April 28, 1931. E. VAIL 1,803,154

HANGER

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Fig. 1.

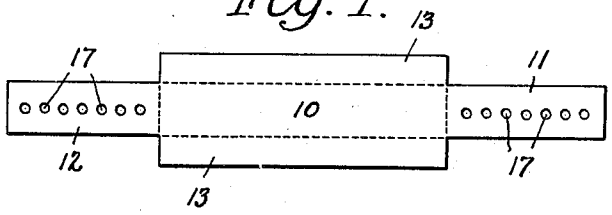



Fig. 2.

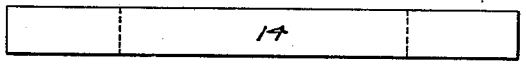



Fig. 3.

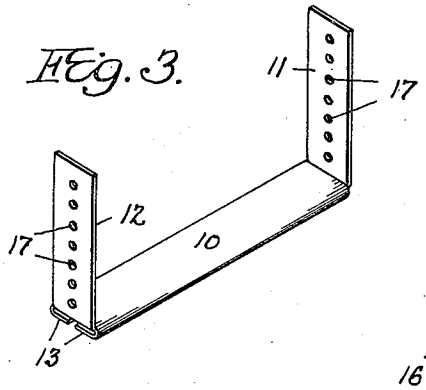
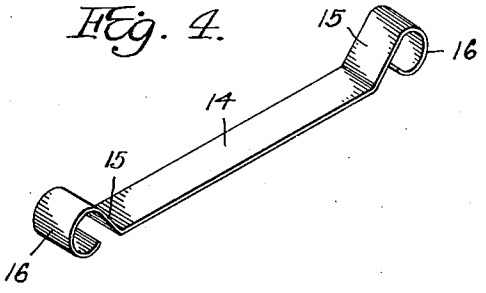



Fig. 4.



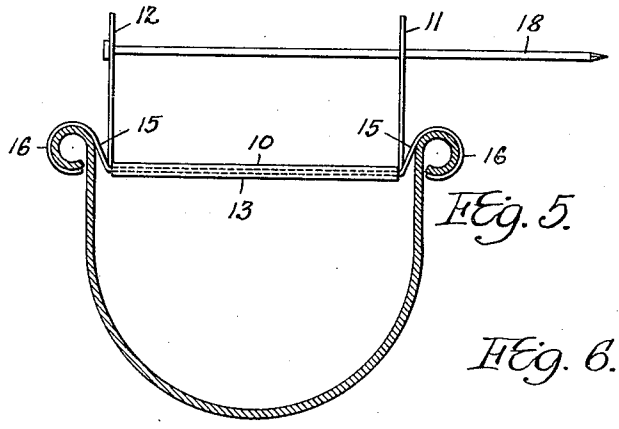
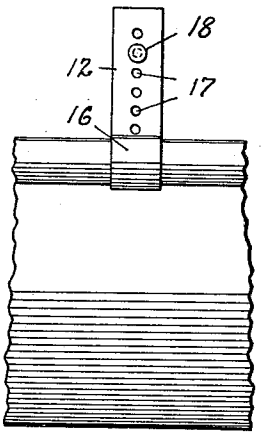




Fig. 5.

Fig. 6.




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Fig. 7.

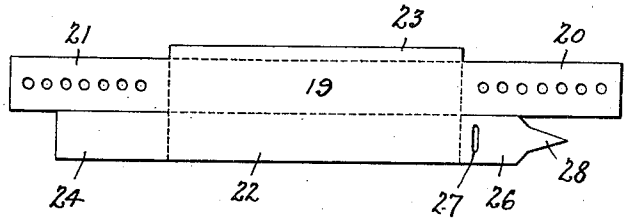
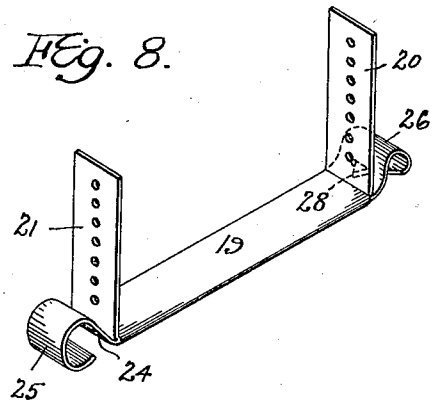



Fig. 8.



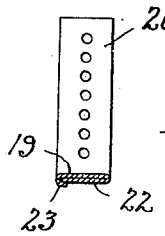
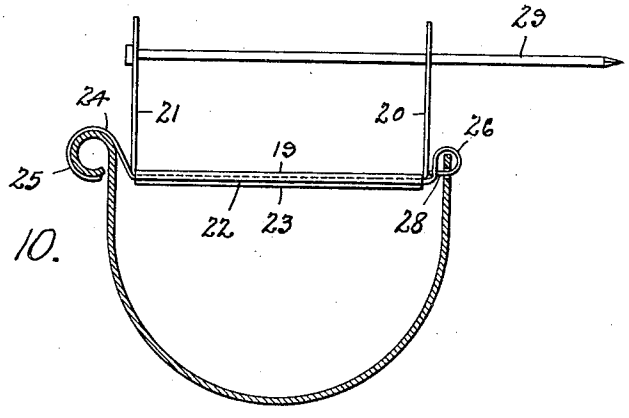




Fig. 9.

Fig. 10.




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Patented Apr. 28, 1931 1,803,154

# UNITED STATES PATENT OFFICE

EDWIN VAIL, OF ARLINGTON, OHIO

## HANGER

Application filed March 10, 1930. Serial No. 434,742.

This invention more particularly relates to supports of a type designed for use upon guttering, eaves troughs, and the like.

One of the principal objects of the invention contemplates the provision and arrangement of attaching means for the support having the fastenings therefor secured within a building structure beneath the eaves to obviate puncturing of the roofing structure.

Another object of the invention consists of means upon the attaching portions whereby the supports may be arranged at different heights in accordance with the degree of fall and angularity of the gutter or eaves trough.

More specifically stated the support is designed for application upon gutters and eaves troughs having single and multiple beads.

With the above and other objects in view, the invention further consists of the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claim.

In the drawings:—

Figure 1 is a top plan view of the support illustrating by dotted lines the manner of folding.

Figure 2 is a top plan view of a gutter engaging element for the multiple beaded type.

Figure 3 is a perspective view of the support after being bent into shape.

Figure 4 is a perspective view of the gutter engaging element.

Figure 5 is a horizontal sectional view taken through a multiply beaded gutter element, illustrating the manner of association of the support and gutter engaging element thereon.

Figure 6 is a fragmentary front elevation of the gutter showing the invention in end elevation.

Figure 7 is a view similar to Figure 1 of a modified form of my invention.

Figure 8 is a view similar to Figure 3 showing the modification bent into shape.

Figure 9 is a horizontal sectional view taken through the modification.

Figure 10 is a view similar to Figure 5 showing the modification attached upon a gutter having a single bead.

Referring to the drawings in detail wherein like characters of reference denote corresponding parts, the reference character 10 indicates a plate, preferably of elongated formation having tongues 11 and 12 of relatively narrow width projecting for appreciable distances beyond the extremities thereof. Flanges 13 formed by the narrowing of the tongues are bent upon themselves in alignment with the aligned side edges of the tongues and beneath the plate 10 proper. A gutter or eaves trough engaging element 14 in the nature of an elongated plate is disposed within the channel formed by the bending of the flanges 13 in the manner suggested in Figure 3 of the drawings. Those portions of the plate 14 protruding beyond the ends of the aforementioned channel are upwardly and outwardly inclined as at 15 and subsequently downwardly, inwardly and upwardly curved to provide sleeve portions 16 for the accommodation of the heads, formed upon the opposite side edges of a gutter or eaves trough. The tongues 11 and 12, upstanding in spaced parallelism from the ends of the supporting plate 10 are provided with vertical series of aligned openings 17 designed for the accommodation of a single spike or other fastening, such as indicated at 18, whereby each one of the supports may be arranged at different heights upon a building structure in accordance with the degree of fall and inclination of the gutter.

On Sheet 2 of the drawings, that is, as shown in Figures 7 to 10 inclusive, I have illustrated a modified form of my invention and which, as evidenced from the Figure 10 illustration is designed for accommodation and support of gutters having beads formed upon one side edge only.

The modification embodies the essential characteristics of the form of my invention previously described but differs therefrom in the means of anchorage for the straight side edge of the gutter.

Such construction comprises an elongated plate 19 having tongues 20 and 21 respectively upstanding from the ends thereof in a manner identical to the arrangement shown in Figure 3. Wide and narrow flanges 22

and 23 respectively, carried by and bent from the side edges of the plate 19 are associated in the manner suggested in Figure 9 of the drawings. In this manner the support and gutter engaging means is constructed in one piece. The wide flange 22 is provided with a tab 24 upon one end curved upon itself to provide a sleeve 25 accommodating a single bead of the gutter shown in Figure 10. An ear 26 projecting from the opposite end of the flange 22 and aligned with that of the tongue 20 is provided with a horizontally disposed elongated slot 27 for the accommodation of a pointed projection or fastening, indicated as at 28, carried upon the ear proper. Said projection or fastening 28 is to be passed through a slot in the straight side edge of the gutter precedent to final disposition of same within the slot 27 in the manner shown in Figure 10 of the drawings. The tongues 20 and 21 are apertured to accommodate a spike 29 common to both.

In the installation of both forms of my invention, it is to be especially noted that none of the fastenings are designed to puncture or otherwise penetrate any portion of the roof's structure whereby leakage of the latter will not occur incident to the installation of the invention as the spikes and fastening elements are embedded within appropriate portions of the building siding, upon the extremities of rafters, etc.

The invention is susceptible of various changes in its form, proportions and minor details of construction, and the right is herein reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention what is claimed is:

An eaves trough hanger comprising an attaching plate having connection terminally thereof with the opposed side edges of the trough, a plate dispersed in superimposed relation to and having connection with said attaching plate, and apertured tongues carried by and upstanding in parallelism from the ends of the superimposed plate to accommodate a common fastening therethrough.

In testimony whereof I affix my signature.

EDWIN VAIL.