Sept. 13, 1955 J. M. BEARDEN 2,717,561

GUTTER SCREEN BRACKET OR SUPPORT

Original Filed April 2, 1948

FIG. 1.

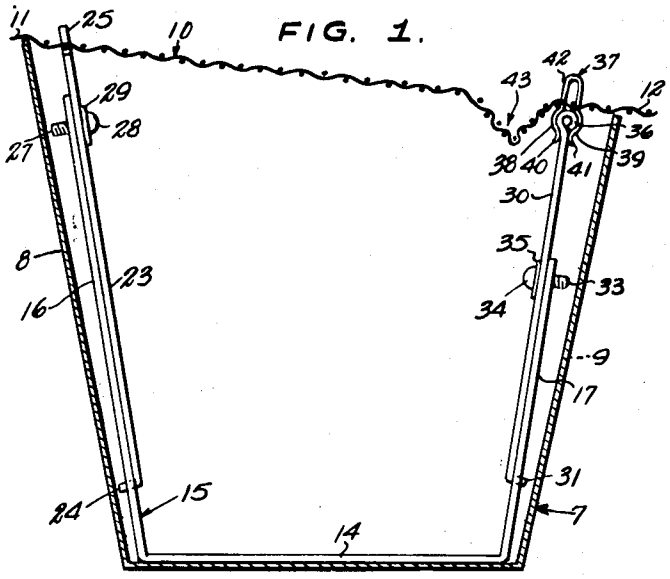


FIG. 2.

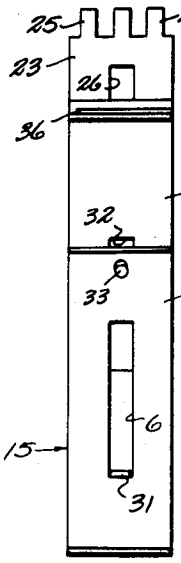


FIG. 3.

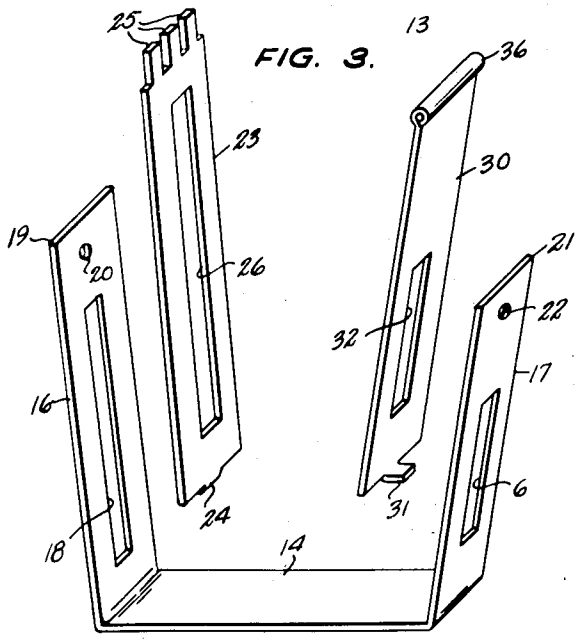


FIG. 4.

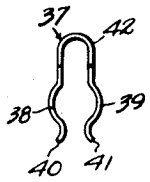


FIG. 5.

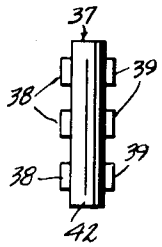
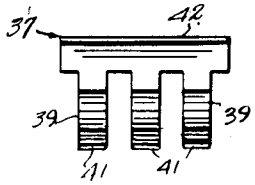


FIG. 6.



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GUTTER SCREEN BRACKET OR SUPPORT

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Substituted for application Serial No. 18,673, April 2, 1948. This application March 12, 1954, Serial No. 415,902

3 Claims. (Cl. 108—30)

This invention relates to supporting and securing means for protective screens upon roof gutters and channels, with particular reference to the type of supporting member which may be located within the channel to support the screen within the two side edges thereof.

The main object of my invention is to provide an adjustable supporting member for a protective screen upon a roof gutter or channel which may be inserted in gutters of various sizes and adjusted accordingly to support the screen within the edges of the gutter.

Another object is to provide a support member of the character indicated which is provided at the end within one side of the gutter with projecting prongs adapted to engage between the wires or mesh of the protecting screen and provided upon the other end or portion within the other edge of the gutter with a special clip securing the screen in place.

A further object is to have such a supporting member for a protective screen upon a gutter which, when placed in position, is itself protected by the gutter and wholly contained within the same.

It is also an object of the invention to provide a supporting member for such a screen which is simple in construction and easily adjusted and not likely to get out of order, and which is reasonable in cost, so that it will be available on the market in general distribution.

Other objects and advantages of the invention will be set forth in greater detail as the specification proceeds.

In order to facilitate ready comprehension of this invention, the latter is illustrated in the accompanying drawing forming part hereof, and in which:

Figure 1 is an elevation of the screen supporting member embodying the invention in a practical form and shown in proper position for supporting a screen with a gutter indicated in broken lines in the figure;

Figure 2 is a side elevation of the same screen supporting member as seen from the right in Figure 1, but with the screen omitted;

Figure 3 is an exploded view of the screen supporting member in perspective;

Figure 4 is an elevation of a clip used for the right end or portion of the screen supporting member;

Figure 5 is a top or plan view of the same clip shown in Figure 4;

Figure 6 is a side elevation of the clip as seen from the right in Figure 4.

In the various views, the same reference numerals indicate the same or like parts.

Upon houses provided with roof gutters and channels it is often the experience, especially in the suburbs, of residents of these houses that leaves from adjacent trees are blown into the gutters by the wind and finally become deposited and accumulated to such an extent that they clog these gutters and eventually block them altogether. It has already been suggested by many to cover the gutters with screens and wire mesh, and this has, to some extent, proved successful, but generally there has been no successful means provided which will support

the screens in proper position so as to remain in place upon the gutters. After due consideration of this problem, I have found it quite feasible to introduce a special supporting member into the gutter itself and have the upper portions thereof engage two separate parts of the screen adjacent to but within the two side edges of the gutter to be protected by the screen, as will be more fully described.

Hence, in the practice of my invention, and referring to the accompanying drawing, a gutter or channel, indicated at 7, includes two side walls 8 and 9, upon the upper edges of which the screen, generally indicated at 10, is located, which reaches from one wall to the other and, in fact, overhangs the edges thereof at 11 and 12. Upon the bottom 13 of the channel or gutter is located the base portion 14 of the screen supporting member, generally indicated at 15, rising upwardly from the two ends of the bottom 14 of the supporting member are two upright, but outwardly inclined rigid limbs 16 and 17 which are preferably integral with the bottom 14 so that all three members are bent up from a single strip of metal. In the left limb 16 is a longitudinal slot 18 extending almost the entire length toward the upper end 19 which has a threaded hole 20 in the intermediate portion thereof. In the right limb 17 which is shorter than the left limb 16 is also a longitudinal slot 6', while in the upper end 21 of this limb is a second threaded hole 22. The purpose of the slots 18 and 6' and threaded holes 20 and 22 will immediately be set forth.

Upon the inside of limb 16 is fitted a flat, slidably adjustable plate 23, this member having at the lower end an outwardly projecting central lug 24 normally projecting out through slot 18 in limb 16 of the bracket. The upper end of plate 23 terminates in a group of rigid fingers 25, 25 adapted to engage with the mesh or wires of screen 10 and project therethrough, while along the intermediate section of the plate is longitudinal slot 26 adapted to allow clearance for screw 27 normally projecting through said slot from its head 28 with washer 29 engaging against the plate and the screw itself passing through the slot and the threaded hole 20 and limb 16. When the screw is released to a certain degree, it will allow sliding of plate 23 up or down along the inner face of limb 16 with lug 24 moving in slot 18 of the limb, while the screw is cleared by slot 26 in the plate itself, and when the proper position of the plate with respect to the limb has been attained, the screw may be tightened and the plate will remain fixed.

In similar fashion, upon the right side of the screen supporting member, a slidably adjustable plate 30 has a bottom lug 31 adapted normally to project out through slot 6' in limb 17 and itself has a central longitudinal slot 32 providing clearance for a second screw 33 when it projects through the slot into threaded hole 22 in the side limb 17 with the head 34 supported by a washer 35 resting against the inner side or face of plate 30, and thereby holding it in place against limb 17. As soon as the screw is released, the inner plate 30 may be adjusted up or down, and when the proper position has been attained, tightening of the screw will fix the plate in position upon the limb.

The upper end of adjustable plate 30 is formed into a roll bead 36 adapted to support a special clip indicated generally at 37 and provided upon its two sides with depending arcuate fingers 38, 39 having divergent ends 40, 41 facilitating slipping the clip in place on bead 36 by temporarily spreading the fingers and then allowing these fingers to seat upon the sides of the mentioned bead.

It is to be noted that limb 16 is longer than the right limb 17, and that adjustable plate 23 is also somewhat longer than the adjustable plate 30 associated with limb

17, while the upper end of plate 23 has the mesh engaging fingers 25 for directly engaging with the screen and then projecting therethrough, but in the case of plate 30, the screen is intended to rest directly upon the bead 36, and then have clip 37 placed in position thereon by threading the fingers 38 and 39 through the wire mesh of screen 10 and seating these fingers upon the sides of the bead so that the clip occupies the position shown in Figure 1, where the fingers extend down through the wire mesh while the upper portion 42 of the clip which is virtually U-shaped, remains above the screen to secure the same in place upon the bead and prevent accidental removal thereof from the latter.

It has already been mentioned that limb 16 with its adjustable plate 23 supporting the left edge 11 of screen 10 is higher than the limb 17 at the right with its adjustable supporting plate 30, even when the clip 37 is in place, but this arrangement is intended to cause drainage of water from the left side or wall 8 of the gutter toward the right wall 9 upon the screen 10. Not only is the left adjustable plate 23 higher than the right adjustable plate 30 in order to cause the drainage toward the right, as just mentioned, but in the installation of the present supporting bracket in a sunken gutter, the upper or left wall of the latter is longer or deeper than the lower or right-hand wall thereof, due to the pitch of the roof. On the upper or left-hand wall, the edge of the screen is, of course, intended to be placed beneath the projecting edge of the roofing, while on the lower or right wall, the edge of the screen will then rest on the continuation of the roof beyond the gutter. In order to cooperate with this rightward drainage and particularly to prevent the water thus gravitating toward the right end or edge 12 of the screen from creeping down along the outside of the gutter and perhaps disfiguring the same by having rusty water running upon the paint thereof, or draining off the screen upon a sunken gutter and reaching the roof beyond the latter, the screen is indented by providing a V-shaped groove, generally indicated at 43, which will cause the water to gravitate to the bottom of this groove and then drop into the gutter on the inside thereof and within the right wall of the same.

It is obvious that the supporting members may be made in different sizes and of different proportions and different materials, but I prefer making them out of metal.

This application is a substitute of my prior application Serial No. 18,673, filed April 2, 1948, now abandoned.

What is claimed is:

1. A bracket for supporting a substantially flat protective screen across the top of a drain gutter or the like, said bracket comprising a base to rest transversely upon the bottom of the gutter, said base having vertical arms at its opposite ends rising therefrom to position their upper ends substantially on a level with the upper edges of the related side walls of the gutter, and means on the upper ends of said arms for supportably and retainably engaging the screen at points inwardly displaced from the gutter side walls so as to support the screen in the plane of the upper edges of the gutter side walls, said arms being vertically extensible so as to be adjustable to position the upper ends of said arms on a level with the upper edges of gutter side walls of different heights.

2. The combination with a drain gutter or the like having side walls of different heights, of a protective reticulated screen device comprising a bracket comprising a base to rest transversely upon the gutter bottom having vertical arms at its opposite ends rising along the inner sides of the gutter side walls, said arms having vertically adjustable arm portions and clamping means enabling adjusting the arm portions to position their upper ends substantially on a level with the upper edges of the related gutter side walls and securing said arm portions in adjusted position, a substantially flat screen lying across the top of the gutter and resting upon the upper ends of said arm portions, and retaining means on the upper ends of said arm portions retainably engaging said screen, the retaining means on the upper end of one of said arm portions comprising a clip comprising an element having a pair of opposed spring pressed fingers inserted downwardly through adjacent reticulations of the screen and frictionally receiving the upper end of the arm portion with said element overlying the upper side of said screen.

3. The combination with a drain gutter or the like having side walls of different heights, of a protective reticulated screen device comprising a bracket comprising a base to rest transversely upon the gutter bottom having vertical arms at its opposite ends rising along the inner sides of the gutter side walls, said arms having vertically adjustable arm portions and clamping means enabling adjusting the arm portions to position their upper ends substantially on a level with the upper edges of the related gutter side walls and securing said arm portions in adjusted position, a substantially flat screen lying across the top of the gutter and resting upon the upper ends of said arm portions, and retaining means on the upper ends of said arm portions retainably engaging said screen, the retaining means on one of said arm portions comprising a plurality of fingers projecting upwardly from the upper end of the arm portions inserted upwardly through adjacent reticulations of said screen.

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