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2,379,549

SUB-IRRIGATION DEVICE FOR THE PROPAGATION OF PLANTS

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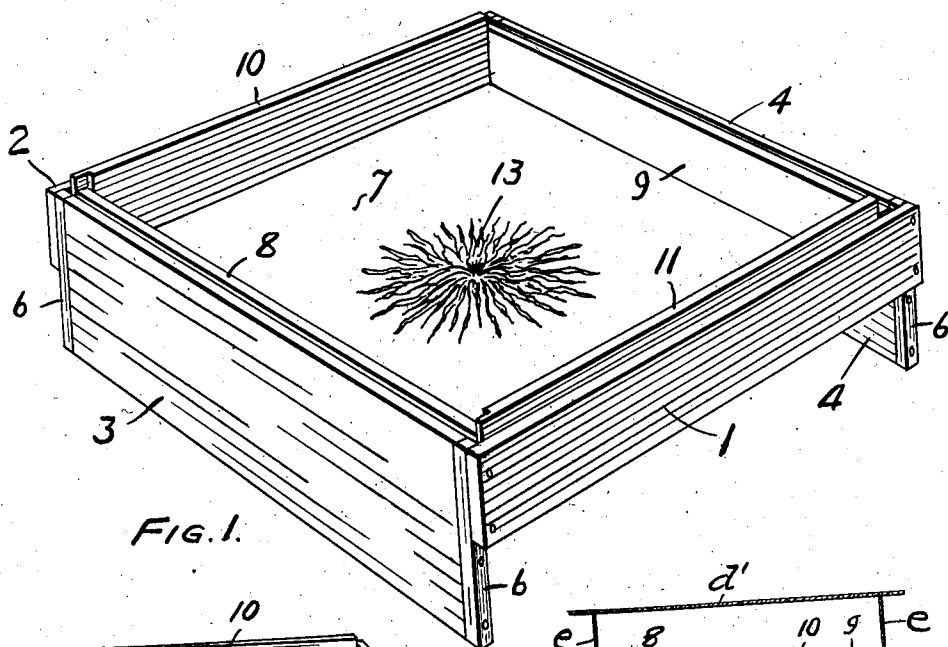


FIG. 1.

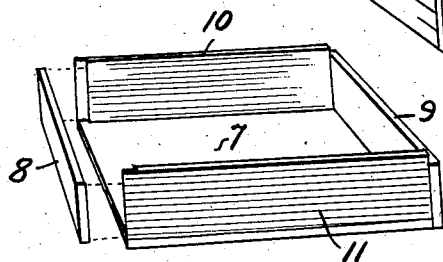


FIG. 3.

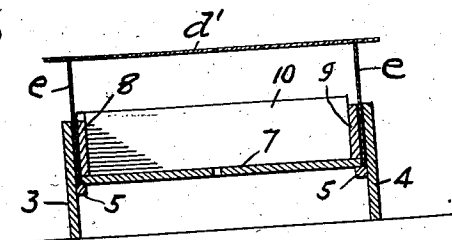


FIG. 4.

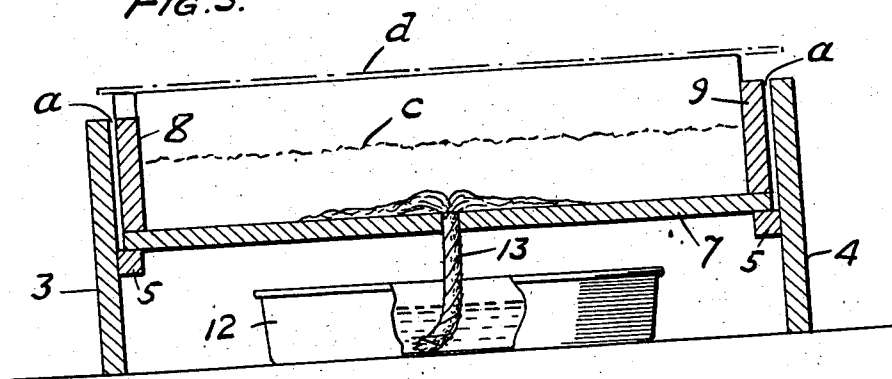


FIG. 2.

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SUBIRRIGATION DEVICE FOR THE PROPAGATION OF PLANTS

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Application September 17, 1942, Serial No. 458,692

1 Claim. (Cl. 47—38)

The principal object of the present invention is to provide a comparatively inexpensive and efficient device or equipment of the character mentioned which is simple, convenient and easy to operate and manipulate and which is capable of producing greatly improved results.

Other objects of the invention will appear from the following description at the end of which the invention will be claimed.

Generally stated, the invention consists in a hollow generally rectangular open top frame of which the end pieces are constructed with depending legs and which are provided on the intermediate portions of their inner faces with generally horizontal cleats terminating substantially at the inside faces of the side pieces of the frame, a generally rectangular tray adapted for insertion into and removable from the open top frame with clearance between and in respect to the cleats, the side pieces of the tray extending above the frame and constituting hand grasps and cover supports, an open top fluid receptacle arranged under the bottom of the tray, and a wick arranged through the bottom of the tray and having one end tasseled on the inside face of the bottom of the tray and the other end dipping into said receptacle.

The invention also comprises the improvements to be presently described and finally claimed.

In the following description reference will be made to the accompanying drawing forming part hereof and in which,

Figure 1 is a perspective view of a subirrigation device embodying features of the invention.

Figure 2 is a transverse cross sectional view of the same showing in dotted lines a glass or other cover.

Figure 3 is a detached perspective view drawn to a reduced scale and showing the wooden tray provided with a readily detachable end piece; and

Figure 4 is a cross sectional view showing the device arranged to give a greenhouse effect.

Referring to the drawing there is a hollow generally rectangular open top wooden holding frame. It consists of comparatively narrow pieces 1 and 2 and of comparatively wide end pieces 3 and 4 arranged with their top edges substantially flush and connected at the corners. The depending portions of the end pieces provide legs for supporting the frame in raised position. The intermediate portion of the inside faces of the end pieces 3 and 4 are provided with horizontally disposed cleats 5 that terminate substantially at the inside faces of the side pieces.

The end pieces 3 and 4 in which the grain of the wood runs horizontally are reinforced at their ends by wooden strips 6 in which the grain runs vertically. In this way accidental breakage of the leg portions is obviated. There is a generally rectangular grower unit, flat or wooden tray, Figure 3, and it is adapted for insertion into and removal from the open top of the holding frame with clearance indicated at *a* at the sides and ends of the same. The grower unit is constructed to be removably supported by the cleats 5 and consists of a flat bottom 7 and end pieces 8 and 9 and side pieces 10 and 11 which extend upward beyond the end pieces and beyond the side pieces of the supporting frame. One of the end pieces 8 is detachably fitted or mortised to and disconnected from the side pieces. 12 is an open top receptacle for water or plant feeding solutions and it is arranged under the bottom 7 of the tray or grower unit. 13 is a wick arranged through the bottom 7 of the grower unit and one of its ends is tasseled on the inside face of the bottom 7 and the other of its ends dips into the container 12. The broken line *c* indicates the level of sand, soil or the like in which the plants, seeds or cuttings are grown and it is watered or moistened by means of the wick 13. The wick 13 may be of fiber glass or other appropriate material. The high sides 10 and 11 of the grower unit or tray serve as hand grasps in lifting it into and out of the frame and placing it on a suitable bench or table. The loose end 8 of the tray is disconnected therefrom and readily removable in order to slide the soil or plants out of the tray onto the table where they can be readily separated for potting or transplanting. The high sides 11 and 10 of the tray serve to support a cover *d* of glass or moistening material and the low ends of the tray provide ventilation. The clearance at *a* provides ventilation and may also be availed to support glass pieces *e*, Figure 4, upon which the cover *d* is placed providing a greenhouse effect when necessary or desired.

Reference has been made to the use of wood because it is an advantage of the device that it can be made of that material. However, it is not the intention to limit the invention to the use of wood because other materials such as glass, pottery, plastic or metal, or combinations of them may be used, also paper and rubber.

It will be obvious to those skilled in the art that modifications may be made in details of construction, arrangement and matters of mere form without departing from the spirit of the inven-

tion which is not limited in respect to such matters or otherwise than the appended claim may require.

I claim:

A device of the class described consisting of, a hollow generally rectangular open top wood holding frame comprising, comparatively narrow side pieces and comparatively wide end pieces arranged with their top edges substantially flush and connected at the corners, the depending portions of the end pieces providing legs for supporting the frame in position to provide space beneath it for the accommodation of a container for water or the like, generally horizontal cleats provided on the intermediate portions of the inside faces of the end pieces and terminating

substantially at the inside faces of the side pieces, reinforcing strips arranged at the ends of the end pieces and at the corners of the frame to reinforce the legs; a generally rectangular wooden grower unit tray adapted for insertion into and removable from the holding frame with clearance at the sides and ends of the same for ventilation and for supporting sheets of glass, said tray having a flat bottom and side pieces and end pieces which extend upward beyond the side pieces, providing a support for a cover and for ventilation, one of the end pieces being detachably fitted to and disconnected from the side pieces and securely held in place by the supporting frame.

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