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A. L. HARRIS
DRAIN TROUGH COVER
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2,636,458

FIG. 1.

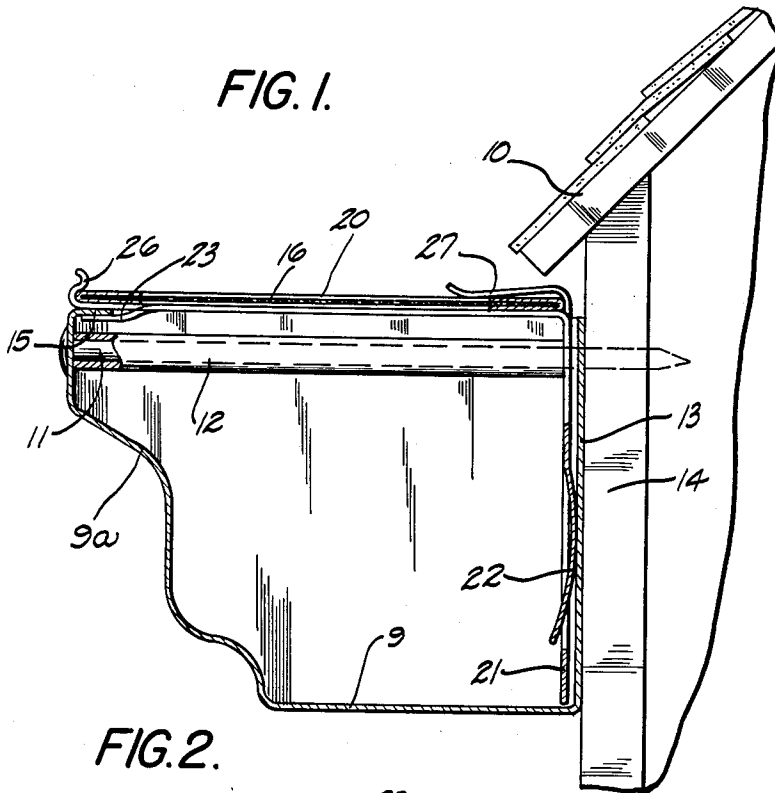


FIG. 2.

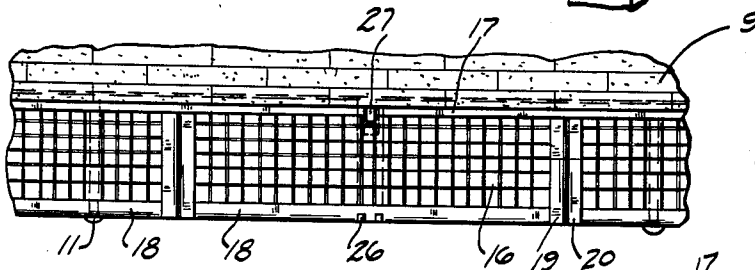


FIG. 3.

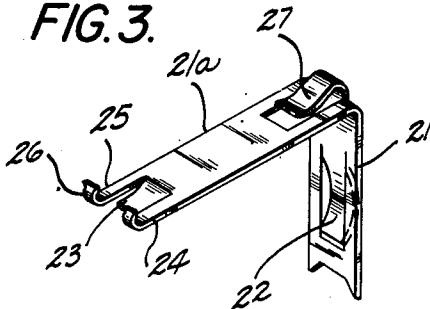
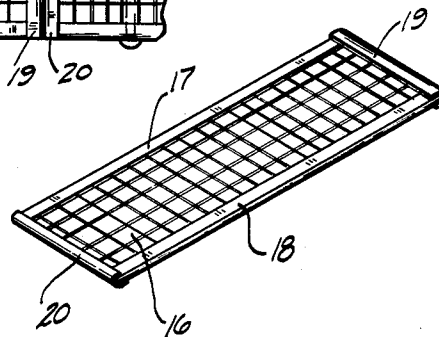


FIG. 4.



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DRAIN TROUGH COVER

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2 Claims. (Cl. 108—30)

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My invention relates to a new and useful improvement in a drain trough cover adapted for mounting on drain troughs which are positioned below roof eaves and other projections which serve to deflect water such as rain and melting snow from a roof into a drain trough. Experiences show that these drain troughs frequently become clogged with foreign material, particularly leaves, branches and so forth. Experiences also show that the drain trough frequently becomes warped and distorted from its original shape and position.

It is an object of the present invention to provide a drain trough cover which will prevent the foreign material from entering the drain trough while permitting the water free entry into the drain trough.

Another object of the invention is the provision of a drain trough cover and support so arranged and constructed that while serving as a cover for the drain trough it will also serve as a re-enforcement for the drain trough and prevent warping and distortion of the same thus rendering the drain trough a more rigid body.

Another object of the invention is the provision of a drain trough cover of this type which may be easily and quickly placed in position and easily and quickly removed therefrom and which, when in position, will rigidly hold and thus the undue removal of the same by high winds or the like prevented.

Another object of the invention is the provision of a drain trough cover of this class which will be simple in structure, economical to manufacture, durable, highly efficient in use, and easily and quickly installed.

Other objects will appear hereinafter.

It is recognized that various modifications and changes may be made in the detail of structure illustrated without departing from the invention and it is intended that such will be embraced within the scope of the claims which form a part hereof.

Forming a part of this specification are drawings in which:

Fig. 1 is a transverse sectional view of a drain trough showing the invention applied,

Fig. 2 is a fragmentary top plan view showing the invention applied to a drain trough,

Fig. 3 is a perspective view of a retainer used in this invention,

Fig. 4 is a perspective view of one of the sections of the drain trough cover.

In the drawings I have shown the invention mounted on a building having a roof 10 which

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extends beyond the side wall 14. Engaging to this side wall 14 is a wall 13 of a drain trough which is held in position by the securing nail 11 extending through the spacing sleeve 12. The trough also embodies a bottom 9 and a front wall 9a. The upper end of the front wall 9a is turned inwardly to provide the inwardly projecting flange 15.

The cover comprises a screen 16, which is made in sections to fit the drain trough, each section being provided with a frame embodying the oppositely disposed side rails 17 and 18 and the oppositely disposed end rails 19 and 20.

A retainer, which is formed preferably from spring metal, comprises the leg 21 from which is punched the spring tongue 22. This retainer of support is also provided with the leg 21a so that the structure is essentially L-shaped. Punched from the leg 21a is a central tongue 23 which is downwardly offset. At opposite sides of this tongue 23 are the tongues 24 and 25 each of which is turned upwardly at its end to provide a hook-shaped formation 26. Punched out of the leg 21a at its joined end is a tongue 27.

In use the retainer or support is mounted as shown in Fig. 1. The spring tongue 22 bears against the wall 13 of the trough and the tongue 23 underlies the flange 15, while the tongues 24 and 25 overlie the flange 15, thus securely clamping the flange 15 between the tongue 23 and the tongues 24 and 25. The leg 21a is of such length that when the structure is mounted in this position tension will be placed upon the spring tongue 22 and it will be flexed inwardly so that there is thus an outward thrust delivered to the upper outer end of the drain trough which serves to retain this drain trough in rigid position at its outer edge and re-enforce the same. When these retainers or supports are placed in position the screen sections are then mounted in position. In order to do this, one of the longitudinal edges of the section is slid under the tongue 27 springing the tongue 27 slightly upwardly so that the tongue 27 serves to clamp the screen cover against the leg 21a. When this section of cover is thrust into the fully thrust position shown in Fig. 1, it is then pressed downwardly springing the hook 26 outwardly which snaps over the outer edge of the cover and serves to retain it in position, clamped against the surface of the leg 21a. In this way the cover may be easily and quickly mounted in position and at the same time the trough re-enforced. In order to remove the cover it is but necessary to spring the tongue 26 outwardly and tilt the outer edge of the cover up-

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wardly whereupon it may be moved forwardly to disengage from beneath the tongue 27. The mesh of the screen 16 is sufficiently large to permit the passage of water therethrough while at the same time it is sufficiently small to prevent the passage of leaves, twigs and the like into the drain trough. In this way the accumulation of foreign material in the drain trough is avoided and the objects referred to herein are believed accomplished.

What I claim is:

1. In combination, a drain trough having a rear wall and a bottom and a forward wall and an inwardly projecting flange on the upper edge of said forward wall, an L-shaped retaining member formed from resilient material and having one of the legs extended into said trough vertically and engaging the rear wall thereof and the other leg extended forwardly from the upper end thereof toward said flange; a pair of spaced apart tongues on the outer end of said upper leg and an intermediate tongue extending below the same engaging above and below said flange and clamping the same therebetween; a hook forming member on the upper of said tongues and bent inwardly; an upwardly struck tongue on the opposite end of said upper leg and formed from resilient material; a screen cover positioned under said upwardly struck tongue and engaged at its outer edge with said hook for clamping said cover against said upper leg.

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2. In combination, a drain trough having a rear wall and a bottom and a forward wall and an inwardly projecting flange on the upper edge of said forward wall, an L-shaped resilient retaining member formed from resilient material and having one of the legs extended into said trough vertically and engaging the rear wall thereof and the other leg extended forwardly from the upper end thereof toward said flange; a pair of spaced apart tongues on the outer end of said upper leg and an intermediate tongue extending below the same engaging above and below said flange and clamping the same therebetween; a hook forming member on the upper of said tongues and bent inwardly; an upwardly struck tongue on the opposite end of said upper leg; a screen cover positioned under said upwardly struck tongue and engaged at its outer edge by said hook for clamping said cover against said upper leg; and a resilient tongue struck from said vertically extended leg and engaging the inner face of the rear wall of said trough for exerting outward pressure on the upper leg.

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