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H. M. DIX

2,335,920

AWNING FERRULE

Filed April 18, 1942

FIG_1

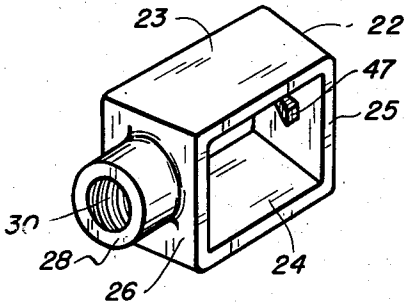
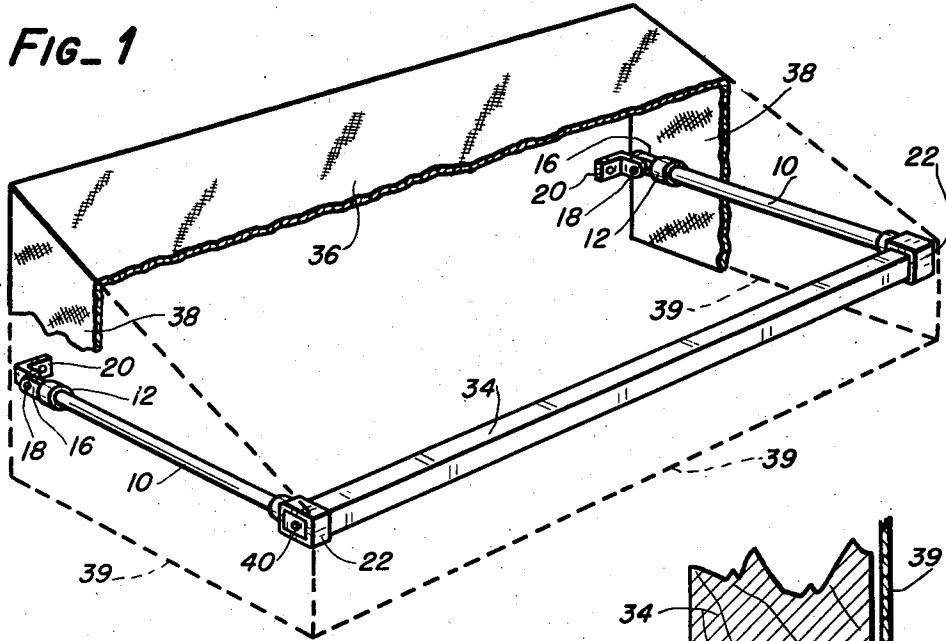


FIG_2

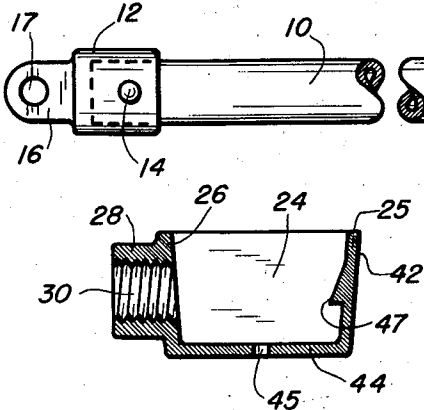


FIG_5

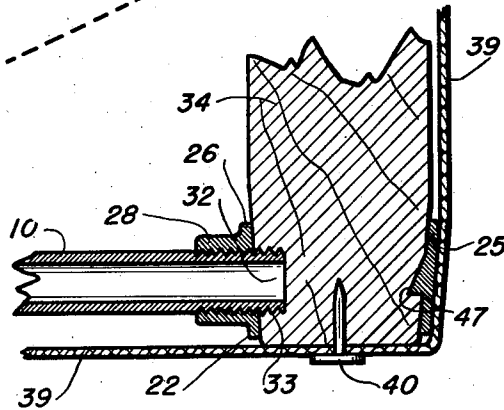


FIG_3

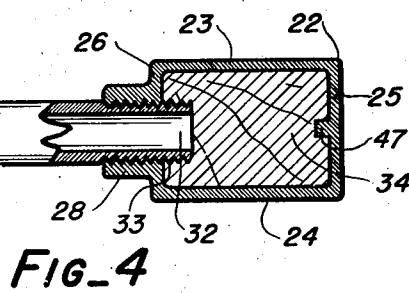


FIG_4

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2,335,920

AWNING FERRULE

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2 Claims. (Cl. 287—54)

This invention relates to an awning ferrule and is more particularly adapted for use in joining the framing of a fabric awning.

It is an important object of my invention to provide an awning ferrule of simple construction and use that may be formed of metal or other suitable material for cooperation with the frame members of an awning.

Another object of my invention relates to the provision of means whereby a ferrule may be fitted to a frame member of an awning to enclose an end of the member in a manner to prevent dislocation of that member during use of the frame.

A further object of my invention relates to the provision, in an awning ferrule, of clamping means whereby when the ferrule is cooperatively joined with a frame member of an awning the parts are securely clamped together to prevent accidental disassociation.

Other objects and advantages of my invention will be more apparent during the course of the following description wherein I have set forth and described the preferred form of my invention. This specification, taken in view of the accompanying drawing, constitutes a disclosure of my invention and it is to be understood that alterations as to size, shape and material of my ferrule are contemplated within the scope of the sub-joined claims:

Figure 1 is a perspective view of an awning with portions broken away, for convenience of illustration, showing my awning ferrule in position in the frame of the awning in cooperation with the other parts thereof,

Figure 2 is a perspective view of my awning ferrule,

Figure 3 is a fragmentary, sectional view through a corner of an awning having my ferrule incorporated therein,

Figure 4 is a plan view of a pivoted arm of a ferrule with portions shown in section illustrating the manner in which the ferrule is employed, and

Figure 5 is a sectional view through a modified form of my awning ferrule.

Throughout the drawing like reference numerals refer to like parts. The numerals 10, 10 designate brace arms conventionally employed in an awning frame. These arms are usually provided with caps 12, 12 on their inner ends that may be secured in place as by a rivet 14 passing through the cap and the arm. A pivot ear 16, provided with a hole 17, is customarily joined by a pin 18 to a pivot clip 20 that may be secured to

a building or other structure to which the awning is applied.

The ferrule 22, shown clearly in Figure 2, comprises side walls 23 and 24 and end walls 25 and 26 arranged together in a manner to define a rectangular enclosing member. A hollow boss 28 extends outwardly from the outer face of the wall 26 and an opening or socket 30 therethrough communicates through it to the interior of the ferrule. The opening 30 may be threaded as has been shown in the drawing.

The outer end of an arm 10 is inserted through the opening 30 to join the two elements together. In certain cases the end 32 extends into the area enclosed by the ferrule. In the figures of the drawing it is shown that arm 10 is threadedly joined to the ferrule so that the end 32 of the arm may protrude through wall 26.

A spreader bar 34, usually formed of wood, cooperates with arms 10, 10 to complete the desired shape of the frame. Its ends are each inserted into a ferrule according to Figure 2 to join the elements together.

As may be clearly seen in Figure 3, the walls 25 and 26 of the ferrule lie in planes that tend to converge in one direction and to diverge in the opposite direction to provide a slight flare or taper in the ferrule. This provision of a flare to the walls of the ferrule makes it possible when an end of the member 34 is inserted therein, to be compressed slightly so that a compressing fit can be obtained. While the walls of the ferrule are shown as tapering it will be obvious that they may be parallel where it is thought not necessary to compress the end of member 34.

In assembling the mechanism, usually the bar 34 has a ferrule fitted to each end and then an arm 10 is inserted into the boss 28 of each of the ferrules to securely join the structure in a rigid manner. By forming the ends of the bar 10 with enough extra material to insure its passing entirely through the boss 28 it is possible to engage and clamp the member 34 into the ferrule tightly and securely.

The clamping operation above described can be facilitated by the employment of threads on the end of bar 10 and on the interior of the passage through the boss 28. In that case all an operator need do is to screw the bar 10 sufficiently into the boss so that its end "bites" into the relatively soft material of the bar 34 and forms its own clamping depression 33 therein. A depression 33 may be preformed by drilling and the end of the arm inserted through the ferrule and into it.

The fabric of the awning comprises the sloping surface 36 usually having depending side walls 38, 38. In the dashed lines of Figure 1 a fringe or valance is suggested at 39. At the corners where the fabric of the awning passes over the ferrule, a tack or nail as 40 is driven through the fabric and into the ends of member 34 if they are wooden. In the case of metal, a screw or bolt would be used.

In Figure 5 I have shown a modified form of my ferrule 42 having all of the characteristics above described but also including an end wall 44 provided with a hole 45 for the reception of a fastener member 40. In this case the four sides of bar 34 are enclosed as well as the ends by the ferrule.

As an added aid in securing the ferrule 22 rigidly to bar 34, I form on the wall 25, opposite the hollow boss 28, a barb 47. Thus when the

ferrule and bar are assembled, the barb cooperates with the end of bar 10 to resist any tendency of the two elements separating.

I claim:

5 1. An awning ferrule comprising a plurality of walls joined together to form a loop, a boss on one wall having a socket therein extending through the wall and communicating with the space enclosed by the loop, at least one of said walls being disposed in a plane at an angle to the axis of the loop.

15 2. An awning ferrule comprising a plurality of walls joined together to form a loop and having an interior detent at one end, and a boss in the wall opposite said detent, said boss having a socket therein extending through the wall and communicating with the space enclosed by the loop.

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