Feb. 6, 1940. E. J. MILLER 2,189,567

AWNING STRIP

Filed June 27, 1938

FIG. 1

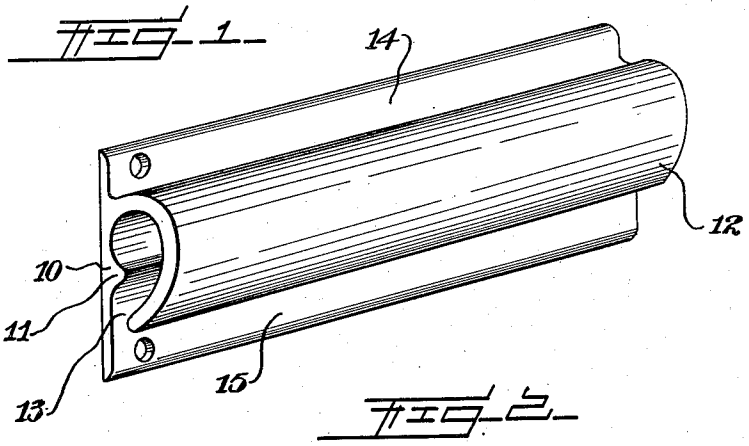


FIG. 2

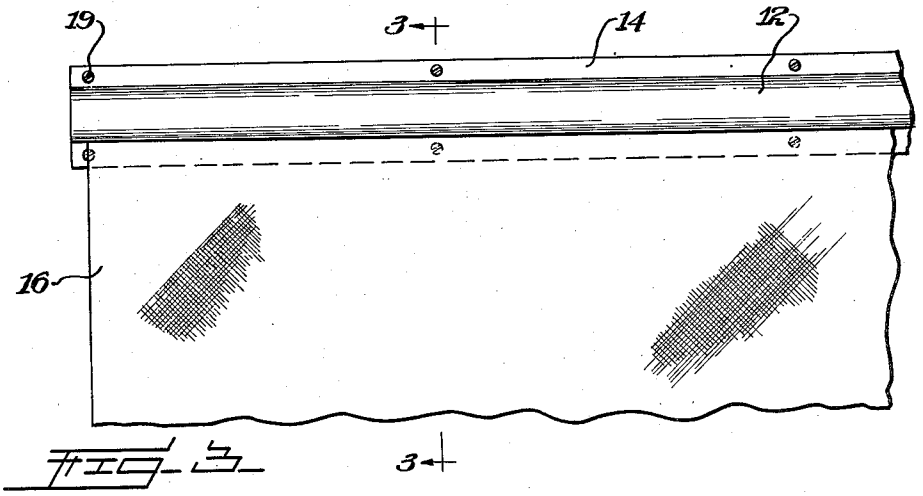


FIG. 3

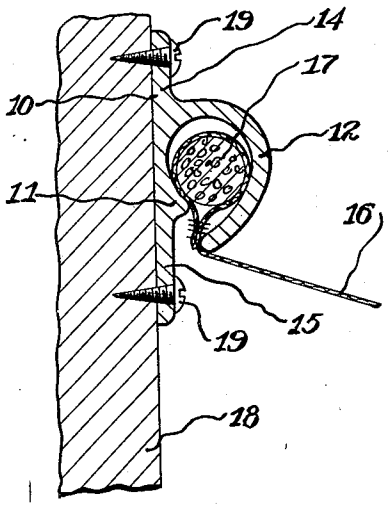
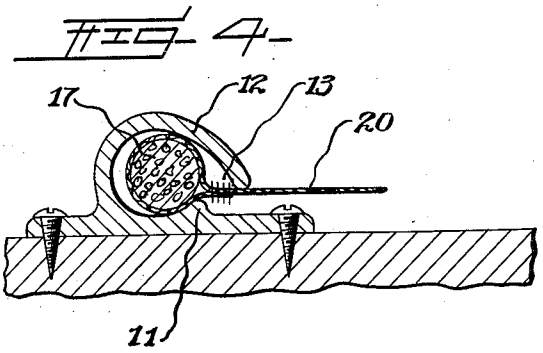


FIG. 4



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AWNING STRIP

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3 Claims. (Cl. 156—15)

This invention relates to a strip adapted for attaching the head of a flexible shelter, such as an awning or tarpaulin to a support, and for other similar uses.

A particular object of the invention is to provide a strip that is economical to manufacture, and which is strong and efficient in operation.

The strip is preferably formed as a single piece of extruded metal, such as aluminum, and the pulling strain normally exerted by the shelter on the strip is distributed between a rib formed on the base of the strip and a cover member which cooperates with the rib. The cover member engages the shelter along two lines spaced apart from each other. The strip is provided with attaching flanges, both above and below the cover member so that the strip may be securely anchored by a suitable fastening means.

These and additional objects and advantages of the invention will become apparent as the description proceeds.

While a preferred form of a strip is disclosed herein for purposes of illustration, it should be understood that various changes may be made without departing from the spirit of the invention as herein set forth and claimed.

In the drawing:

Fig. 1 is a perspective view of one end of a strip embodying the invention.

Fig. 2 is an elevation of a vertical installation of the strip.

Fig. 3 is a section taken on line 3—3 of Fig. 2.

Fig. 4 is a section similar to Fig. 3 but illustrating a horizontal installation.

Referring to the drawing more particularly it will be seen that the awning strip comprises a base plate 10, which has an outwardly extending rib 11 formed intermediate its lateral edges. In the form illustrated this rib 11 is located near the middle of the strip, but this location can, of course, be varied. A cover member 12 projects from the base plate at a point spaced from rib 11 and extends around and over rib 11. The inner surface of cover member 12 is formed on a curve which is continued into the base 10 and up along rib 11 so as to form a substantially cylindrical channel with a slot 13 opening along its lower side. The outer contour of cover member 12 is also curved and follows closely the shape of the inner wall so that the cover member is of substantially uniform thickness from a point adjacent the base strip to its free edge.

The base plate 10 extends above the cover strip to form a flange 14 and extends below the cover strip to form a flange 15. Any suitable fastening devices may be applied to flanges 14 and 15 to hold the strip in place.

A typical vertical installation using the awning strip of this invention is illustrated in Figs. 2 and 3. The upper edge of the awning 16 is formed with the enlarged head 17 in any well-known manner, as by passing a rope through the hem formed on the awning. In this case the awning strip is secured to the vertical wall 18 by means of screws 19 which pass through holes formed in the flanges 14 and 15.

When the parts are thus assembled any outward and downward pull exerted by the awning is carried partly by the rib 11 and partly by the cover member 12. The fact that a large share of the strain is absorbed on the base plate 10 relieves cover member 12 of a considerable part of the strain that would otherwise fall upon it, and the strip is therefore able to withstand very great strains without failure. Moreover, the outer edge of the cover member has a snubbing action on the flexible shelter that reduces the force tending to wedge the pliant head 17 into the throat of the strip. The fact that the channel extending through the strip is substantially cylindrical permits the cover member to conform closely to the cylindrical shape of the awning head 17, and allows the use of the smallest possible cover strip for any particular size of awning head, thus conserving strip metal.

Fig. 4 illustrates a horizontal installation of the strip in any case where it is desired to have an awning or tarpaulin member 20 extend horizontally from its anchoring point. In this position also the rib 11 and cover member 12 cooperate to hold the head 17 and to keep it from working out through slot 13 even when the awning 20 is severely whipping in the wind.

It will be clear from the above description that the awning strip of this invention provides a perfectly weather-tight anchorage for the head or end of the awning since the base plate 10 is firmly secured to the wall or deck and the curved cover member 12 completely surrounds the head of the awning. There are, therefore, no cracks through which any leakage can occur. Moreover, the strip provides a smooth exterior surface, and hence has a pleasing appearance while avoiding any sharp corners that might accidentally catch passing objects.

I claim:

1. In a shelter structure of the type in which a flexible shelter has a substantially cylindrical enlarged pliant head secured in a unitary strip

which extends the full width of the shelter and which is attached to a supporting structure, the enlarged head being slidable lengthwise into an opening of the strip, the improvement which comprises; a retainer strip having a base plate, a rib projecting from the base plate intermediate the edges of the base plate and engaging one side of the shelter head, a curved cover member projecting from the base plate and forming with the base plate and rib a bore substantially surrounding the shelter head, the cover member engaging the shelter head along a line opposite the rib, the free edge of the cover member being spaced from the rib a distance sufficient to accommodate the shelter but to retain the head and being extended so that its edge contacts with the shelter along a line spaced from the enlarged head, the base plate extending beyond the cover member on both sides of the strip to form attaching flanges.

2. In a shelter structure of the type in which a flexible shelter has an enlarged pliant head secured in a unitary strip which extends the full width of the cover, the enlarged head being slidable lengthwise into an opening of the strip, the improvement which comprises; a base plate having a flat lower side, a rib extending the full length of the plate, the rib being located on the outer side of the base plate intermediate the edges of the base plate, a curved cover member projecting from the outer side of the base plate intermediate the edges of the base plate, the cover member being of substantially uniform thickness, the rib, base plate and cover member forming a substantially cylindrical bore, the cover member having a free edge which extends outwardly from the cylindrical bore, overlaps the rib and extends to approximately the level of the top of the rib, the rib and cover member being homogeneous with the base plate, the base plate extending beyond the cover member on both sides of the strip to form attaching flanges.

3. In a shelter structure of the type in which a flexible shelter has a substantially cylindrical enlarged pliant head secured in a unitary strip which extends the full width of the shelter and which is attached to a supporting structure, the enlarged head being slidable lengthwise into an opening of the strip, the improvement which comprises; a retainer strip having a base plate, a rib extending the full length of the strip, the rib projecting from the base plate and engaging the enlarged head of the shelter, a cover member extending the full length of the strip, said cover member projecting from the base plate and contacting the enlarged head along a line opposite the line of contact between the rib and the enlarged head, the cover member being extended so that its edge contacts with the flexible shelter along a line spaced from the enlarged head, leaving a length of the flexible shelter between the enlarged head and the line of contact of the outer edge of the cover member with the flexible shelter.

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