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MOUNTING BRACKETS FOR GUTTERS

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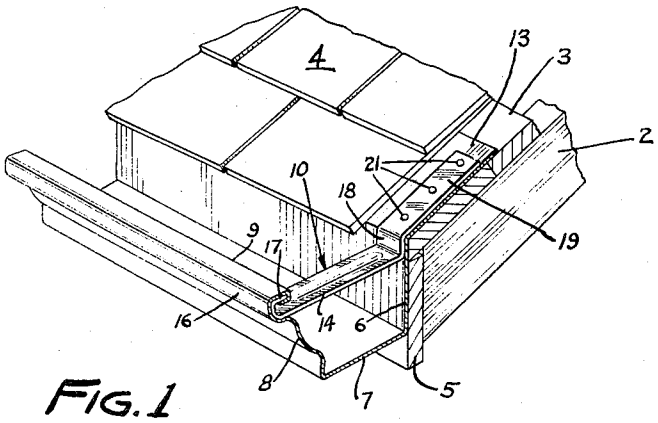


FIG. 1

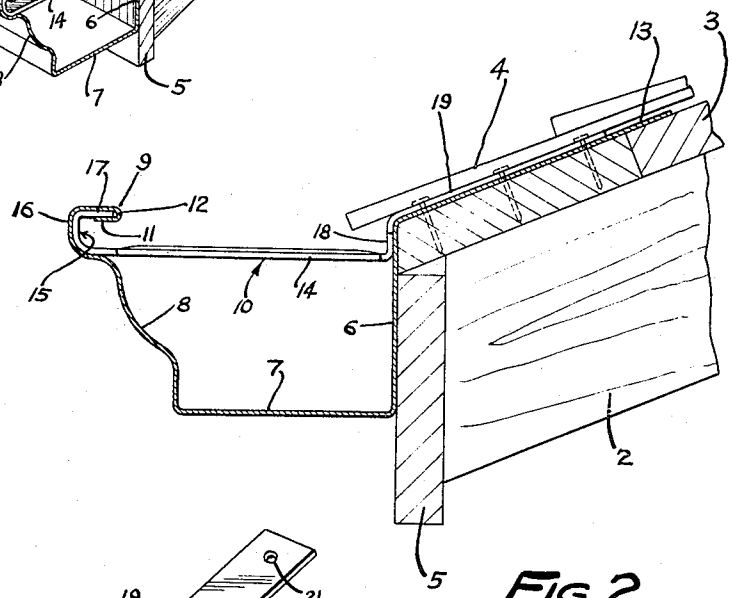


FIG. 2

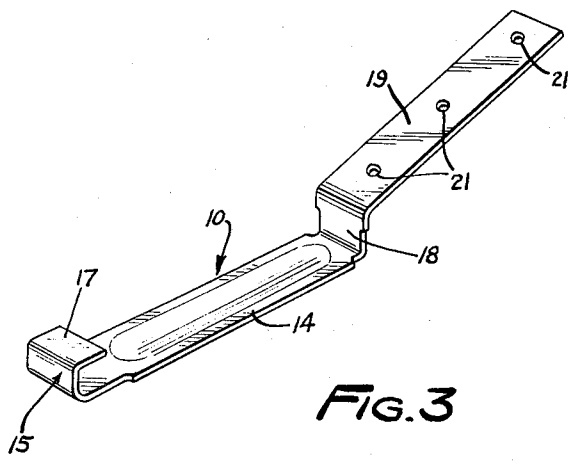


FIG. 3

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MOUNTING BRACKETS FOR GUTTERS

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1 Claim. (Cl. 248—48.1)

This invention relates to new and useful improvements in mounting brackets for roof gutters, and particularly to such gutters of the type commonly known to the trade as "Ogee" gutters, which are usually constructed independently of the roof eaves, and are subsequently secured thereto.

"Ogee" gutters are commonly constructed of sheet metal, and the outer or front wall of the gutter is normally unsupported, except for its connection with the bottom wall of the gutter. When such gutters are embodied in the eaves of a building, it is customary to provide some sort of supporting means for the outer front wall of the gutter whereby it is not likely to become distorted by placing a ladder thereagainst, or from sagging as a result of snow and ice accumulating therein.

Various types of mounting brackets have heretofore been made for supporting the outer front wall of such gutters, but to the best of our knowledge, all of these require the use of additional securing elements for fixedly anchoring the outer ends of the brackets to the "Ogee" molding forming the top edge of the gutter.

It is therefore an important object of the present invention to provide a simple inexpensive bracket for supporting a conventional "Ogee" type gutter on the usual eaves of a building, whereby the gutter will be retained in fixed relation to the eaves and is not likely to become distorted when a ladder is placed against the gutter, or to sag as a result of snow and ice accumulating therein.

A further object of the invention is to provide a mounting bracket for conventional metallic gutters comprising a main body portion having its outer terminal portion bent upwardly and then horizontally inwardly to form a hook adapted to be received within the usual reversely turned "Ogee" molding provided at the upper edge portion of the front wall of the gutter, the opposite end portion of said main body terminating in an upwardly inclined strap-like hand manipulating extension adapted to be finally secured to the roof boards under the usual shingles or covering material of the roof.

A further object resides in the specific construction of the outer terminal portion of the bracket which provides an inwardly, horizontally extending tongue adapted to be closely received within a longitudinally extending slot-like recess provided by the upper flat edge portion of the front gutter wall being downwardly and outwardly turned. The opposite upwardly inclined end portion of the bracket is adapted to be fixedly secured to the roof boards, as by nailing, under the shingles adjacent the gutter after first inserting the horizontal tongue portion of the hook-shaped end into the slot-like recess provided in the "Ogee" molding, whereby both ends of the bracket may then be placed under tension and concealed from view when the upwardly inclined hand manipulating end portion of the bracket is secured to the roof boards in position to rigidly support the "Ogee" molding and adjacent outer front wall of the gutter.

These and other objects of the invention and the means for their attainment will be more apparent from the following description taken in connection with the accompanying drawings.

In the accompanying drawings there has been disclosed a structure designed to carry out the various objects of the invention, but it is to be understood that the invention is not confined to the exact features shown, as various changes may be made within the scope of the claim which follows.

In the drawings:

Figure 1 is a perspective view of a portion of a roof, showing the preferred manner of securing the gutter mounting bracket to the building roof;

Figure 2 is an enlarged detail sectional view showing one end of the bracket secured to the roof boards with the main body portion of the bracket horizontally disposed within the upper margins of the gutter between an upturned offset inner portion which is seated therein adjacent the roof and the similarly offset and upturned hook portion at the opposite end of said bracket and seated and received within the "Ogee" bead forming the upper edge of the front gutter wall; and

Figure 3 is a perspective view of the bracket only, showing the means provided at the lower horizontal portion thereof for reinforcing the bracket against bending.

In the selected embodiment of the invention herein disclosed, there is illustrated in Figures 1 and 2, a portion of the roof of a building comprising the usual rafters **2**, roof boards **3**, shingles **4** and friez board **5**.

The "Ogee" gutter shown in Figures 1 and 2, comprises the usual rear upright wall **6**, bottom wall **7**, and front wall **8**. The upper marginal edge portion of the gutter is shown bent outwardly and upwardly, and thence inwardly as shown at **9**, with its marginal edge portion **11** turned under to provide an outwardly facing restricted recess **12** between the parallel upper edge portions **9** and **11**. Such beading of the upper marginal edge of the front wall **8** adequately stiffens and strengthens the upper edge of the front wall **8** so that under normal conditions, the front gutter wall may retain its normal position, as will be understood by reference to Figures 1 and 2.

The back wall **6** of the gutter terminates at its upper end in an outwardly and upwardly inclined flange **13**, which is seated directly upon the roof boards **3** and is secured thereto by nailing, as shown in Figure 2.

An important feature of the present invention resides in the specific construction of the mounting bracket shown in Figure 3 of the application drawing, and generally designated by the numeral **10** so that it may securely hold up and reenforce the entire front wall structure against sagging or collapse under abnormal conditions of use. This bracket comprises an elongated strip of metal or like stiff material providing a main body **14** terminating at its outer end in an upwardly and inwardly turned hook portion **15**, shaped to fit into and seat against the outer wall and base of the "Ogee" bead **16** provided along the upper longitudinal edge of the front wall of the gutter, as best illustrated in Figures 1 and 2. The upwardly turned tongue **17** of the hook portion **15** extends parallel with the main body **14** and is adapted to be hooked under and forceably received in the longitudinally extending recess **12** provided at the upper edge of the front wall **8** as the offset saddle portion **18** of the body portion **14** is forced down to horizontal seated position within the gutter and secured on the shoulder and inner wall **6** thereof. When so doing the upwardly turned hooked end portion **15** is simultaneously seated into and against the bottom wall as well as the front and top walls of the "Ogee" bead with the top horizontal lip portion thereof interlocked with the outwardly facing channel **12** of the bead. The front wall structure **8** of the gutter is thus uniformly spaced and braced throughout its length from the roof attached inner wall portions thereof by

the two rigid shouldered end portions of the body **14** of the bracket **10** which extends horizontally thereacross within the gutter and between the shouldered portion of the inner wall and the inwardly facing bead of the front wall, as best understood in Figure 2.

The opposite end of the main body **14** of the bracket **10**, is shown formed with an upwardly directed offset **18**, having one end of a strap-like member **19** secured thereto, which extends upwardly at an incline corresponding to the pitch of the roof to which it is to be secured by suitable nailing, as shown in Figure 1. The strap-like extension **19** is apertured, as shown at **21** in Figure 3, to facilitate nailing, as will be understood. The offset or shoulder **18** cooperates with the hook-like element **15** to retain the front and rear upright walls of the gutter in spaced parallel relation. The brackets **10** are located at spaced intervals along the length of the gutter so as to adequately support the outer wall of the gutter against abnormal pressures, such as may be caused by a ladder, or by snow or ice accumulating in the gutter.

The novel gutter mounting bracket herein disclosed is extremely simple and inexpensive in construction and is so fashioned that its outer end may be quickly fitted into the outer reinforced bead of the gutter with its opposite end seated on the roof boards or the flange **13**, as indicated in Figures 1 and 2. When so positioned and nailed, the gutter is firmly anchored to the building, whereby it is not likely to become distorted, as hereinbefore stated.

The foregoing detailed description has been given for clearness of understanding only, and no unnecessary limitations should be understood therefrom, and the appended claim should be construed as broadly as permissible in view of the prior art.

I claim as my invention:

In combination, a roof gutter having a rear vertical wall angled inwardly and upwardly from an intermediate point thereon to provide roof board engaging and connecting shoulder portions, a horizontal bottom wall and an upwardly and outwardly inclined front wall, said front wall having a preformed U-shaped bead along its upper edge with spaced top and bottom horizontal walls providing therebetween a channel, and said top wall of said bead being downwardly and inwardly turned providing a horizontal narrow channel way at the inner edge of said first mentioned channel, and a single piece mounting bar bracket for said gutter comprising a main body portion extending horizontally across said gutter between the front and rear walls thereof; the improvement comprising the intermediate portion of said bracket being offset upwardly and outwardly providing a hand manipulating roof anchoring extension and an intermediate saddle and vertical shoulder portion overlying and tightly engaging the shoulder and vertical rear wall of said gutter, and the opposite end portion of said bracket having an upwardly and inwardly facing hooked end with the upper horizontal tongue thereof underlying the top wall of said bead and positively interlocked within the narrow channel way thereof and the lower portion seated against the bottom horizontal wall of said bead, whereby uniformly spacing and bracing the front wall structure of said gutter from the rear wall portions thereof and securing same under tension.

References Cited in the file of this patent

UNITED STATES PATENTS

1,855,241	Irwin	Apr. 26, 1932
2,144,663	Petersen	Jan. 24, 1939
2,843,063	Thomson	July 15, 1958

FOREIGN PATENTS

110,726	Australia	May 28, 1940
858,932	France	May 20, 1940