusting it can be put in by almost any person. It overcomes the only objection ever made to the septic tank system, viz., that when the emptying of the tank depended upon a servant or some other member of the family to put a plug at regular intervals, replacing it when all the liquid had escaped, it was sometimes forgotten and the tank overflowing caused the pipe between it and the house to fill up, thereby causing a great deal of annoyance and expense.

It will be noticed that a dividing wall is built in the centre of the tank to a height of about two inches from the top, the latter space being left for the free passage of fresh air. In this partition is built overflow "F," the lower end of which should be "caged" with wire netting,  $\frac{1}{4}$  inch mesh, to prevent

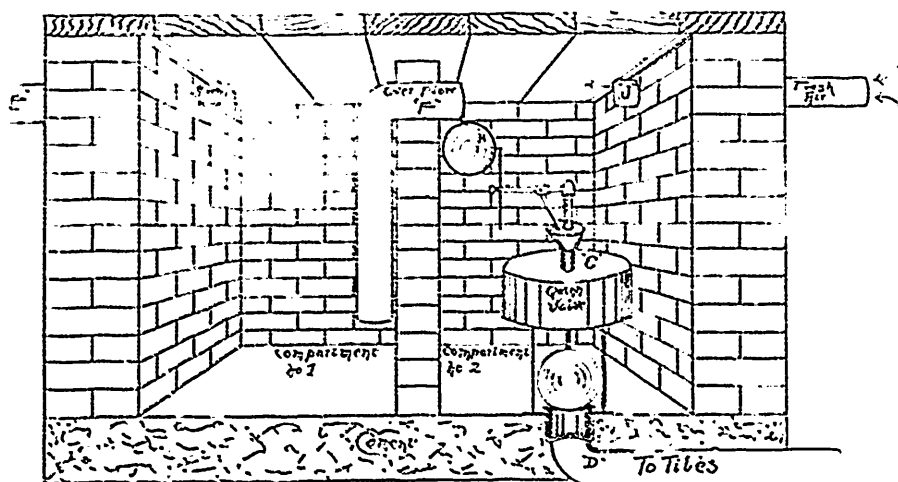


Fig 1.