Feb. 15, 1949. C. R. LORD 2,461,610

SCREENED EAVES TROUGH

Filed Nov. 1, 1946

FIG. 1.

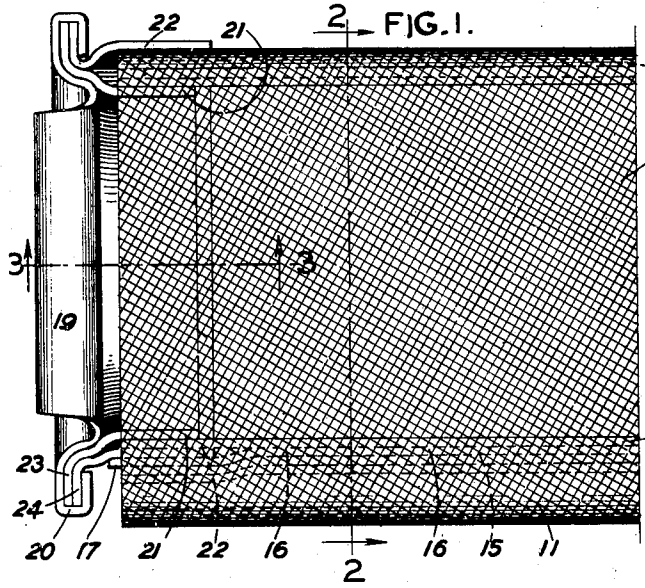


FIG. 2.

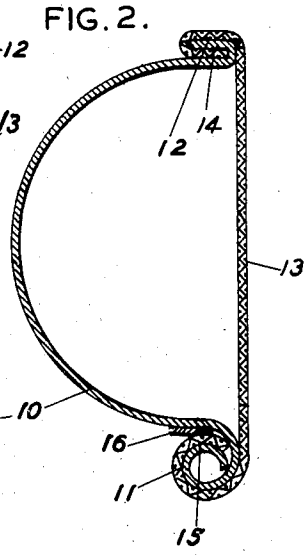


FIG. 3.

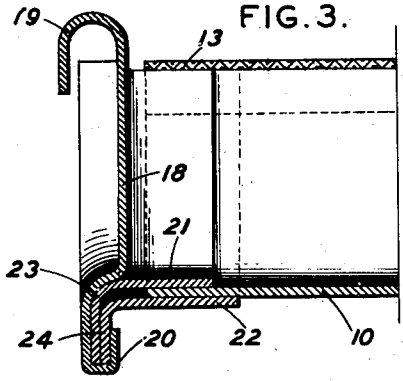


FIG. 4.

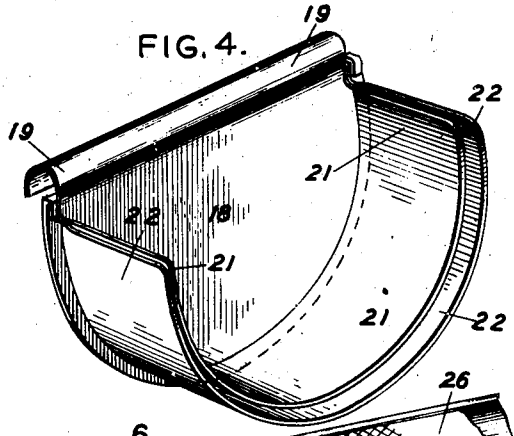


FIG. 6.

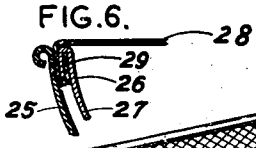


FIG. 5.

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SCREENED EAVES TROUGH

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1 Claim. (Cl. 108—28)

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My invention relates to improvements in eaves troughs and the screening means for such troughs.

An important object of the invention is to provide screening means which are installed upon the eaves troughs when they are manufactured.

A further object of the invention is to provide screening means which may be applied to eaves troughs already in use, without altering the construction of the eaves troughs.

In the accompanying drawings,

Figure 1 is a plan view of a section of the eaves troughs and screening means embodying my invention,

Figure 2 is a transverse section taken on line 2—2 of Figure 1,

Figure 3 is a vertical longitudinal section taken on line 3—3 of Figure 1,

Figure 4 is a perspective view of the end or cap removed,

Figure 5 is a perspective view of a eaves trough and screening means, embodying a modification of the invention, and,

Figure 6 is a detailed section taken on line 6—6 of Figure 5.

In Figures 1 to 4 inclusive I have shown the first form of the invention, wherein the screening means is applied to the eaves trough at the time the eaves trough is manufactured. In these figures, the numeral 10 designates the eaves trough, which may be generally U-shaped in cross section. This trough is formed of sheet metal, which is accordingly somewhat resilient. The outer edge of the trough 10 is rolled into a hollow cylindrical bead or rib 11, extending for the entire length of the trough. This bead or rib extends beneath the top of the trough. The inner edge of the trough 10 is bent outwardly and downwardly upon itself for providing an outer flange 12, extending for the entire length of the trough. The numeral 13 designates a screen or wire fabric of suitable mesh to allow for the passage of water into the trough but to exclude leaves or the like. The screen 13 is arranged horizontally above the top of the trough 10, and the inner marginal edge portion of the screen is folded about the flange 12, providing a layer 14 arranged between the flange 12 and the adjacent portion of the trough 10. These parts are clamped together by pressing the flange 12 toward the trough. The opposite marginal edge portion 15 of the screen is passed about and beneath the bead 11, and this portion 15 extends between the bead 11 and the adjacent portion of the trough 10. A metal clamping strip 16 is

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now driven between the marginal portion 15 of the screen and the trough, and there is a wedging action which clamps the marginal portion 15 to the bead 11 and also holds the strip 16 in place. This metal strip 16 extends for the entire length of the trough 10, and may be in one section, or in a plurality of sections. The clamping strip 16 has its end 17 extending beyond the end of the trough 10, for a short distance, Figure 1. Each end of the trough 10 may be formed open.

A cap is provided to cover the open end of the trough. This cap includes an end 18, bent outwardly and downwardly at its top to form a bead 19. The cap 18 has a lower curved edge, and the marginal portion of the cap 18 adjacent to this curved edge is formed into a socket 20, which is U-shaped in cross section, as shown. This socket is longitudinally curved. The cap further comprises inner and outer sides 21 and 22, which are spaced, and are longitudinally curved. These sides carrying outwardly projecting radial flanges 23 and 24, which extend into the socket 20 and are clamped therein.

With the screen 13 and clamping strip 16 in place, the cap is applied to the end of the trough 10 by inserting the outer side 22 between the outer face of the trough 10 and the clamping strip 16, while the inner side 21 is arranged upon the inner face of the trough 10. The outer side 22 also passes outwardly of the flange 12 and the screen 13 secured thereto. These parts have suitable frictional engagement so that the cap is held in place. The construction permits the bead 11 projecting outwardly beyond the outer side 22.

In Figures 5 and 6 I have shown screening means for an eaves trough already in use. The eaves trough is designated by the numeral 25. The screening means comprises an open frame including a pair of longitudinal side strips 26, connected by spaced curved or transverse U-shaped strips 27. The side strips 26 have a screen 28 applied thereto, and the marginal edge portions of the screen 28 are clamped to downwardly extending outer flanges 29 formed upon the side strips 26, Figure 6. The frame having the screen 28 applied thereto is introduced into the trough 25, and the screen is held at the top of the trough, to cover such top.

It is to be understood that the forms of my invention herewith shown and described are to be taken as preferred examples of the same, and that various changes in the shape, size, and arrangement of parts may be resorted to, without

departing from the spirit of my invention or the scope of the subjoined claim.

Having thus described my invention, what I claim is:

The combination with an eaves trough, of a screening means supported within said trough, said means comprising an open frame positioned within said trough, and a reticulated member extending across the open end of said trough and having its ends interposed between said frame and said trough for securing the reticulated member thereto, said frame embodying a pair of longitudinally extending side strips and a plurality of curved strips arranged in spaced relation with respect to each other and secured to the longitudinal strips.

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