

Sept. 12, 1933.

O. F. BAUSCHARD

1,926,609

RIGID AWNING

Filed June 29, 1932

2 Sheets-Sheet 1

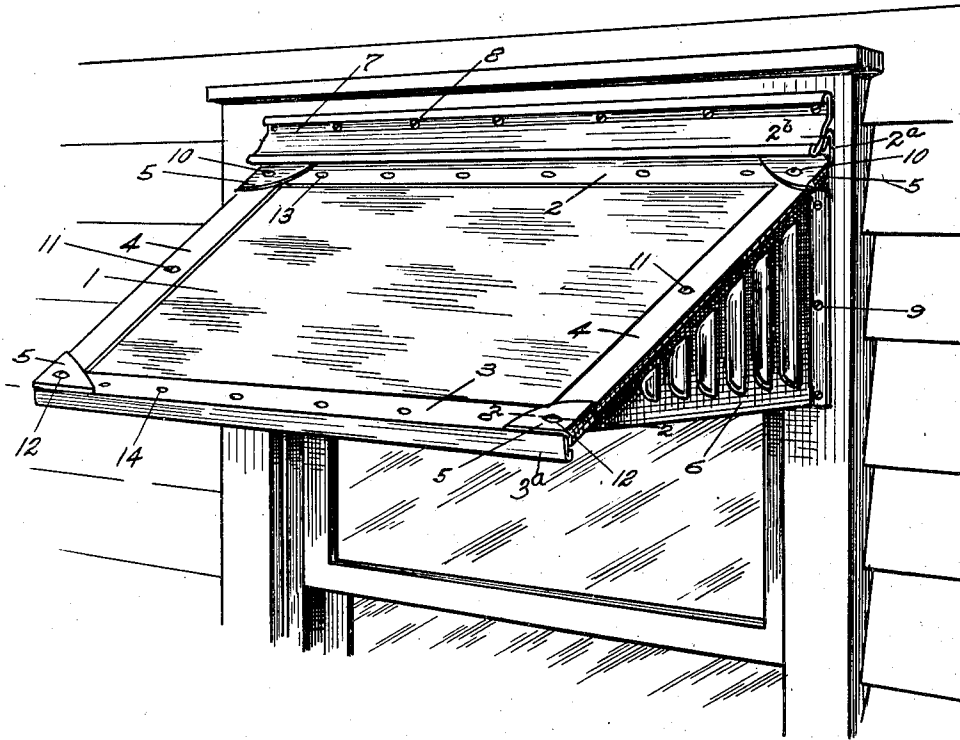


Fig-1

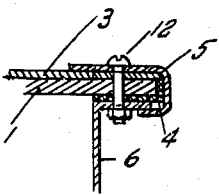


Fig-2

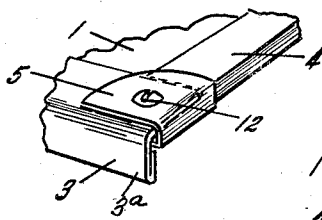


Fig-3

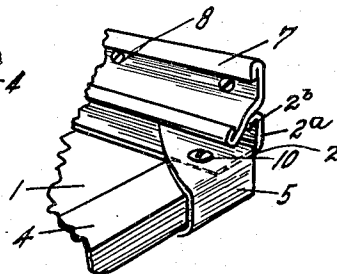


Fig-4

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2 Sheets-Sheet 2

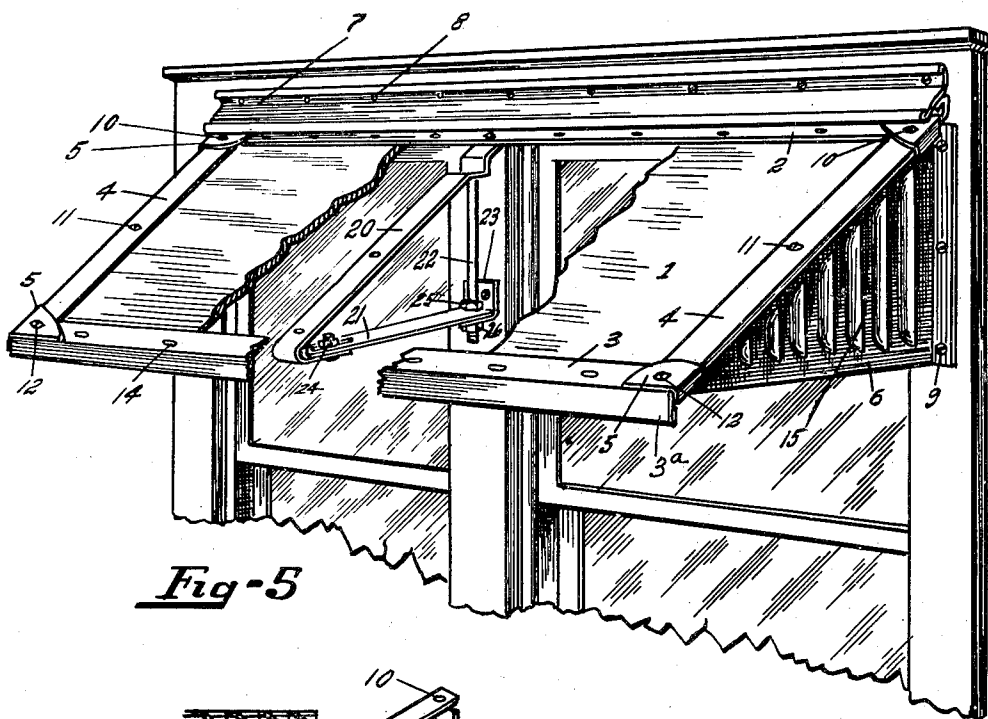


Fig-5

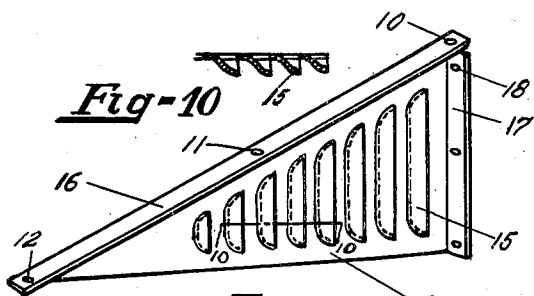


Fig-9

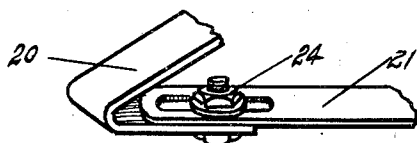


Fig-8

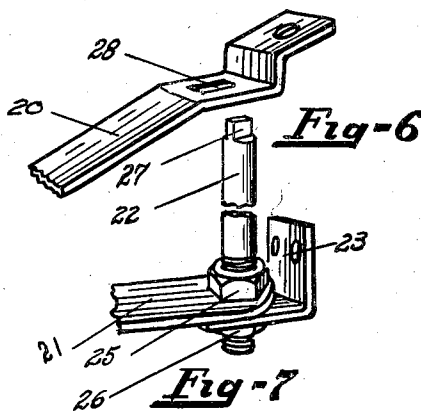


Fig-6

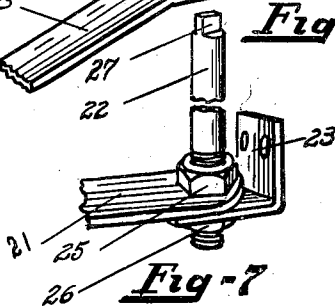


Fig-7

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UNITED STATES PATENT OFFICE

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RIGID AWNING

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10 Claims. (Cl. 156—15)

This invention is directed to an improvement in awnings, and particularly awnings of the rigid type wherein the protective or awning area proper is a substantially rigid sheet of requisite area.

5 The primary object of the present invention is the provision of means cooperating with a rigid sheet of the type referred to, through which the sheet may be connected in place in an extremely simple expeditious manner, while maintaining
10 the awning structure as a whole fixed with relation to the structure to which it is secured in a rigid, non-leaking, thoroughly protective relation to the structure with greater than usual freedom from light obstruction and a materially increased
15 ventilating effect.

A further object of the invention is the association with the awning strip proper of metallic elements forming in effect an edge frame for the strip and serving to maintain the strip substantially rigid throughout its full area, the metallic
20 elements being arranged particularly for cooperation with structure-carried elements to insure non-leaking cooperation of the awning with the structure, and further with means to facilitate the
25 application of the awning to the structure in a simple, expeditious manner.

A further object of the invention is the provision of means designed more particularly for use with awnings of extended lateral length by which the
30 awning strip may be accurately positioned to prevent sagging and maintained rigid throughout such central area in relation to the structure to which the awning is applied to thereby insure that the awning strip will be accurately supported
35 throughout its length, maintained rigid with respect to the structure, and with capabilities of adjustment to insure a proper awning-forming relation of the strip under any and all conditions.

The invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a perspective view showing the improved awning applied to a single window.

Figure 2 is a section on the line 2—2 of Figure 1.

Figure 3 is a broken perspective view showing the corner connections.

Figure 4 is a broken perspective showing the relation of the awning frame to a weather-resisting element on the structure to which the awning
50 is applied.

Figure 5 is a perspective view showing the awning applied to a double window or other structure of greater width than the single window.

Figure 6 is a broken perspective view of the
55 awning-carrying element of the adjusting bracket.

Figure 7 is a perspective view showing the mounting of the adjusting bracket with respect to the structure to which the awning is applied.

Figure 8 is a broken perspective view showing the connection between the outer ends of the elements of the adjusting bracket. 60

Figure 9 is a perspective view of one of the side walls of the awning.

Figure 10 is a section on the line 10—10 of Figure 9. 65

The awning proper is made up of an element 1, hereinafter referred to as the awning strip, which for the purposes of this invention is a rigid or substantially rigid element having the requisite resistance to the elements. In this connection, it is preferred that the awning strip be made of a section of composition board having appropriate element-resisting characteristics and preferably about one-quarter of an inch in thickness. This material provides not only an economical element as the main section of the awning, but when in place is rigid and, while perfectly protective for awning purposes, requires absolutely no attention after installation and is absolutely silent in use. 70

In connection with the strip 1, the awning proper involves what may be stated as a metallic edge frame to protect the edges of the strip and at the same time maintain the desired rigidity of the strip in use. This metallic frame involves an upper edge strip 2 positioned in alignment with the upper edge of the awning strip 1 and co-extensive in length with that edge. The strip 2 is formed with a series of openings in order that said strip may be riveted or otherwise secured to the awning strip, the connection preferred being that of the conventional split rivet, indicated at 13 in Fig. 1, passed through openings in the metallic strip 2 and the awning strip 1 and spread beneath the latter to fix the metallic strip to the upper edge of the awning, with such a strip on the upper side of the awning strip. 75

The metallic strip 2 extends beyond the free upper edge of the awning strip 1 and immediately beyond said edge is turned upwardly at 2a and then forwardly at 2b to cooperate with the fixture element to be later referred to. The lower edge of the awning strip 1 is also protected by a metallic strip 3 coextensive in length with the length of such edge of the strip 1, with such strip 3 formed with openings 14 through which the strip 3 may be fixed with relation to the awning strip in any preferred manner, preferably as described in connection with the strip 2. The forward edge of the metallic strip 3 is turned 80

downwardly at 3a, extending below the lower surface of the awning strip to provide a deflecting apron, as will be understood.

The side edges of the awning strip 1 cooperate with channel members 4 formed to overlies the upper surface of the strip 1, cover the side edges of such strip, and underlie the lower surface of the strip 1. Those portions of the channel members 4 which underlie the awning strip 1 are coextensive in length with the length of the side edges of the strip, while the upper sections of the channel members 4 or those portions overlying the upper surface of the strip 1 terminate and about the relative inner edges of the strips 2 and 3, as clearly shown in Figures 3 and 4.

The respective strip sections, as well as the corner portions of the awning strip 1, are bound by clips 5 which overlies the strips 2 and 4 and 3 and 4, fit snugly over the edge portions of the channel members 4, and are bent beneath the latter, space being provided for the reception of the side walls of the awnings, as will later appear. These clips 5 are of triangular shape on their upper edges and overlies and bear snugly on the metal strips 2 and 4 and 3 and 4.

The side walls of the awning include metallic sections 6 of triangular outline to follow the slope of the awning, the upper edge of the strip being formed as a right angled outstanding flange 16, while the inner edge of the strip is formed as a right angled outstanding flange 17. The flange 16 underlies the side edge of the awning strip, bearing against the lower surface of the channel member 4 and being secured in place by rivets passing through openings 11 in the channel member and in the flange 16, these rivets or like fastenings passing, of course, through the awning strip 1. The extreme ends of the flange 16 underlie the channel members at those portions embraced by the brackets 5 so that the lower portion of each bracket which is bent beneath the channel member 4 is arranged to underlie and assist in maintaining the connection between the side walls and the awning proper.

The brackets 5 are secured in position by bolts 12 passing through registering openings 12a in the brackets, the strips 2 or 3, as the case may be, and the flanges 16 of the side walls thereby rigidly uniting the elements, maintaining their relative positions and insuring effective rigidity of the awning structure as a whole. The vertical area of the side walls may be, and preferably is, formed to provide ventilating and light-admission openings in the form of the usual louver construction, indicated at 15 in Figures 9 and 10. This louver construction, in addition to stiffening the side walls, permits the escape of heated air which may be trapped beneath the awning proper and reduces the darkening effect of the awning by admitting light. Of course, the louver openings extend toward the structure to which the awning is secured to prevent the admission of rain or the like as far as possible.

The awning proper is applied to a building to overlies, for example, a window by suitable fastening means passed through the flanges 17 of the side walls. As these side walls form a rigid part of the awning proper, and as the awning parts, other than the side walls, are constructed for extreme lightness consistent with necessary rigidity and protective function, it is apparent that the securing means applied to the window frame or structure through the flanges 17 will effectively support the awning rigidly in place, assuming that the length of the awning in a di-

rection parallel to the structure is not too great. When thus applied, the upright portion 2a of the upper edge strip 2 of the awning proper will bear against the frame of the window or other structure, and obviously means must be provided to prevent the admission of the elements at this point.

To secure this result, there is provided a top molding 7. This is also a metallic strip secured at 8 to the structure and having its upper edge above the securing means turned forwardly as a deflector, with the portion below the securing means overlying and bearing snugly on the forwardly turned portion 2b of the strip 2 and extending therebelow, the lower edge of the top molding being turned back on itself as a reinforcement and to give a finished appearance.

When the length of the awning is such that the supporting means provided through the side walls as described might prove insufficient to prevent sagging of the intermediate portion of the strip 1, there will be provided a supporting bracket, or any multiple thereof, which in part cooperates directly with the awning proper and in part cooperates with the structure to which the awning is applied, these parts being arranged for relative adjustment to insure the proper rigidity and position of the intermediate portions of the awning strip 1. These brackets, shown more particularly in Figures 5, 6 and 7, include a section 20 to underlie the awning strip 1 and to be secured to the strip by riveting or other appropriate connection.

The upper end of the strip 20 is riveted directly to the under side of the awning within the plane of the upper frame strip 2 so that the securing means at this end of the strip 20 is also the securing element for the strip 2. The bracket strip 20 is of slightly less length than the dimension of the strip 1 outwardly from the structure to which it is secured so that it may terminate short of the frame strip 3. Obviously, however, it may be extended to the plane of the frame strip 3, if desired.

Immediately adjacent its upper end, the bracket strip 20 is offset to provide a portion which extends at right angles to the plane of the structure to which the awning is attached, this right angled portion being formed with a rectangular slot 28. The supporting bracket includes an L-shaped element 23 designed to be secured to the window frame or other structure below the bracket strip 20 and in vertical alignment therewith. A second bracket strip 21 extends from the L-shaped member 23 on which it rests, and at its outer end overlies the return bend portion formed at the forward end of the bracket strip 20. The inner end of the bracket strip 21 in that portion overlying the L-shaped member 23, and also the forward portion of the L-shaped member 23, are formed with registering openings to receive the threaded end of a bolt or pin 22, the upper end of the bolt being formed at 27 to accurately fit the rectangular slot 28 of the bracket strip 20. The forward end of the bracket strip 21 is formed with an elongated slot to receive a threaded pin passed through an opening in the return bend of the bracket strip 20 and through the slot, the pin above the slot being provided with the usual washer and securing nut 24.

With the supporting bracket in position, it is apparent that the central portion of the awning strip may be vertically adjusted to an extent desired through the adjustment of a nut 25 fitting

the threaded portion of the pin 22 above the inner end of the bracket strip 21. The engagement of the upper end of the pin with the slot 28 of the bracket strip 20 prevents turning of the pin and, therefore, the operation of the nut will compel relative movement of the inner ends of the bracket strips 20 and 21 to thus insure that the central portion or those portions of the awning to which the adjusting brackets may be secured may be arranged in any desired relative position with respect to the ends. This absolute alignment of the upper end of the awning may be maintained in an obvious, simple and convenient manner, and the adjustment may be locked through the medium of a lock nut 26 secured on the lower end of the pin 22 below the L-shaped supporting member 23. The outer end of the bracket strip 20 may be also adjusted longitudinally and therefore vertically, relatively speaking, with respect to the bracket strip 21, the nut 24 securing this adjustment.

Of course, it is obvious that any appropriate number of the adjusting brackets may be used according to the length of the awning strip 1 and thus absolute rigidity of the central portion of the awning strip and its perfect and unbroken alignment may be maintained under all conditions, as any variation from these conditions may be readily and conveniently compensated for by the adjustment of the bracket strip or strips in the manner described.

In the installation of the awning, the molding 7 is applied to the top or lintel of the window casing at the desired height. The awning assembly, having been otherwise completed, is introduced to apply the extension of the metallic strip 2 beneath the molding. The awning structure is forced up, wedging the part 2b beneath the molding, and when it has reached its upper limit, the flanges 17 resting against the parts of the frame are secured in place. After the molding is in position, the installing operation of the awning can be completed from the sides of the awning without serious obstructions and it is not necessary to reach over and around the awning to secure the top in place.

In installing the awning supplied with the supporting adjusting brackets, the L-shaped supporting member 23 is secured in place, the bracket strip 21 placed on the horizontal surface of the supporting member, and the bolt 22 is applied through the registering openings in the parts 21 and 23. The awning assembly is then positioned as previously described, after which the bolt 22 is lifted and the rectangular end 27 introduced into the slot 28 and the nut 25 is turned home. This forces the portions of the awning connected to the adjusting brackets upwardly, the brackets which have been secured by temporary fastenings are brought upwardly by pressure to simultaneously bring up the ends of the awning, and by cooperation of this adjustment with the adjustment of the supporting brackets, the whole length of the awning can be brought together and kept in line. After adjusting, the brackets are secured to the side casings, the slotted end of adjusting bracket part 21 is brought to rest upon the lower end of adjusting bracket part 20, and the bolt applied and secured in place. Before securing this bolt, the outer end of the awning proper is adjusted to bring it in straight horizontal line with the ends, the slot providing the variable movement necessary, and after tightening the bolt, the position is maintained.

The adjusting bracket has several functions.

It assists in the initial installation, in that it renders it possible to force up the central portion of the awning proper beneath the structure molding 7; it supports the intermediate portion of the awning proper after installation; and it holds the outer edge of the awning in line and in rigid position, stiffening the central portion of the awning and preventing any liability of swinging or snapping in the wind. Of course, when the awning is to be of an unusual length, any requisite number of adjusting brackets may be provided.

The awning as a whole has an important characteristic, in that it can be quickly attached to or detached from the building, is rigid and storm-proof when attached, and by entire absence of movable parts is perfectly silent when attached, providing adequate sun protection, and owing to the provision of the louvers will not materially darken the room, requires no attention after being attached, particularly does not require to be raised in inclement weather to avoid ripping or tearing, and by the very nature of the awning strip proper readily lends itself to different decorative schemes. It is essentially economical, in that the component parts making up the awning proper can be readily cut or stamped at the factory, with the parts shipped in knock-down condition, and the assemblage of these parts with the awning strip is a simple matter, requiring neither particular skill, experience nor tools.

I claim:—

1. A rigid awning having a main awning strip substantially proof against the elements and of a substantially rigid character, metallic strips secured to the edges of the awning strip, one of said strips being extended to provide a wedge section, and a molding to be secured to the structure to which the awning is to be applied, said molding being spaced in part from the structure to permit the wedging of the awning strip therebeneath in the installation of the awning.

2. A rigid awning having an awning strip of waterproof, substantially rigid material, metallic strips overlying the edges of the awning strip, and side walls for the awning strip including parts of appropriate shape having flanges rigidly secured to the under side of the awning strip and extending from the upper to the lower edge thereof and additional flanges extending longitudinally of the relatively rear edges of the side walls.

3. A rigid awning including an awning strip of substantially rigid material, metallic strips secured to the upper and lower edges of the awning strip, and channel sections secured to and embracing the side edges of the awning strip, the metallic strip secured to the upper edge of the awning strip being extended therebeyond to provide a wedging section.

4. A rigid awning including an awning strip of substantially rigid material, metallic strips secured to the upper and lower edges of the awning strip, channel sections secured to and embracing the side edges of the awning strip, the metallic strip secured to the upper edge of the awning strip being extended therebeyond to provide a wedging section, and a metallic section secured to the lower edge of the awning strip extending therebelow to provide an apron.

5. A rigid awning including an awning strip of substantially rigid material, metallic strips secured to the upper and lower edges of the awning strip, channel sections secured to and embracing the side edges of the awning strip, the metallic strip secured to the upper edge of the awning strip being extended therebeyond to provide a

wedging section, the metallic section secured to the lower edge of the awning strip extending therebelow to provide an apron, side sections secured to the awning to depend below the same, said sections having upper flanges to be secured to the channel sections, and end flanges to be secured to the structure to which the awning is applied.

6. A rigid awning including a rigid awning strip, a metallic frame overlying the edges of the strip, metallic side sections depending from and rigidly secured to the awning strip and to the metallic frame, said side sections having flanges to be secured to the structure to which the awning is to be applied, an intermediate adjusting strip having a part to be applied to the awning and a part to be applied to the structure to which the awning is secured, and means for relatively adjusting the parts of the intermediate strip.

7. A rigid awning provided with means for securing said awning to a supporting structure, an adjusting bracket for the center of the awning including a bracket strip to be secured to the awning, a bracket strip to be secured to the structure to which the awning is applied, and an adjusting bolt by which the respective bracket

strips may be adjusted relative to each other.

8. A rigid awning provided with an intermediate adjusting bracket, said bracket including a strip to be secured to the awning, a bracket strip to be secured to the structure to which the awning is applied, means connecting the bracket strips to adjust the upper edge of the awning, and means connecting the bracket strips to adjust the outer edge of the awning.

9. An awning comprising a rigid awning strip, frame strips rigidly secured along the edges of the awning strip, and side members connected to and depending from the frame strips at the side edges of the awning strip.

10. An awning comprising a rigid awning strip, frame strips secured along the edges of the awning strip, the frame strips on the side edges of the awning strip extending down across said edges and underlying the same and having their ends abutting the frame strips secured along the upper and lower edges of the awning strip, and side members connected to and depending from the frame strips on the side edges of the awning strip.

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