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S. STACK
METAL AWNING

1,893,659

Filed May 14, 1932

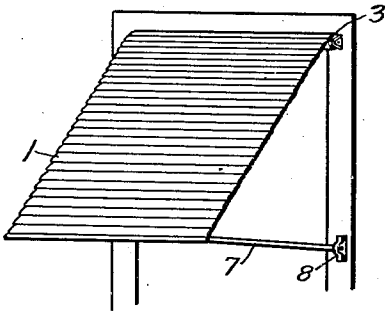


Fig. 1

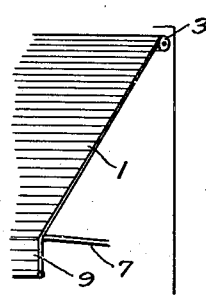


Fig. 2

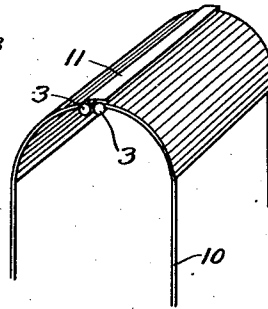


Fig. 3

Fig. 4

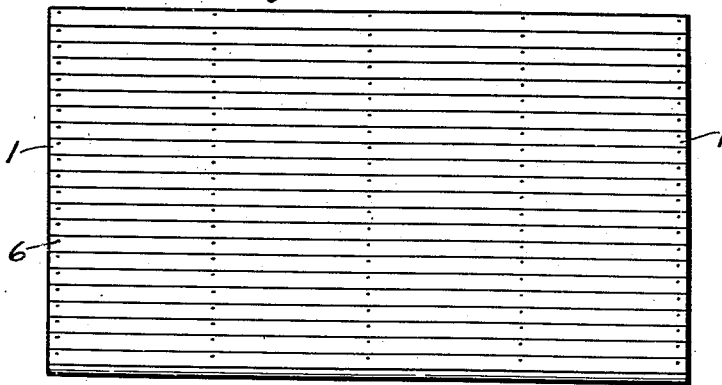
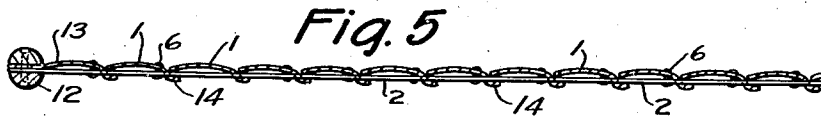


Fig. 5

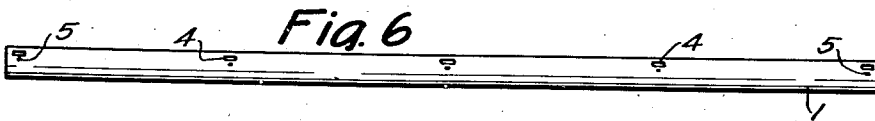


Fig. 6

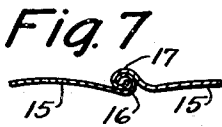


Fig. 7

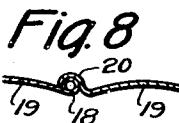


Fig. 8

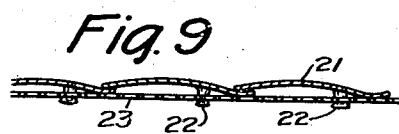


Fig. 9

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METAL AWNING

Application filed May 14, 1932. Serial No. 611,371.

The invention is an awning or canopy for windows, doors, or the like, which is made of thin metallic strips held to flexible members and adapted to roll upon a roller or upon
5 rollers.

The object of the invention is to provide means for constructing an awning of metal.

Another object of the invention is to provide an awning that will wear indefinitely.

10 Another object of the invention is to provide an awning that is fireproof.

A further object of the invention is to provide a metallic awning that may readily be removed and replaced.

15 And a still further object of the invention is to provide a metallic awning which is of a simple and economical construction.

20 With these ends in view the invention embodies an awning constructed of a plurality of thin metallic transverse strips held to flexible, longitudinal members adapted to be rolled upon a roller, and a frame for supporting the same.

25 Other features and advantages of the invention will appear from the following description taken in connection with the drawing, wherein:

Figure 1 is a view showing the awning as it would appear in use.

20 Figure 2 is a similar view showing an alternate design in which the awning is provided with an overhanging border at the end.

35 Figure 3 is a view showing another alternate design in which the device is used as a canopy for a door or entrance and in which two rollers are provided at the top so that the device will be formed in two sections with one section on each side.

40 Figure 4 is a plan view showing a detail of a portion of the awning.

Figure 5 is a view showing a cross section thru the awning showing the method of holding the metallic strips.

45 Figure 6 is a view showing a detail of one of the metallic strips in the design shown in Figure 4.

50 Figure 7 is a section similar to that shown in Figure 5 showing an alternate means of forming the strips in which they may be held without the flexible members.

Figure 8 is a similar view showing another alternate construction of the strips.

Figure 9 is another detail showing an alternate means for holding the strips to a flexible
55 member.

In the drawing the awning is shown as it would be made wherein numeral 1 indicates the strips, numeral 2 a band or flexible member to which the strips are attached, and numeral 3 a roller upon which the awning
60 may be rolled.

The strips 1 may be made, as shown in Figure 6, of narrow pieces of material transversely curved, as shown in Figure 5, and preferably curved to correspond with the curvature of the roller upon which the awning may be rolled. In one edge of the strips are openings 4 thru which the band 2 may pass and adjacent the openings 4 are smaller openings 5 by which the strips may be attached to the band 2 by rivets 6, as shown in Figure 5. It will be understood however that the strips may be attached to the bands in any other
65 similar manner.

In the design shown in Figures 1 and 4 the strips 1 are attached to a plurality of bands at the points indicated by the dots showing the heads of the rivets 6 and the upper end of the bands 2 are attached to the roller 3 and it will be noted that when it is desired to raise the awning
70 it may be rolled upon the roller. A frame 7 may be provided to hold the lower end of the awning and this may be mounted upon hinges 8, as shown. It will be understood however
75 that a frame of any other type or design may be used and the frame may be attached to the awning in any manner. In the design shown in Figure 2 the lower end of the awning extends downward below the corner of the
80 frame forming a flap or edge 9, as shown. It will be understood that the awning may be used with or without the edge 9 as may be desired. In the design shown in Figure 3 the awning is mounted upon a frame 10 so that it will form a canopy for doors or the like and in this design it is made in two sections with two of the rollers 3 at the top and these may be covered by plate 11 as shown. The sides
85 of the awning or canopy may extend down-

ward as shown or to the bottom of the frame, or to any desired point.

In the detail shown in Figure 5, the outer edge of the awning is provided with two half round bars forming a bead 12 which may be attached to the edge of the last strip which is indicated by the numeral 13. It will be noted that the band 2 may also be held in the bead 12 or attached to the end of the awning in any desired manner. It will be noted in Figure 5 that the strips 1 are slightly curved and formed so that their upper edges extend downward forming flanges 14 that pass under the lower edges of the next strip. The bands 2 pass thru the openings 4 and the strips are attached to the bands by rivets 6 as shown and it will be noted that this construction provides overlapping strips with the upper edges of the strips held to the bands so that they will be free to roll upon the roller and also so that they will provide waterproof joints between the strips. It will be understood that the bands 2 may be made of any material and arranged in any manner and also that chains or any other flexible members may be used instead of bands.

In the design shown in Figure 7 the upper end of the strips, which is indicated by the numeral 15, is provided with a roll 16 which is formed in a similar roll 17 at the lower edge of the next strip. It will be noted that this provides a flexible joint and at the same time holds the strips together so that the bands will not be required.

Figure 8 shows a similar joint with a round bead 18 at the upper edge of a strip 19 and this is held in a somewhat larger bead 20 at the lower edge of the next strip.

In the design shown in Figure 9 the strips, which are indicated by the numeral 21, are formed so that their upper edges rest on top of the bands and the lower edges overlap a portion of the next band. In this design lugs 22 are stamped from the strips and these extend thru the bands in order to hold the strips as shown. It will be understood that the strips may be made of any other design and attached to the bands in any other manner, and also that the bands may be omitted. In this design the bands, which are indicated by the numeral 23, may be made of links forming chains, as shown.

It will be understood that other changes may be made in the construction without departing from the spirit of the invention. One of which changes may be in the shape or design of the awning or canopy as it will be understood that awnings may be provided of different shapes and of different designs for all purposes, another change may be in the use of other means for raising or closing the awning, and still another may be in the use of other means for supporting the awning.

The construction will be readily understood

from the foregoing description. In use the awning may be provided as shown and described and when mounting the awning the roller 3 is attached above a window, door, or other opening and the frame attached at a point or points below the roller. When it is desired to open the awning it may readily be unrolled and when it is desired to close or raise the awning it may readily be rolled upon the roller. It will be understood that any means may be used for turning and operating the roller. It will also be understood that the device may be used as an awning or canopy, as hereinbefore stated, or for any other purpose.

Having thus fully described the invention what I claim as new and desire to secure by Letters Patent, is:

1. An improved rolling awning cover comprising a plurality of thin narrow slats arranged in overlapping relation, the under edges of the slats having openings therein, flexible strips passing beneath the slats and through said openings, and fastening means for binding the slats to the strips independent of the connection made through said openings.

2. An improved metallic rolling awning comprising thin flat curved metallic slats disposed in overlapping relation, the under edges of the slats having openings therein, flexible metallic strips passed through the openings of the various slats, fastening means passing through the slats and strips at spaced points from said openings, and a roller upon which the strips and slats are compactly wound.

3. An improved metallic rolling awning comprising a plurality of thin flat transversely curved metallic slats having their edges overlapped, thin flexible metallic strips beneath the slats and engaged through the under portions of the overlapping edges, and a roller upon which the slats and strips may be wound.

4. An improved metallic rolling awning comprising narrow thin slats, a roller upon which the slats may be wound, and thin flexible strips windable on said roller attached beneath and engaged with one edge portion only of each slat to permit the slats to have flexible movement with respect to one another in the act of winding the awning upon the roller.

5. An improved metallic rolling awning comprising narrow thin metallic slats flexibly associated, a roller upon which the slats may be compactly wound, flexible strips windable upon the roller attached beneath and engaged with one edge portion only of each slat, and fastening means for connecting the slats to the strips.

In testimony whereof I affix my signature.
SAMUEL STACK.