March 17, 1953 T. S. TOAL 2,631,801

SEPARABLE EAVES-TROUGH HANGER MEANS

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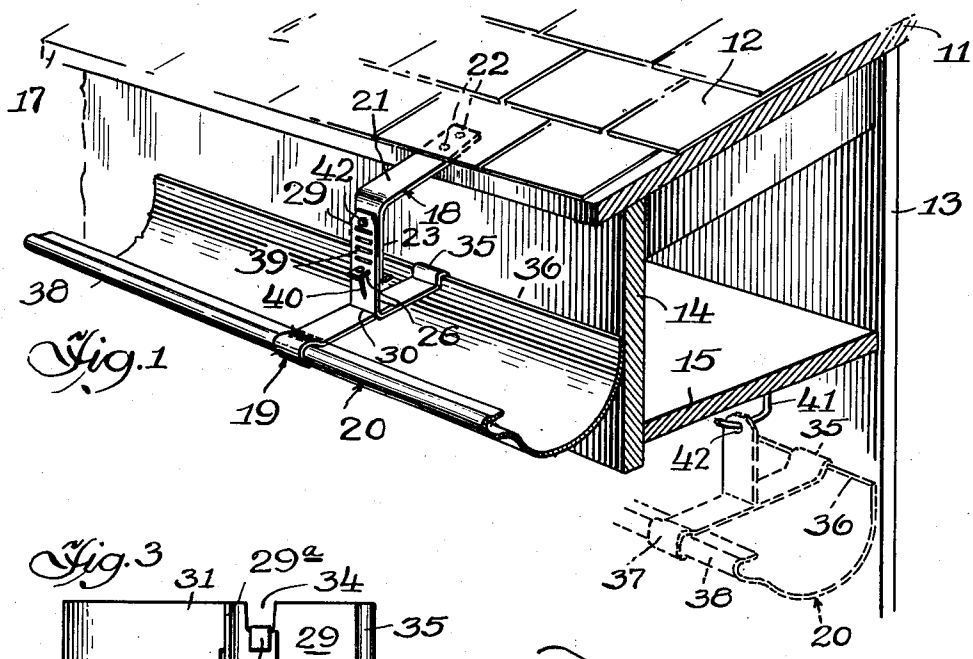


Fig. 1

Fig. 3

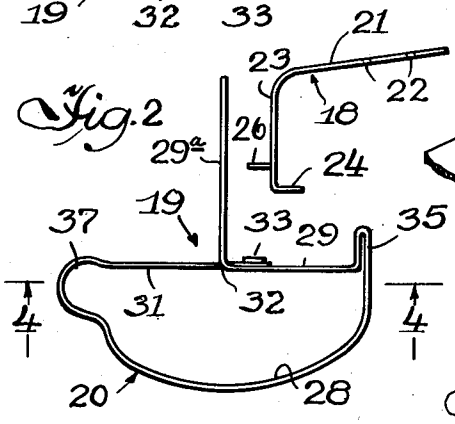


Fig. 2

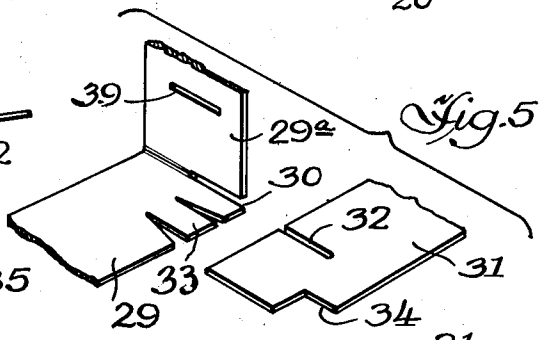


Fig. 5

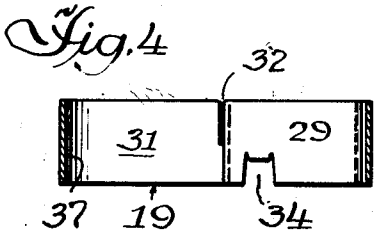


Fig. 4

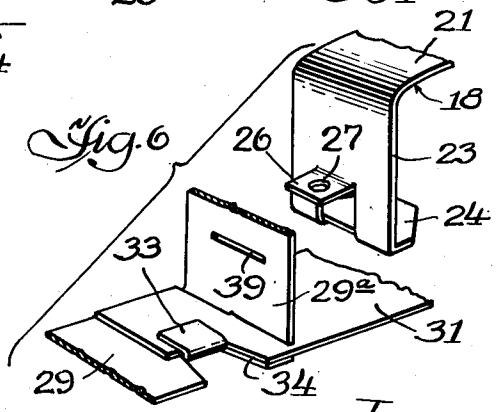


Fig. 6

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SEPARABLE EAVES TROUGH HANGER MEANS

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2 Claims. (Cl. 248—48.1)

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This invention relates to a separable eaves trough hanger means and more particularly to improvements in means of this character by which the trough engaging part may be readily separated from the roof bracket part and the trough with its engaging part may be stored temporarily in a secondary position underneath the eaves.

It is well known that, especially in northern climates, ice of the winter season frequently lodges in the eaves trough so as to cause seepage of water melting therefrom underneath the shingling and into the interstices between the roof timbers, thereby letting moisture into the walls of the house and causing rotting of the timbers.

Furthermore, where the eaves trough is not removable readily, it is difficult to keep it clean from accumulation of leaves and dirt and satisfactory painting of the eaves trough and of the eaves timbers is difficult if not impossible.

An object of the present invention is the provision of improved and simplified separable trough hanger means whereby not only may the trough be readily located in or removed from position on the roof bracket but whereby it may be stored for say the winter season, when snow and ice rather than rain is prevalent, in a convenient position underneath the eaves, where it will be out of the way of snow falling on the roof and will yet be in position for ready replacement in rain-catching position upon the return of the summer season when rain is prevalent.

A further important object of the invention is the provision of such hanger means whereby the locking member thereof may be removed while still leaving the trough supported but removable by a simple outward lateral movement, and the association of this construction with vertical adjustment means for varying the distance of the trough from the shingle line of the roof or to regulate its pitch.

The present invention, moreover, provides a simple construction that may be economically stamped out of strip metal material, bent to the desired shape, and ready for initial attachment of the trough engaging part to the trough by the use of pliers with complete security.

These and other objects and advantages will be apparent from the following description, taken together with the accompanying drawings, of an illustrative embodiment of the invention, and in which drawings—

Figure 1 is a perspective view of an eaves construction embodying the trough hanger means of the present invention parts being shown in section, and an alternative position of parts being shown in broken lines;

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Figure 2 is an enlarged side elevational view of the trough engaging part and the roof bracket part in separated relation.

Figure 3 is a plan view of the trough engaging part omitting the roof bracket part;

Figure 4 is an inverted sectional view taken on the line 4—4 of Fig. 2;

Figure 5 is a fragmentary, assembly-step view of parts shown in previous figures looking thereat from the other direction; and

Figure 6 is a subsequent assembly-step view of parts shown more fully in Figures 1 and 2.

Referring in detail to the illustrative construction shown in the drawings, the roof construction shown may be conventional and may include the usual roof timbers 11 faced by the imbricated shingling 12 and supported by the wall 13, the roof and shingling 11 and 12 laterally overhanging the wall 13 and there being beneath this overhang a well known box-like eaves construction including a down-hang 14 and a closure 15.

At the shingle line 17, a roof bracket part 18 is secured to the roof boards 11 underneath the shingling 12, to have connected thereto a trough engaging part 19 for holding and supporting a conventional trough 20 whereby rain falling on the roof shingling may run down into the trough and from there be conveyed to the usual downspout, not shown.

The trough holding parts 18 and 19 of the present invention are constructed as next described.

The roof bracket part 18 has the usual shank portion 21 in which are located nail holes 22 by which the bracket may be permanently secured to the roof boards 11 before the shingling 12 is laid or by raising the shingling at the shingle line 17 to nail the bracket thereunder. At its outer end, the bracket part 18 has a downwardly-hanging portion 23 terminating in an inwardly bent flange 24 for enhanced strength. Following the present invention, on the downwardly-hanging portion 23 and advantageously struck out from the lower end thereof is an upturned outwardly laterally extending tongue 26 having an aperture 27 therein, somewhat like a nail hole, for purposes presently pointed out.

Turning to the trough engaging part 19, this part, following the present invention, is advantageously formed initially of an integral strip-like material bent around upon itself to form a band 28 to go around the trough and carrying at one end 29 of the strip material an upstanding standard 29a. Where the standard 29a upturns from this band end, the material is shown notched

as at 30 and the other or free end 31 of the band portion 28 is similarly notched as at 32, so that when the band end 31 is bent over onto the band end 29 which is carrying the standard 29a, the two portions may be interengaged with the notches 30 and 32 mating and thus permitting the two band portions to lie contiguous and overlapping while still disposed in a straight line, that is with their lateral edges coinciding. A first of these assembly steps to form the trough encircling band is indicated in Fig. 5.

Subsequently, the invention contemplates further that the band ends may be securely locked together in the position just described by having one of the band portions, in this instance the portion 29, carry a cut-out tab 33 which may be bent over and onto the band portion 31, as shown in Fig. 6, the band end 31 desirably having a cut-out corner 34 to receive the tab 33.

Preferably, the band portion 28 of the trough engaging part 19 may have a return-bend flange 35 at its inner side to snugly receive the inner edge 36 of the trough 20, and, at its outer side, a bulge 37 to fit the beaded outer edge 38 of the trough 20, thus providing, when so arranged and disposed, a tight and secure attachment of the trough engaging part 19 to the trough. Thus, the trough engaging part may be attached to the trough while the trough is still on the ground and after the roof bracket part 18 has been permanently secured to the roof.

Further in accordance with the present invention, when it is desired to hang the trough it may be raised to adjacent the shingle line 17 and by a simple lateral movement the tongue 26 of the roof bracket part may be inserted selectively in one of a plurality of vertically spaced holes 39 disposed in the standard 29a. these holes being here shown in the form of slots of a size to receive the tongue 26. When the tongue 26 is inserted in one of the slots 39, the trough is supported without further connection, but, to removably lock the parts in this position, a locking member such as the nail 40 is desirably passed through the aperture 27 in the tongue 26 after the latter is located in one of the slots 39, so that the tongue cannot be withdrawn from the slot until the nail 40 is first removed.

It will be understood that there will normally be a series of such hanger means spaced at intervals along the trough 20, and thus, when it is desired to remove a trough, it would be possible for the householder to do it himself if he so desired by first removing the nails 40 from all the hangers and then going to a middle portion of the trough and lifting it off laterally from the hangers, which will support the trough until he is ready to do so.

With this ease of removal of the trough is combined, as here shown, means for storing the trough underneath the eaves and out of the way of the snow and ice accumulating at the shingle line 17. For this purpose, a hook 41 may be fastened into the eaves board 15 and upon which the trough may be suspended by passing the hook 41 through the hole 42 in the upper end of the standard 29a. The hole 42 is conveniently round for this purpose.

By reason of the plurality of vertically spaced slots 39 into any one of which the tongue 26 may be inserted, the trough may be readily adjusted for height or for pitch. As here shown in the drawings the trough is located at its highest adjustment, since the tongue 26 is in the lowermost of the slots 39. It may be adjusted to a lower position by having the tongue located in one of the higher slots 39.

Such changes may be made as fall within the scope of the appended claims without departing from the invention.

The invention having been described, what is here claimed is:

1. In separable eaves trough hanger means embodying a roof bracket part and a trough engaging part, that improvement comprising a downwardly extending portion on the roof bracket having a flat face, a trough engaging part having an upwardly extending standard portion parallel with said downwardly extending portion of the roof bracket, one of said portions having a tongue extending horizontally therefrom and the other of said portions having therein a series of vertically spaced horizontally elongated slots for receiving said tongue in one of said slots, said trough engaging part including an integral strip adapted to embrace the trough and from which said standard upstands at one end, the other end of the strip being provided with a notch and said strip being provided with a notch at the base of said standard to interengage at said notches to form an endless band, a transversely directed tab adjacent the base of said standard bendable about the other strip end to lock the two together, a cut-out in the adjacent strip end to receive said tab, an aperture in said tongue, and a locking member received in said aperture after passage of the tongue through a slot.

2. In separable eaves trough hanger means embodying a roof bracket part and a trough engaging part, that improvement comprising a downwardly extending portion on the roof bracket having a flat face, a tongue extending horizontally outwardly on said face, a trough engaging part having an upwardly extending standard portion parallel with said downwardly extending portion of the roof bracket, said upwardly extending portion having therein a series of vertically spaced horizontally elongated slots for receiving the tongue of said roof bracket in one of said slots, said trough engaging part including an intergal strip adapted to embrace the trough and from which said standard upstands at one end, the other end of the strip being provided with a notch and said strip being provided with a notch at the base of said standard to interengage at said notches to form an endless band, a transversely directed tab adjacent the base of said standard bendable about the other strip end to lock the two together, a cut-out in the adjacent strip end to receive said tab, an aperture in said tongue, and a locking member received in said aperture after passage of the tongue through a slot.

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