March 23, 1954 A. K. GOETZ 2,672,832

EAVES TROUGH

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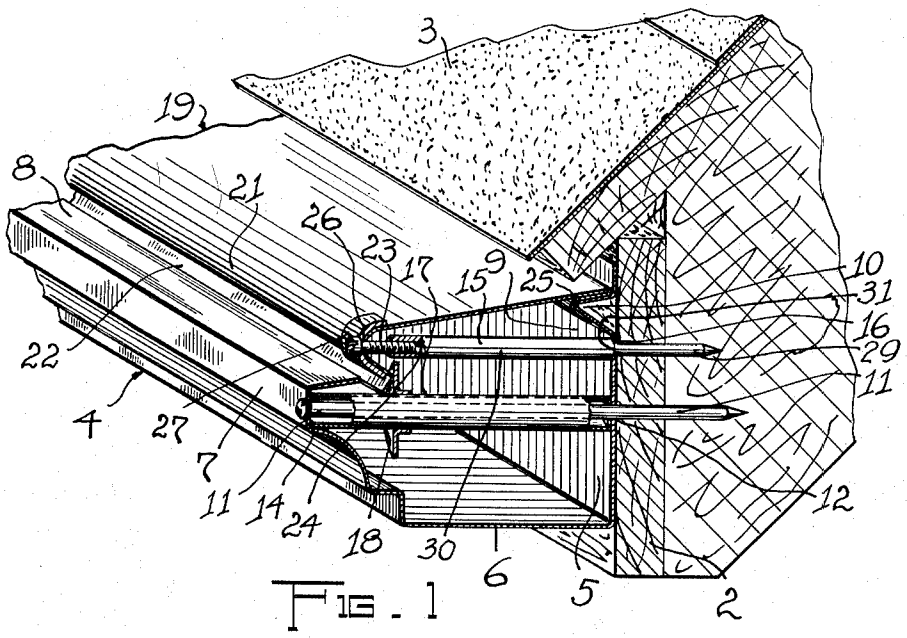


FIG. 1

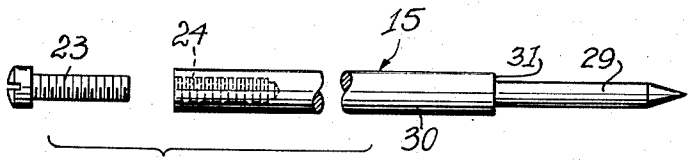


FIG. 2

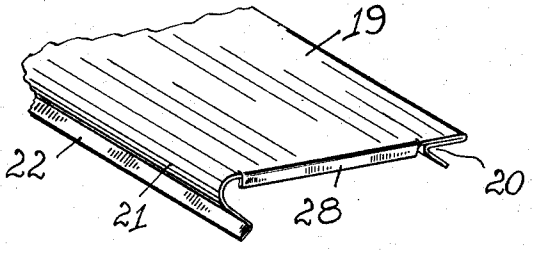


FIG. 3

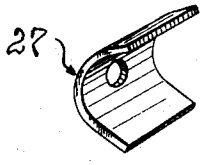


FIG. 4

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EAVES TROUGH

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2 Claims. (Cl. 108—28)

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This invention relates in general to eaves troughs and, more particularly, to eaves troughs having shields or covers to protect the troughs from obstruction by leaves, snow, dirt, etc., and prevent birds from building their nests in the troughs.

The general object of the invention is the provision of an eave trough and a specifically shaped shield or cover member for the eave trough removably supported thereby, the shield or cover member constructed and shaped to protect the trough from leaves, dirt, etc. and properly guide water from the shield or cover member into the trough.

Another object of the invention is the provision of a combined eave trough and cover member including attachment members removably securing the cover member to the building and cooperating elements on said trough, said cover member and said attachment members constructed to effect positioning of the trough and cover member in proper relation to each other, all for the purpose of covering a trough by the cover member and properly guiding water from the cover member into the trough.

A further object of the invention is the provision of a combined eave trough and cover member of the type described above in which the attachment members for the cover member are constructed to include removable head portions permitting free removal of the cover member if desired and in which the attachment members for the trough embody supporting and locating means which in cooperation with the cover member properly support and locate same in proper relation with respect to the trough.

With the above and other incidental objects in view, the invention has other marked improvements and superiorities which substantially distinguish same from presently known structures. These improvements and superior characteristics, embodying certain novel features of construction are clearly set forth in the appended claims and the preferred embodiments of the invention hereinafter shown with reference to the accompanying drawing forming part of the specification.

In the drawing:

Fig. 1 is a fragmentary perspective sectional view showing a covered eave trough constructed in accordance with the invention, the trough being attached to a building;

Fig. 2 is a side elevation of one of the shouldered spikes used for mounting the cover member of the eave trough;

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Fig. 3 is a fragmentary perspective view of a cover member section; and

Fig. 4 is a perspective view of a hook-shaped plate which cooperates with the respective shouldered spike in mounting the cover member in proper relation with respect to the trough.

Referring now more in detail to the exemplified form of the invention shown in the drawing, reference numeral 2 designates a portion of the frame of a house having a sloping shingle-covered roof 3 overhanging frame 2 and forming an eave therewith. Frame 2 has attached thereto, immediately below the eave, an eave trough 4 of conventional form which includes an inner wall 5 contacting frame 2, a bottom wall 6 and an outer sloping, somewhat curved wall 7 having projecting therefrom an inwardly extended flange 8 arranged lengthwise of trough 4. The inner wall 5 of trough 4 includes near its upper portion 9 an inwardly extending, V-shaped groove 10, also arranged lengthwise of the trough.

Trough 4 is rigidly secured to frame 2 by nails or spikes 11 of common design which pass through openings 12 and 14 in the inner and outer walls 5 and 7 of the trough into the frame 2, and specifically constructed shouldered spikes 15 having front portions 29 extended into frame 2 through openings 16 in the inner wall 5 of trough 4 and shouldered portions 30 abutting with their shoulders 31 the inner face of the inner wall 5 just below the V-shaped groove 10. Collapsing of wall 7 is prevented by tubular spacing members 17 which are sleeved upon spikes 11 between outer and inner walls 7 and 5 of the trough. Each of these tubular members has secured thereto a flanged disk 18 which is sleeved on the respective member 17 and soldered thereto in predetermined position to effect supporting, positioning and mounting of sectional cover members 19 on trough 4.

These sectional cover members each consist of an imperforate shield having a rear edge folded downwardly back upon itself and hence folded in the opposite direction to provide the sectional cover member with a V-shaped channel or groove 20 sized to fit V-shaped groove 10 in wall 5 of the trough and adapted to provide with said latter groove a yielding connection coupling cover member 19 with wall 5 of trough 4. The front portion of cover member 19 is curved downwardly and provides a curved front edge 21 having extended therefrom a forwardly and downwardly extended flange 22 yieldingly resting in edge-wise contact on tubular member 17 and yieldingly contacting flanged disks 18 on said tubular mem-

bers when cover members 19, by screw members 23 threadedly extend into threaded bores 24 of shouldered spikes 15, are shifted to couple their V-shaped portions with the rib-like member 25 formed by groove 10 in wall 5. Screw members 23 extend through holes 26 in the curved front edges 21 of sectional cover members 19 and carry curved, perforated reinforcing brackets 27 engaged with the outside face of the curved front edge of the cover members to facilitate assembly procedures without deforming the cover members at their front edges.

The sectional cover members which are placed in edgewise contact and formed at their side edges with flanges 28 abutting each other and insuring proper relation of adjoining cover members, are dimensioned to extend their curved front edges 21 directly above the edge of inwardly extending flange 8 so as to substantially cover trough 4 and guide by adhesion water from the cover member into the trough.

Having thus described my invention, what I claim is:

1. The combination of an eaves trough secured by attachment means to the frame of a house and including a rear wall and a longitudinal, substantially horizontally arranged V-shaped rib extended from the upper inner surface of such rear wall into the eaves trough, with a cover member including a longitudinal, substantially horizontally arranged V-shaped channel extended below the rear top portion of such cover member parallel to its rear edge, the V-shaped channel of said cover member fitting the V-shaped rib in said eaves trough and being engaged with such rib to prevent vertical shifting of the rear portion of the cover member with respect to the eaves trough, and supporting and shifting means for the front end of said cover member shiftably secured to said attachment means and coupled with the front portion of the cover member, said supporting and shifting means adapted to effect by their shifting with respect to the attachment means shifting of the cover member in a direction toward the rear wall of the eaves trough and sealing engagement of the V-shaped channel of the cover member with the V-shaped rib of the eaves trough and engagement of the rear edge of the cover member with the rear wall of the eaves trough.

2. The combination described in claim 1, wherein the said attachment means include spikes having front end portions extended through the rear wall of said eaves trough into the frame of the house and shouldered portions abutting with their shoulders the inside face of the rear wall of the eaves trough to tightly secure same to the frame of a house, and wherein the said supporting and shifting means include threaded elements freely rotatably coupled with the front portion of the cover member and extended through such front portion, said threaded elements being threadedly engaged with threaded axial bores in the shouldered portions of said spikes to effect by rotation of such elements shifting of the cover member toward the rear wall of the eaves trough.

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